Managing Social Risks of Non-Standard Employment:
Europe Compared to Countries in Asia, Latin America and Africa[1]

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1. Setting the Scene

The past decades have witnessed the rise of non-standard forms of employment (NSFE) in many parts of both the industrialised and 'developing' world.[4] The reasons for this shift are multi-faceted, including increased competition as a result of globalisation, technological change that has facilitated business and work re-organisation, the increased participation of women in the labour market, and the emergence of new types of contractual arrangements, sometimes as a result of legal changes, but also in response to changes in the business model.

NSFE include part-time work, temporary work (fixed or project-based contracts, casual labour, minijobs or even zero-hour contracts), triangular employment relationships through temporary employment agencies or subcontracting companies and self-employment, in particular, own-account work. Given their growth across the globe, it is important to ascertain the impact of the rise in non-standard employment on workers' protection, enterprises' development and overall labour market and economic performance. Workers in non-standard employment often have low job tenure and are more likely to transit in and out of the labour market with respective high risk of low pay, (in-work) poverty, unemployment, eroding employability and precarious employment careers over their life course. As these workers are more likely than 'standard workers' to have interrupted or even no contribution records, their entitlement to social insurance benefits in case of unemployment, illness and old age are also negatively affected.

The following study analyses the extent, structure and development of NSFE, their causes as well as their consequences on economic performance and social inclusion. It also focuses on employment policy and institutional responses to prevent, to mitigate or to cope with the social risks related to NSFE. The peculiarity of this study is to contrast NSFE in Europe with the situation of selected countries in Asia, Latin America and Africa.

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[4] We are well aware that the very concept of 'developing countries' is now an anachronism (Collier 2015: 243). In the following we use therefore the term 'development' only in an analytical perspective, including developments in highly industrialised countries. Because the term 'developing countries', however, is still widespread, we sometimes cannot avoid referring to it.

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

Chapter 3 proceeds by providing rich descriptive information on the extent, structure and development of NSFE in Europe on the consistent database of the European Labour Force Survey (ELFS) in the period 1998 to 2014. The chapter goes beyond description by testing possible causes of this development and by demonstrating the consequences of NSFE for economic performance and social inclusion.

Chapter 4 complements this information with case studies of selected countries in Asia (South Korea, India), Latin America (Brazil, Chile) and Africa (Uganda, Kenya). The aim of this extension is to demonstrate the different roles NSFE play in 'emerging' countries and 'developing' economies to prepare context-specific recommendations as to how to prevent, mitigate or cope with the social risks related to NSFE.

Chapter 5 continues by reflecting on the possible institutional responses to the rise of NSFE followed by an employment policy analysis of how countries, social partners or sector or occupational groups are approaching or should address the risks related to NSFE. The analysis seeks good practices of social risk management in particular and explores to what extent and under which conditions they might be adopted by other countries in different stages of economic development.

Chapter 6 provides an extensive summary of the main findings and policy recommendations.

Chapter 7 concludes with general reflections on how to deal with NSFE in the context of the new world of work in the context of globalisation and digitalisation.

Finally, a large amount of references and material is listed on which this study is based, and an Appendix is added with rich statistical material on NSFE in all EU member states, for the EU as a total (EU-28) and the Eurozone (EU-19), complemented with some additional figures.

2. Analytical Framework of Labour Market Institutions[5]

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

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

The parameters on which LMIs 'work' are prices (wages and fringe benefits), quantities (workers and working time) and qualities (skills and competences). The diagonals in the following *Figure 1* symbolise that institutions always have to be considered both as restrictions (-) and opportunities (+), a point which the pundits of labour market deregulation often neglect. When designing LMIs it is a delicate art to find the right balance between equity and efficiency and– as we will argue below – one always has to consider the effectiveness of LMIs in the context of other institutions.

Unemployment insurance, for instance, might induce moral hazard, raise the reservation wage and thus prolong unemployment and reduce employment; but it might also maintain skills, raise morale, and induce productive job search. Properly designed in an anticyclical way (extended in recessions and scaled down in booms), it even induces positive external effects: macroeconomic stabilisation in particular through maintaining aggregate consumption or demand (e.g. Dolls et al. 2011) and the reduction of unfair job competition for scarce jobs in recession (e.g. Lalive et al. 2013).

[5] The following considerations are based on Schmid (1994), Hall and Soskice (2001), and also profit from a recent survey article for ILO by Bernard Gazier (2013).

Figure 1: Portfolio and Impact Parameters of LabourMarket Institutions

	Prices (wages and fringe benefits)	**Quantities** (workers and working time)	**Qualities** (skills and competences)
U-/ Employment Insurance*)	+ -	+ -	+ -
Employment Services	+ -	+ -	+ -
Education and Training Systems	+ -	+ -	+ -
Employment Protection	+ -	+ -	+ -
Wage setting and Bargaining	+ -	+ -	+ -
Taxes and Benefits Related to Wages	+ -	+ -	+ -
Public Sector Employment	+ -	+ -	+ -

Source: + (= opportunities); - (= restrictions); authors design (GüS).
*) We also use the term "employment insurance" (EI) because unemployment is only one of the labour income risks during the life course (Schmid 2008, 2011a, 2015). Other common labour income risks are, for instance, short-time work, parental leave or occupational disability. A paradigm of EI is the short-time work allowance scheme in Germany (Möller 2010). The Canadian system of employment insurance also covers income risks due to parental leave, involuntary part-time or lower wages of new jobs (van den Berg et al. 2008).

Employment services, often publicly provided, on the one hand restrict the 'market' for private employment services, thereby reducing employment opportunities in the private sector. They also have to be financed by contributions or taxes, thus raising the burden of wage costs, thereby indirectly reducing employment. On the other hand, they may be better able to pool information and risks than private employment services, thereby increasing mobility (possibly connected with mobility incentives or training from the unemployment insurance) and the employment opportunities of the unemployed or the job seekers, both 'inactive' (school leavers, mothers returning) or 'active' (frustrated workers who would like to move). Because mobility raises the exit options and thereby the potential labour supply for potential vacancies, it reduces both the monopoly power of local employers and insider-workers, thereby lowering wage inequality and in this way – indirectly (the efficiency-wage argument) – unemployment (Akerlof and Yellen 1990). The example also shows that the causal slopes might be quite complicated, taking time to show their real impact on the final (positive or negative) balance on employment and demonstrates that the potential role of employment services in supporting mobility chains and transitions from non-standard to standard employment (or vice versa) might be substantial (e.g, Schmid 2008: 242–280).

Employment protection restricts, first of all, employers' freedom to hire and fire and may lead to cautious recruitment practices that lead to lower standards of employment and to the recourse of non-standard employment, such as fixed-term contracts, casual work, part-

time work or dependent self-employment. Moreover, it limits the intergenerational exchange of the staff, which might induce employers to set the retirement age as early as possible with corresponding problems of social protection in old age or even self-respect related to work (e.g. Freeman et al. 2008). On the other hand, employment protection deters firing as a first response of firms to a downturn and thus encourages firms to build up mutual loyalties that, for instance, reduce for the employer the necessity and costs to control shirking, and give incentives for the employees to invest in firm-specific skills in the expectation that the respective higher risks (reduced employability on the market) are either rewarded by the employer through higher wages and working time flexibility and/or compensated through generous unemployment benefits to search for an alternative job in case of the closure of the firm. Employment protection also supports the unionisation of workers and collective bargaining since in the absence of this protection, workers may be less disposed to join a union out of fear of reprisal.

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

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

First, the concept of *institutional path dependency*: Building up mutual expectations between the actors on the labour market, institutions cannot be changed easily from today to tomorrow. Some institutions go back more than hundreds of years ago (Madsen 2006), for example, the cooperative industrial relations system in Denmark, or the dual vocational training system (apprenticeship) in the German-speaking countries Austria, Germany and Switzerland where the bulk of workers follow this training and recruiting route, while this institution remains marginal in other countries (Eichhorst et al. 2012). The diversity comes not only from the specificity of societal contexts and history, but also from the variety of objectives pursued by each scheme and rule, e.g. efficiency and equity considerations may be combined in multiple ways. Labour markets are usually segmented in different submarkets. Some groups, benefitting from long-term and secured careers with promotional

ladders, may be favoured by some institutions, while others are left aside or excluded. Another essential source of variety is the degree of implementation on the rules, depending on the size of the informal sector, on the political will and the amount of resources devoted to detecting and sanctioning non-compliance (Falkner et al. 2005). There may be a big gap, and even an abyss between laws or signed agreements and their implementation. In some countries, tax-avoiding – for instance – may be a culture or even 'sport', in other countries it may be considered a criminal act or at least antisocial. So, for reasons of path dependency it is almost impossible just to copy institutions from other countries; learning from other countries, therefore, is restricted.

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

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

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

Institutional trade-offs might occur when the same institution affects different objectives either positively or negatively. Employment protection may (and is intended to) support the mutual investments of employers and employees in training and education thereby enhancing productivity, particularly in the period after a downturn as workers are less likely to be laid off. Nonetheless, it may also create insider-outsider cleavages, enhancing wage rigidities, preventing wage flexibility in a recession or the hiring of new apprentices

to maintain a sustainable stock of skills. Some studies find strong positive correlations between high levels of employment protection and some non-standard forms of employment, in particular temporary jobs (Berkhout et al. 2013; Martin and Scarpetta 2011; Schmid 2011b). Other studies discovered that employment protection and respective high levels of tenure enhance productivity at the cost of employment levels, arguing for protected mobility to solve this trade-off (Auer et al. 2005). In countries where employment protection is combined with the institution of life-time employment in large firms, corresponding mandatory early retirement might lead to (often precarious) self-employment in old age, as in Korea, or to precarious non-standard work in small and medium-sized firms, as in Japan (Freeman et al. 2008).

Third, one has to consider *institutional equivalents*, which means that one missing (or badly functioning) institution might be replaced by the functioning of another institution. An effective minimum wage, for instance, can be established by the state through mandatory legal minimum wages (as in France or Great Britain), and also through collective bargaining enforced by strong unions and employers associations (like in Sweden, Denmark or Austria). Open-ended contracts (the essential element of 'standard' employment) might be combined with internal flexibility in terms of working-time flexibility, task flexibility or even wage flexibility) and thus be an (even more) effective equivalent for external flexibility like temporary or casual work or out-contracting to (dependent) self-employed (Storrie 2012; Schmid 2015). Both sides – workers and employers – might be interested in internal flexibility for various reasons. LMIs even might be (at least to a certain degree) a functional equivalent to product market institutions or financial market institutions. If, for instance, the devaluation of a currency is no longer possible due to the joining a common currency union (like Greece as a member of the Eurozone) or due to the binding of a national currency (like Denmark) to the Euro or the Dollar, then real devaluation might be implemented through working time and wage flexibility (like in Denmark). Other equivalents to devaluation are wage cost subsidies (Kaldor 1936) and labour mobility incentives.

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

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

3. Recent Development of NSFE in Europe

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

(1) Activity rate or labour force participation = (all employed + unemployed) as a percent of the working-age population (aged 15 to 64);[6]

(2) Part-time employment rate = employed in open-ended or in temporary (fixed-term) part-time work or in part-time self-employment[7] as a percent of the working-age population;

(3) Temporary employment rate = employed in temporary or fixed-term contracts (including temp-agency work with fixed-term contracts and temporary part-timers) as a percent of the working-age population;

(4) Self-employment rate = own account workers (self-employed without dependent employees) in full-time or in part-time plus self-employed with employees as a percent of the working-age population;

(5) Non-standard employment rate = sum of (2, 3 and 4 controlled for overlaps)[8] as a percent of the working-age population.

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

[6] Notice that "working-age population" used here does not correspond to the usually published data. Due to missing data related to the work status (employed, unemployed, inactive) in the ELFS we related the work-status figures only to the working-age population cases for which answers were given. So, our figures correspond to the (raw or total) working-age population minus missing cases. The difference between the two measurements is – e.g. for EU-28 and Germany – about 4 percent.

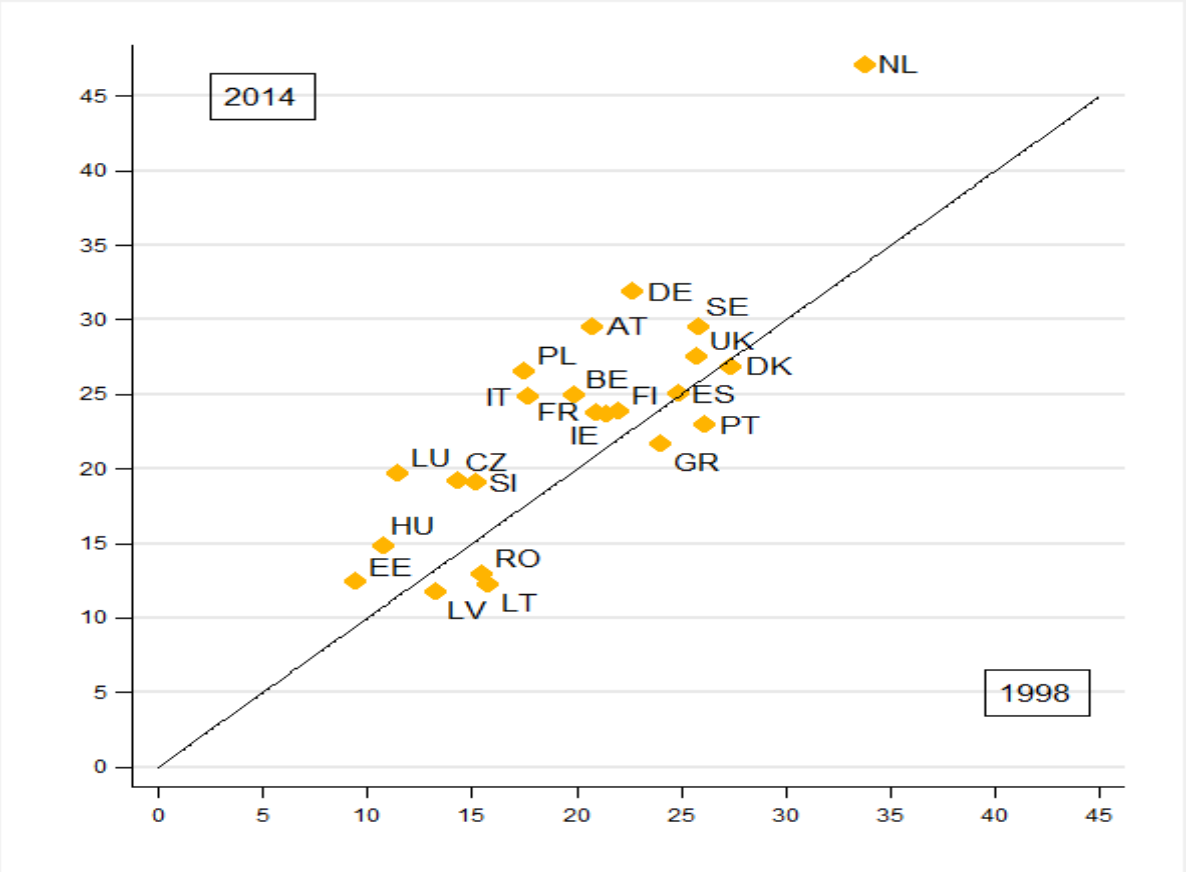
[7] Notice that self-reported "part-time" is used here, which includes both the possibility that some people are in an open-ended, full-time contract but actually work part-time or the possibility that people are in an open-ended, part-time contract but actually work more than 35 hours a week.

[8] For example, temporary or self-employed part-timers are counted only once.

3.1 Extent, Structure and Dynamics of NSFE in Europe

Figure 2 shows the total non-standard employment rate for 28 EU member states in 1998 and 2014.[9] The first pattern we can see is the fact that countries of so-called old Europe rank highest in terms of the combined indicator of non-standard employment; the new member states, in particular from Eastern Europe rank lowest. The Netherlands stands out as the champion with 47.2 percent; in other words, almost half of the Dutch at working age (15–64) are in one or another form of non-standard employment. The members with the lowest non-standard employment rate are the Baltic States Latvia, Lithuania and Estonia with about 12 percent.[10]

Figure 2: Non-standard Employment Rates in EU28 Member States, 1998 and 2014



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

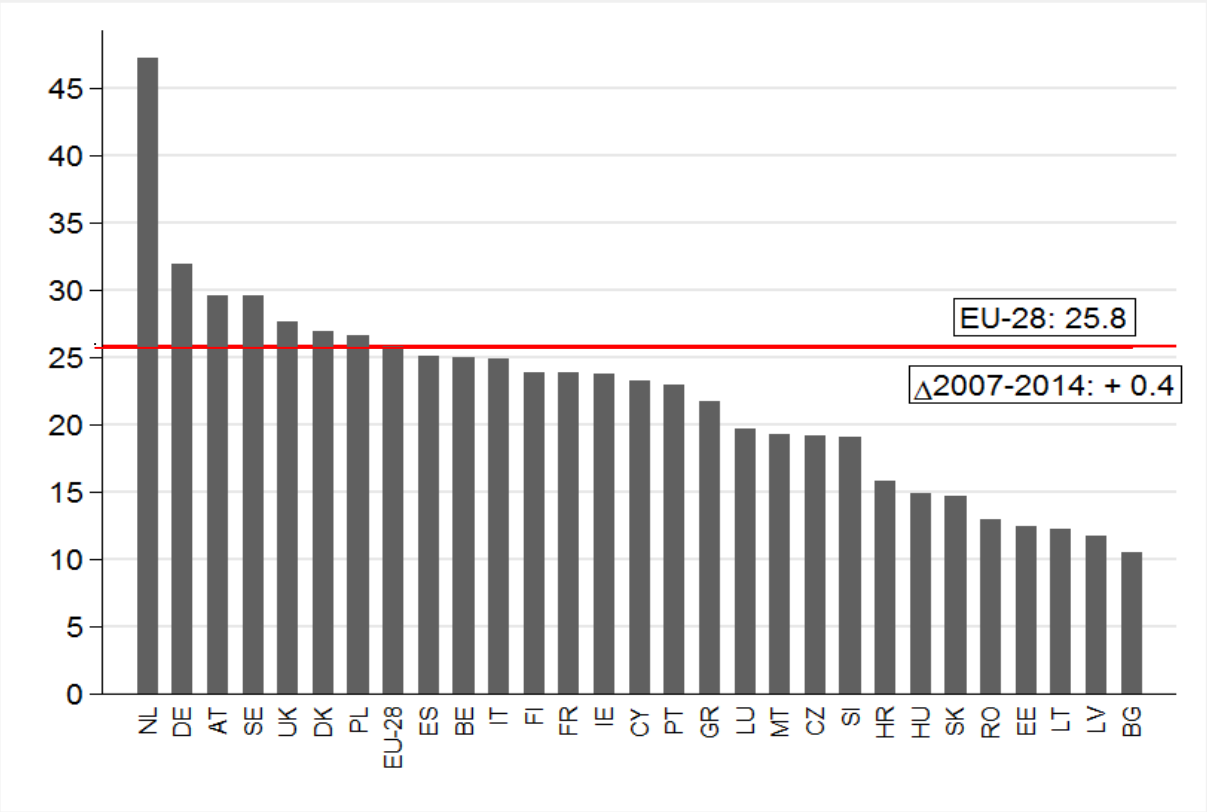
The second feature is that most of the EU member states are situated at the left or above the diagonal line that serves as an implicit time axis: NSFE increased in most EU-member states. At the top of this development are again the Netherlands with the growth in NSE rate of 13.5 percentage points; Italy, Germany, Luxembourg, Poland and Austria follow with 7 to 9 percentage points. Only a few countries experienced a small decline, for in-

[9] Missing countries in 1998 are Bulgaria, Cyprus, Croatia, Malta and Slovakia.
[10] Only Bulgaria, not included due to missing data in 1998, has a lower non-standard employment rate of 8.45 percent in 2014.

stance, Portugal, Lithuania, Latvia, Romania, and Greece, i.e. the countries most heavily exposed to the economic crisis in 2008 that were quick to shed temporary workers.

The ranking of all 28 EU member states for 2014 (Figure 3) provides a first hint to the possible causes of the spread of NSFE.

Figure 3: Ranking of Non-Standard Employment Rates in EU-28, 2014



On average, 25.8 percent of the working-age population in EU28 worked in some form of non-standard employment. At the top, as already mentioned, are the Netherlands with 47.2 percent followed by Germany and Austria. But the interesting point is the bottom where almost only new EU member states from former socialist Eastern Europe are clustering: Bulgaria with a non-standard employment rate of only 10.5 percent, followed by Latvia, Lithuania, Estonia, Romania, Slovakia, Hungary, Croatia, Slovenia and the Czech Republic; only Poland is an exception with a non-standard employment rate of 26.6 percent (basically temporary work). This pattern indicates that NSFE might be a characteristic of mature, developed, capitalist Western countries, whereas the former socialist countries are today still facing a high share of employment in the agricultural and informal sector. Another element of an explanation of the differences between East and West could be the 'inherited' high share of women in standard employment in most former socialist countries and their accordingly lower share in non-standard forms of employment (see Table A3 in the Appendix), whereas women in most west European countries have low shares in standard employment and comparably high shares in non-standard employment.

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

Figures 4 and 5 clearly show that the variation of non-standard employment among women in the EU is much higher than among men. The minimum and maximum non-standard employment rates for men in 2014 vary between about 13 percent (Latvia, Bulgaria, Estonia and Luxembourg) and 37 percent in the Netherlands. For women, however, they range from 7.5 percent in Romania to 57 percent in the Netherlands.

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

By decomposing non-standard employment into its three components of part-time, temporary and self-employment, our expectation is confirmed: part-time work is the most prominent element of non-standard employment in most countries (figures 6, 7 and 8). The *part-time employment rates* – here including the (for most countries) trivial number of self-employed people working in part-time and temporary part-time workers – however, display great variation between the EU member states, ranging from 1.4 percent in Bulgaria[11] to 35.5 percent for the "champion" Netherlands. It is remarkable that in the Netherlands only 9 percent of the working-age population work as temporary part-timers, which means that most of part-timers are 'standard' in the sense of open-ended contracts.

The break-down into the two time periods 1998–2007 and 2007–2014 shows that even in the recent recession and after-recession period, the activity rates in part-time work increased, with the exception of Croatia and Poland, unlike temporary employment which suffered as a result of the crisis. The dynamic, however, has substantially slowed down, in particular in countries with already high part-time figures like Denmark, Sweden, the UK, and the Netherlands where the growth of part-time employment rate surpasses barely one percentage point from 2007 to 2014. Even in Austria and Germany with high growth rates in 1998 to 2007, the slow-down is remarkable (Table A4 in the Appendix).

The breakdown of figures 6 to 8 into age groups (Table A19–A21 in the Appendix) shows, among others, two interesting features: First, part-time increased in the recent period especially among senior workers (aged 55–64) in those countries that exhibit drastic increases in the total activity rates of senior workers (Austria, Germany, France, Netherlands); second, part-time rates among young (15–24) are high in those countries that combine vocational training with formal schooling (Denmark and Netherlands).

[11] Not in Figure 6 due to missing data in 1998, but see Figure A1 and Table A4 (Appendix) for all 28 EU member states in 2014.

Figure 4: Non-Standard Employment Rates of Men in Europe, 1998 and 2014

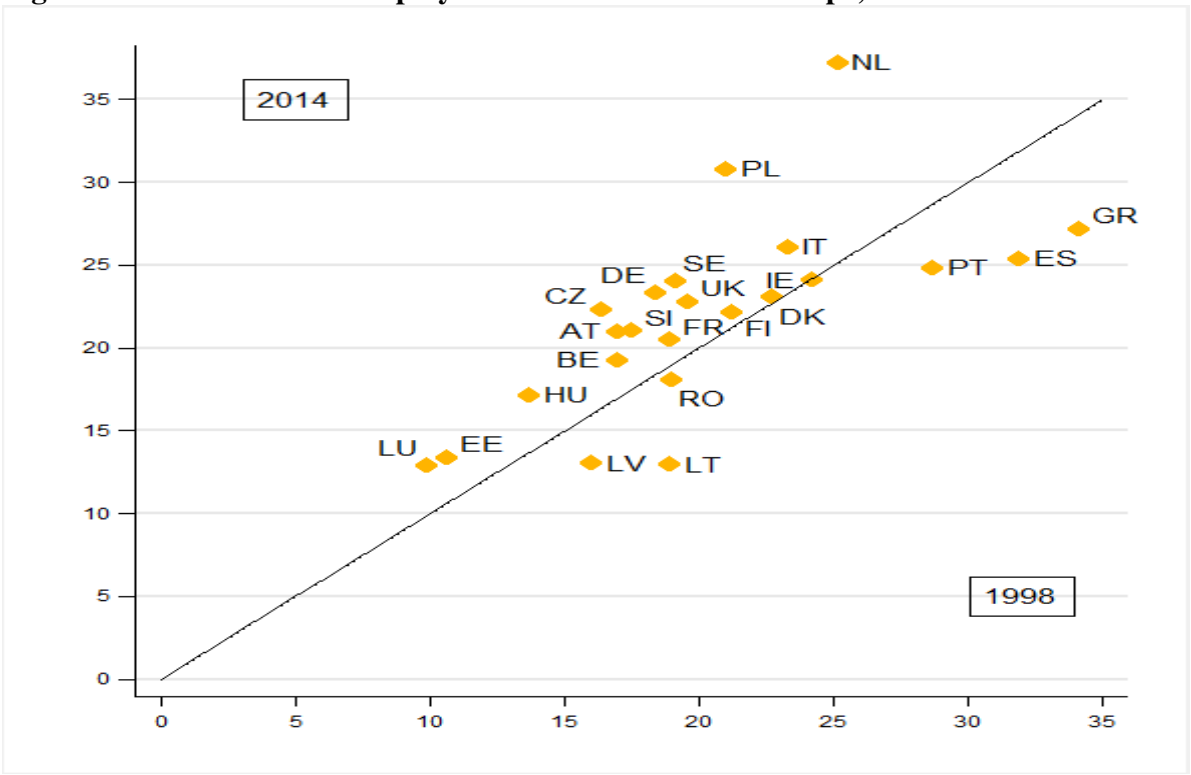


Figure 5: Non-Standard Employment Rates of Women in Europe, 1998 and 2014

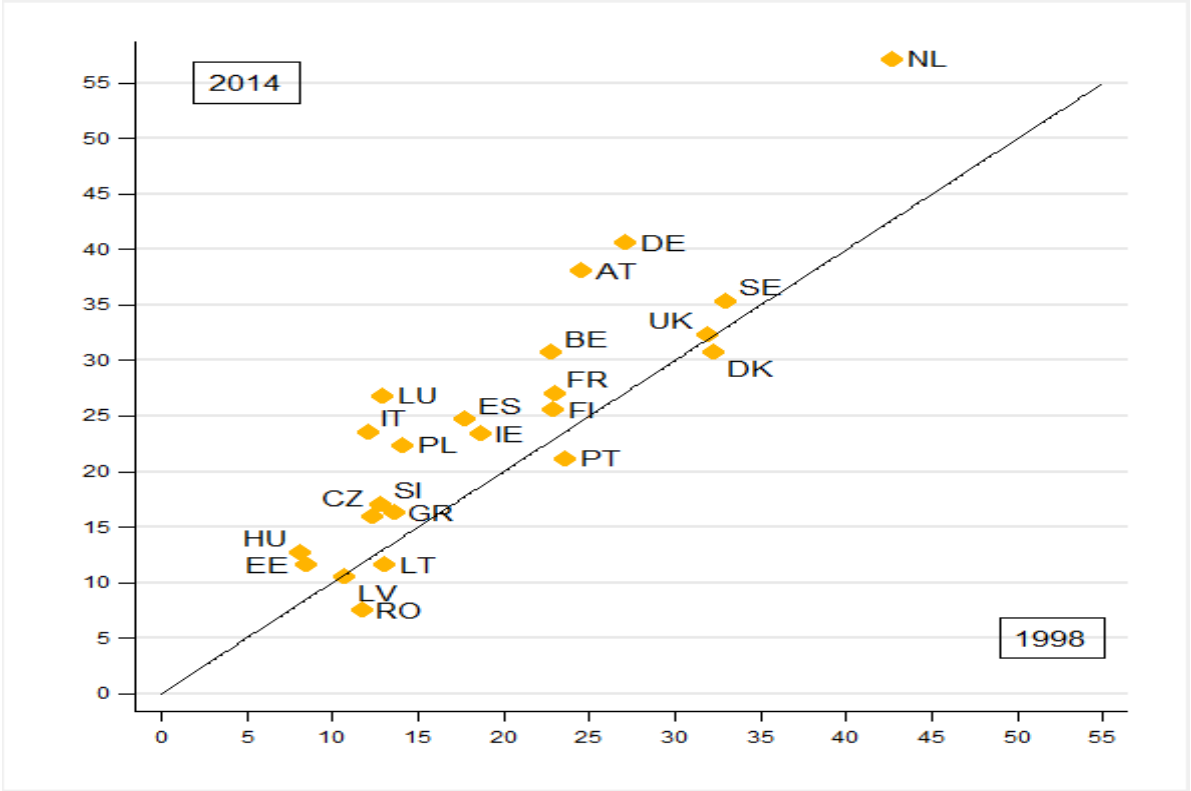


Figure 6: Part-Time Employment Rates 1998 and 2014
(Including open-ended, fixed-term and solo self-employed part-timers)

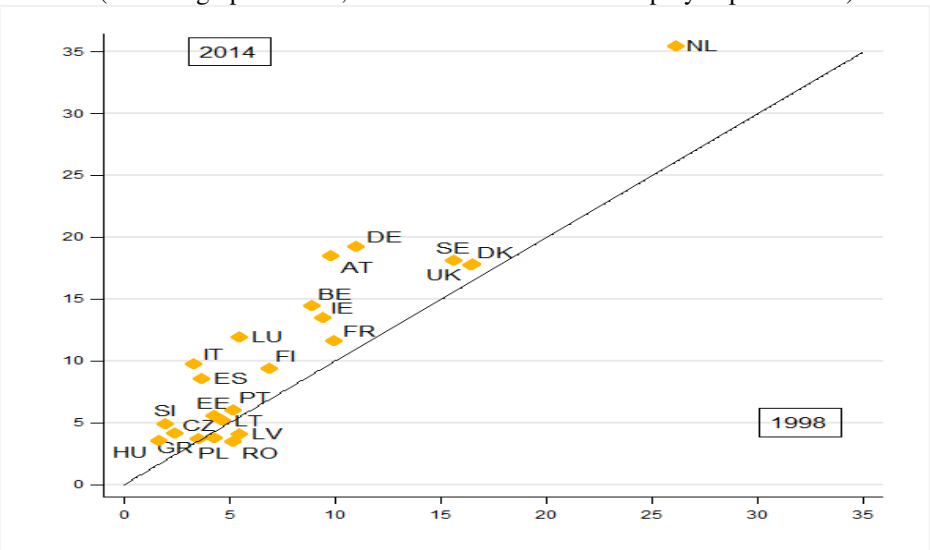


Figure 7: Fixed-Term Employment Rates 1998 and 2014
(Including part-timers and full-timers)

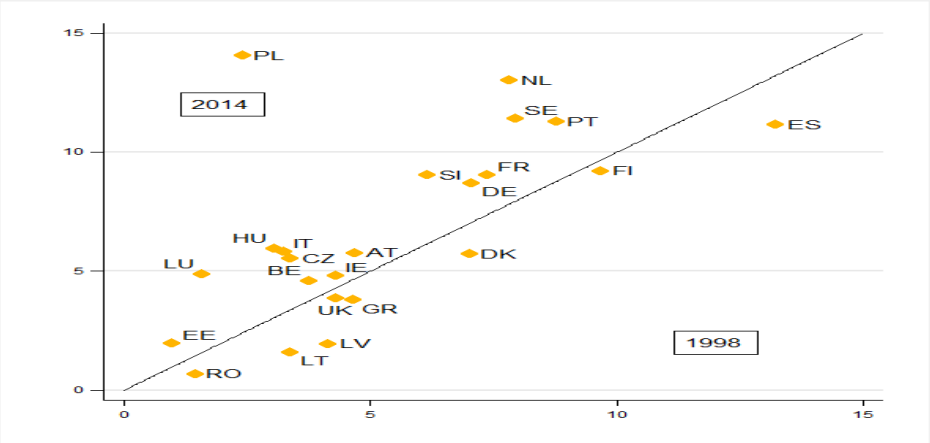
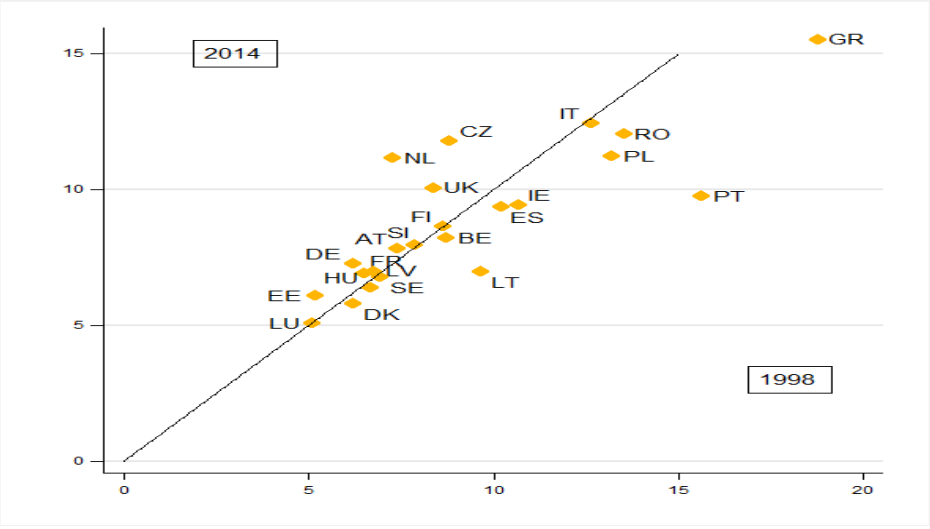


Figure 8: Self-Employment Rates 1998 and 2014
(Including part-time, full-time own account workers and self-employed with employees)



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

The fixed-term employment rates (unfiltered, i.e. including part-timers with temporary contracts) vary "only" between (less than) 1 percent in Romania and 14 percent in Poland. Most of the fixed-term employment consists of full-timers (the EU-28 average was 5.4 percent in 2014), whereas the part-timers in fixed-term contracts make up less than one-third (the EU-28 average was 2.3 percent). Generally, fixed-term or temporary employment is concentrated among the young workers (15–24) and is lowest among senior workers (55–64). In the Netherlands, about one-third of young people at working age are employed in fixed-term contracts, in Germany it is one-fourth: in other words, the fixed-term employment rate of young Germans is 24.1 percent, depending to some extent on the large extent of apprenticeships. The corresponding figures for seniors are only 2.8 percent (NL) and 2 percent (DE), however, increasing in most EU member states from a low level (see Table A22 and A24 in the Appendix).

The self-employment rate (unfiltered, i.e. including self-employed with employees, as well as part- and full-time own account workers) displays a minimum of five (Luxembourg) and a maximum of 15.5 percent in Greece in 2014. The majority of self-employed are full-timers in own account work, i.e. solo self-employed without employees (the EU-28 average was 5.4 percent in 2014), whereas the self-employed with employees make up a bit more than a quarter of all self-employment (the EU-28 average was 2.7 percent in 2014). Generally, self-employment is highest in the core-age group (25–54) and lowest among youth.

Labour market participation in the form of self-employment decreased substantially in some countries in the observation period 1998–2014, in particular in Greece (-3.2 pp) and Portugal (-5.8 pp), but also increased substantially in other countries, in particular in the Netherlands (+3.9 pp), Czech Republic and the UK. The negative dynamics are mainly related to self-employment with employees (-0.26 pp in EU28 2007–2014), and the positive dynamics interestingly come from part-time, solo self-employment (+0.19 pp in EU-28 2007–2014), in particular among women, in some countries (Netherlands, the UK, Germany) also from full-time, solo self-employment. This observation leads us to reflect a bit more on the reasons for this development.

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

Only five of the 15 possible correlations are significant at the 1 percent level. The strong positive correlation between open-ended and temporary part-time employment (r=0.67) is intuitively clear since both contractual forms are *complementary*. One can plausibly assume that a majority of open-ended, part-time employment is the continuation of temporary part-time work.[12] The same explanation can be given for the (weaker) positive corre-

[12] Of course, one would need individual transition data over the life course to rigorously test this assump-

lation between temporary part-time work and temporary full-time work (r=0.28). In other words, a substantial part of temporary part-time contracts might lead to temporary full-time contracts, although such interpretations cannot directly be derived from such correlations.

Table 1: Correlates of Total Non-Standard Employment Rates, averages from 2005 to 2014 (280 observations)

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

Source: Eurostat (ELFS), own calculations; N = 28 member states of the EU; Strong coefficients (significant at 1% level) are in bold; *) significant at 5% level

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

Furthermore, the less but still significant correlation between solo self-employment in full-time and self-employment with employees (r=+0.23)[13] might, again dynamically interpreted, indicate that some start-ups eventually lead to small enterprises with some employees. The successful start-up programme for unemployed, for instance, in Germany, to which we refer later in the policy part, confirms the legitimacy of such speculation.

A final interesting result of this exercise is the negative correlation between full-time self-employment and open-ended part-time work (r=-.42),[14] which indicates a *substitutive* relationship between these forms of non-standard employment. Former (in particular traditional) self-employment might be substituted by dependent part-time work. In other words, this pattern can be (with the usual caveats related to correlations) interpreted as

tion. Such data are hardly available and an urgent desideratum for improving the statistics. Averages over 10 years used here add only a little to confirm the assumption.

[13] Significant for women even at the 1% level (r=+0.35).

[14] This negative correlation is even stronger (-.54) among women.

structural change from precarious full-time self-employment towards open-ended, part-time employment that provides more security in terms of (even if small) income. Furthermore, it can be assumed that formerly self-employed people in agriculture, retailing or sweatshops transit into dependent part-time work and combine this small but regular income with volatile income from various kinds of informal work on the side (especially in small-sized agricultural production), moonlighting or even illegal work. This kind of structural change might be expected especially for countries that need to catch up with mature, 'developed' countries.

3.2 Explaining the Dynamics of NSFE in Europe

3.2.1 A simple causal model

What are the reasons for expanding non-standard forms of employment? The causal nexus of this development is obviously very complex. Factors related to structural change and institutions are intertwined, mutually reinforcing or conflicting. Instead of evoking single causes or ad hoc explanations, we therefore take recourse to Ockham's razor[15] and start with a simple causal model based on just two dimensions for labour supply and labour demand (Figure 9).

Figure 9: A Simple Causal Model for Non-Standard Forms of Employment

		S U P P L Y	
		Contingent	**Life-course**
D E M A N D	**Fluctuating**	Precarious NSFE	Flexible SE
	Stable	Testing NSFE	Career/investment oriented SE

The attachment of people at working age to the labour market (*supply*) can be contingent or life course-oriented, and employers' *demand* for labour can be fluctuating or stable. Labour supply is *contingent* if aspects other than income generation through wage-work predominate or – at least – play a strong role, for instance, education or training and family or care obligations. The reasons for *fluctuating* labour demand can be manifold. For instance, seasonal like in agriculture, tourism or holidays, and project-oriented types of work like in art, research, further education or training, repair and installation of new technologies into the work organisation; extension and globalisation of service chains is a further cause of fluctuating demand. If both factors come together, i.e. contingent supply and fluctuating demand, there is a high chance for non-standard forms of employment; furthermore, if the corresponding labour supply has low power because it is not well organised through trade unions as is often the case for women, or has low skills as it is often

[15] According to William of Occam, a philosopher of the 14th century, who suggested that the simplest hypothesis is usually the correct one.

the case with migrants, or has no work experience like youth, then there is a strong likelihood that these NSFE will become precarious.

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

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

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

3.2.2 Structural change

Quite plausible propositions follow already from this simple model for which we can easily find crude descriptive evidence. First, because structural change moves labour demand more and more from manufacturing to services, and since in many services demand is more volatile than demand for manufactured goods, it seems plausible to expect both an overall increase in non-standard employment relationships and a concentration of these relationships in services that are, in particular, prone to fluctuation in demand. One reason is that the production and delivery of services often fall together so that production on stock, like in manufacturing, is not possible, another reason is that services-demand (as in the care sector) often arises around the clock (24-hour economy).[16]

Table 2 confirms that *part-time work* in Europe is concentrated in hotel and restaurants, health and social services, and household activities, all domains of women's work and with comparatively volatile or unstable demand. Part-time work is least developed in manufacturing and construction, both domains of men's work and relatively stable demand. Germany and the UK display similar features although the labour market institu-

[16] For a closer look at the relationship of NSFE and occupations (including country case studies) see the informative volume by Eichhorst and Marx (2015).

tions of these two countries are quite different. Structural change, both on the labour demand and supply side, seems to be the main driver of part-time work.

Table 2: Sectoral Features of Non-Standard Forms of Employment in 2014 as a percent of total employment compared to 2008 (+ = increase; - = decrease)

A: Part-time	**EU-27**	**GE**	**UK**	**GR**
Manufacturing	7+	11+	8+	6+++
Retail and Repair	22++	31-	36-	8+++
Hotel, Restaurants	33+++	44+++	46+	15+++
Public Administration	19++	28+++	24+++	4+
Education	26++	42+	35--	11+
Health, Social Services	30++	40++	33-	7++
Household Activities	60++	86+	64+++	46+++
Agriculture	18-	21+	18+	10--
Construction	7++	10+	8+	17+++
Transport	11++	17-	8++	5+++
Total	**19++**	**26++**	**25++**	**9+++**

B: Temporary Work	**EU-27**	**GE**	**UK**	**GR**
Manufacturing	11+	10--	5+	6+
Retail and Repair	11+	12-	4+	4+
Hotel, Restaurants	19+	14--	9+	20+++
Public Administration	13-	12--	5+	8--
Education	15-	20-	10-	11+
Health, Social Services	12-	14--	6+	7--
Household Activities	17---	4---	9+++	20--
Agriculture	9++	7--	4-	3-
Construction	11--	9--	3+	13++
Transport	10++	10-	5++	5-
Total	**12-**	**12--**	**5+**	**8-**

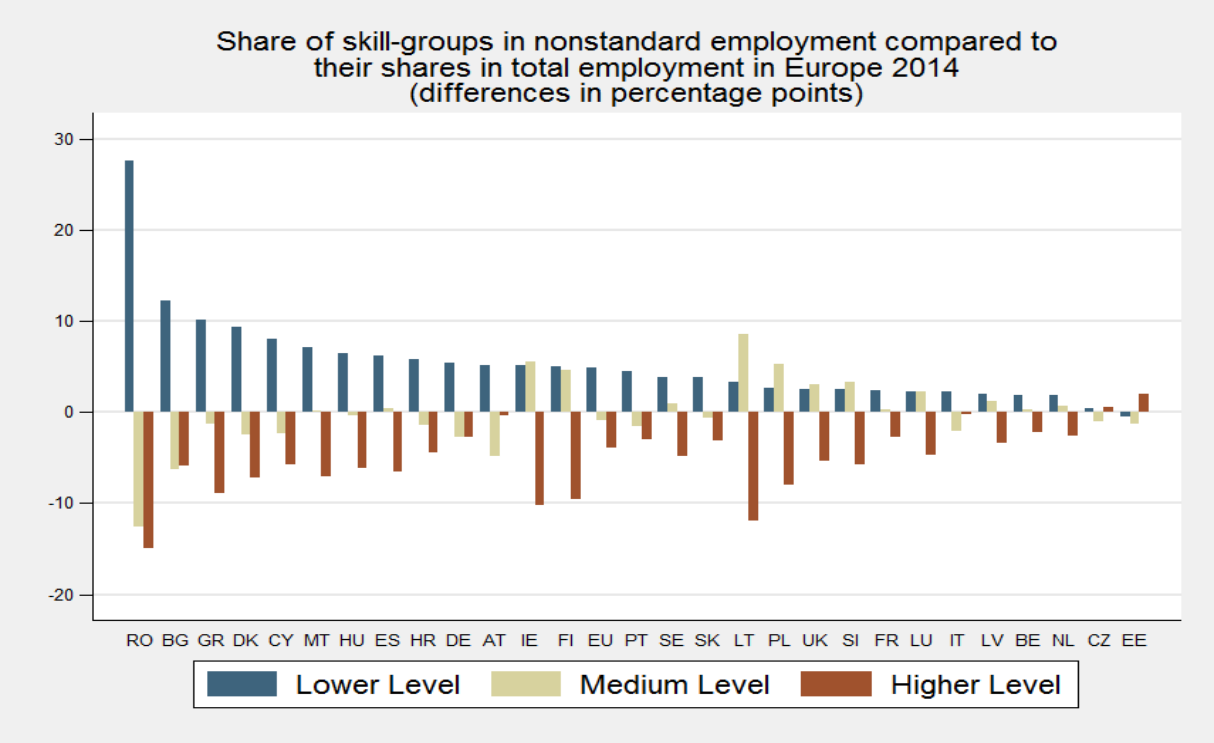
Source: Eurostat (ELFS), own calculations; ++ = more than 1pp; +++ = more than 3pp; -- = more than 1pp; --- = more than 3pp; for exact figure of changes between 2008 and 2014 see Table A28 in the Appendix.

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

3.2.3 Career and Power Relationships

A second expectation from the simple causal model is that highly educated people have not only a great interest in jobs that provide a career perspective and promise high returns of investments in human capital, but more importantly that they also dispose of higher power than low-skilled people to defend their interests and to get either non-standard employment contracts in a testing form or as stepping stones to career-oriented standard employment.

Figure 10: Share of Skill-Groups in Non-standard Employment Compared to their Shares in Total Employment in Europe 2014



Source: Eurostat: Labour Force Survey; own calculations. For a differentiation of this figure according to the components of NSFE see Figure A2 Appendix.

In Figure 10 we find, for instance, that people with low skills (blue) are overrepresented by about 28 percentage points (pp) in Romania, 9pp in Denmark, 6pp in Germany, and only by 2pp in the Netherlands (5pp being the EU-average). At medium-skill level (light), the pattern is mixed, whereas people at high-skill level (dark brown) are underrepresented in most countries (especially in Eastern European new member states), with the exception of Italy, Czech Republic and Estonia (-5pp being the EU-average). The low-skilled are in

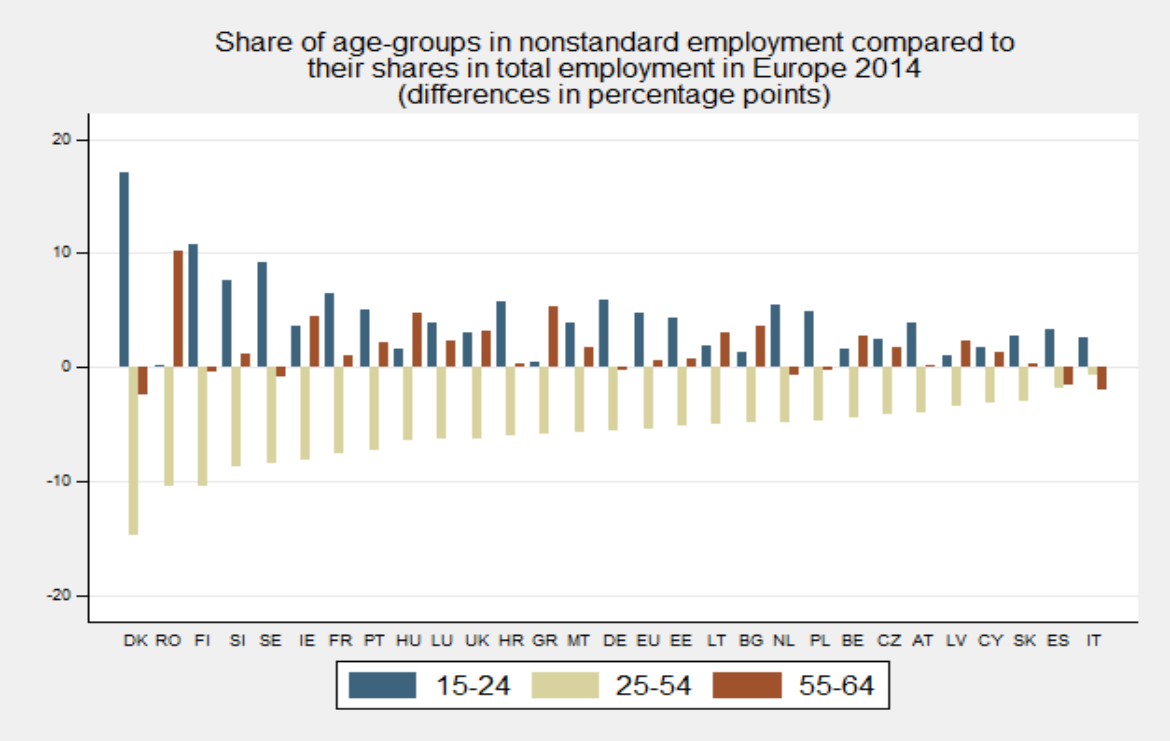
particular overrepresented among the part-time workers without any exception in the 28 member states of EU-28 (see Figure A2 the Appendix).

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

3.2.4 Age-related causes

According to our model, we would expect that the marginal age groups, the young (15–24) and the mature-aged people (55–64), are less attached to the labour market than the core age group (25–54). Their labour supply is, for various reasons, compared to the core age group more contingent on other circumstances like education or restricted work capacities. Their bargaining power is more constrained due to low work experiences, low seniority rights (in the case of youth) or possibly outdated skills and competences (in the case of the elderly). They are either at the beginning of their occupational career (often, as with youth, still unspecified) or at the height or declining curve of their career. Employers have not yet invested much into their human capital (in the case of youth) or are no longer willing to commit to further investments because the return of these investments is becoming more and more uncertain (in the case of elderly). All in all, we expect a much higher incidence of NSFE among youth and, to a lesser extent, among mature-aged workers, and a comparatively low incidence among the core age group. Figure 11 confirms this expectation.

Figure 11: Share of Age-Groups in Non-Standard Employment Compared to their Shares in Total Employment in Europe 2014



Source: Eurostat: Labour Force Survey; own calculations. For a differentiation of this figure according to the components of NSFE see Figure A3 in Appendix.

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

The age differentiation according to the components of NSE provides further interesting information. The overrepresentation of young people is especially pronounced (and without any exception in EU-28) in temporary (fixed-term) work even in countries without apprenticeship employment relationships. The core age group (25–54) is particularly underrepresented in part-time work with the exception of Italy and Austria. in Germany, the core age group is almost equally presented compared to overall employment (see Figure A3 in the Appendix).

3.2.5 Employment protection

When considering the whole portfolio of LMIs (Figure 1, p. 4), the most prominent candidate for driving NSFE is employment protection. Neoclassical theory has two clear propositions. First, the stronger the standard employment relationship is protected (especially through individual dismissal laws), the more employers will be inclined to circumvent this employment relationship through NSFE, especially temp-agency work, fixed-term contracts, part-time work and all kinds of out-contracting, among others to freelancers like the self-employed without dependent employees. Second, the stronger temporary employment is restricted and protected, the less employers can take refuge in this form of non-standard employment. In any case, strong employment protection will lead to a dualistic segmentation between insiders and outsiders, whereas the outsiders tend to be the young, the old, married women with children, people with disabilities, migrant background and low skills.

New institutional and behavioural theory of economics, however, sees this relationship in a more complex way. Employment protection can foster, for instance, cooperation among employees in the firm, thereby increasing productivity and competitiveness, which can eventually result in higher labour demand, thereby reducing or at least mitigating segmentation. Forms of non-standard employment, thereby, might play the role as mediators or stepping stones to transform employment potentials into real and sustainable employment. Combined with generous social security entitlements, strong employment protection might indeed be disastrous for the weaker groups of the labour market, the potential outsiders; but if basic social security is decoupled from standard employment through a citizenship-related universal right (as in most Scandinavian countries), the form of employment relationship will be less affected by employment protection.

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

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

Table 3: Correlates between Employment Protection (EP) and Non-Standard Employment Rates (NSER) in the time period 2008–2014

	NSER *Men*[1]	**NSER** *Women*[2]	**Part-T Open-Ended** *Total*	**Part-T Fixed-Term** *Total*	**Part-T Self-Empl.** *Total*	**Fixed-T Full-Time** *Total*	**Self-Empl. Solo** *Total*	**Self-Empl. With E** *Total*
Individual EP[3]	**.31**	.15	-.10	.22	**.31**	**.45**	.12	**.33**
Collective EP[4]	-.13	.05	.15	-.10	.27*	-.26*	-.02	.05
Temporary EP[5]	-.21	**-.35**	**-.44**	**-.36**	**-.40**	.25*	.14	-.01
Combined EP[6]	.24*	.18	-.01	.16	.16	**.31**	.11	**.37**

Source: Eurostat; OECD (2013); own calculations; figures in bold significant at 1% level; *significant at 5% level (N=22 member states of the EU, 128 observations)
1) Men in part-time, fixed-term or self-employment in percent of working-age men (15 to 64), (2008–2014)
2) Women in part-time, fixed-term or self-employment in percent of working-age women (15 to 64), (2008–2014)
3) Indicator composed of eight characteristics of employment protection against individual dismissals (2008–2014) (OECD 2013)
4) Indicator composed of four characteristics of employment protection against mass dismissals (2008–2014) (OECD 2013)
5) Indicator composed of six characteristics of employment protection in case of temporary work (2008–2014) (OECD 2013)
6) Indicator composed of 3, 4 and 5.

3.2.6 Preferences for NSFE

It is evident that asking people themselves about their preferences should provide insights into the reasons for non-standard employment. This, however, raises a measurement problem. Preferences cannot be measured directly because they are not fixed or even not inher-

ited. Preferences are also expressions of economic constraints and cultural influences. It remains therefore unclear whether responses to corresponding questions in surveys reflect genuine choices (as expressions of autonomy or free will) or the results of external constraints and influences.

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

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

Table 4: Reasons for Working Part-time or Fixed-Term in EU-28, Percent, 2014

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

Source: Eurostat (ELFS), own calculations; for the dynamics from 2008 to 2014 see the corresponding figures A4 in the Appendix.

Involuntary part-time increased since 2008, in particular among men, whereas the proportion of other reasons for part-time remained almost constant. However, it needs to be men-

tioned that the proportion of involuntary part-timers varies widely across countries in Europe.[17] Interestingly, however, these figures strongly correlate negatively with the extent of part-time work. The country with the highest share of part-time work, the Netherlands, has one of the lowest shares of involuntary part-time (9%), whereas most of the countries with low shares of part-time have a high proportion of involuntary part-time, for instance Spain, Greece and Bulgaria with levels over 60 percent.[18] Further studies should assess the impact of other institutional factors, in particular public or affordable care services, on whether part-time is voluntary or involuntary.

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

If we look at changes of 'preferences' over time, we find remarkable differences only related to involuntary part-time which increases slightly both for women and – to a larger extent – for men in the period of observation (2008–2014). Involuntary temporary work rather increased slightly than decreased, whereas voluntary temporary work remained constant at a level of about 12 percent (see Figure A4h in the Appendix).

Temporary work related to education or training also remained constant at a level of about 18 percent; this figure, however, is heavily biased through the high levels in countries (like Germany) where apprenticeship systems are established, which are by definition fixed-term contracts (three to four years) until the end of training.[19] Surprisingly, and a bit disappointingly from a transitional labour market point (TLM) of view, is the fact that the reason for part-time for education or training intentions did not increase in the last decade.[20] For an ageing workforce that is confronted with high structural and technological change, the combination of intermediate part-time combined with training or retraining would certainly enhance employability and upward mobility. It is probably still the lack of institutional incentives that explain the stagnant share of part-time with education. We will come back to this point later.

3.3 Consequences of Increasing NSFE in Europe

Conventional studies usually concentrate on individual wages and social protection as consequences of NSFE. As the literature is already quite established in this respect and almost unanimous in finding that wages as well as social protection more or less deteriorate with NSFE, we take a broader perspective here and also look (according to our broad institutional framework in Figure 1, p.4) at quantitative aspects in terms of inclusion into the labour market and qualitative aspects in terms of aggregate productivity and economic welfare.

[17] For details of some countries (Germany, the Netherlands, Sweden, and the United Kingdom) see figures A4d, A4e, A4f, A4g, in the Appendix.
[18] Williams and Renooy (2014: 106): Appendix F.8, referring as source to Eurostat: lfsq_eppga(Q2); lfsa_eppgai, OECD, Incidence of involuntary part time workers.
[19] See figures A4i, A4j, A4k, A4l in the Appendix.
[20] Among our selected countries, only Sweden seems to be an exception (Figure A4f, Appendix).

3.3.1 An analytical framework for measuring the impact of NSFE

Two hundred and forty years ago Adam Smith noted that the *'Wealth of Every Nation'* "must […] be regulated by two different circumstances; first, by the skill, dexterity, and judgement with which its labour is generally applied; and second, by the proportion between the number of those who are employed in useful labour, and that of those who are not so employed" (Smith 1937 [1776], Vol. 1, VII). In other words: it is not only productivity but also social inclusion into the labour market that create sustainable wealth. Today, this wisdom can be transformed into a simple identity equation:

GDP/P = GDP/H x H/E x E/WAP x WAP/P

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

Table 5: Decomposition of GDP/P in EU28

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

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

As Table 5 shows, in 2013 economic wealth in constant prices (GDP/P) in the European Union (EU-28) were not yet recovered compared to 2008, the year shortly before the great recession. Labour productivity increased, but at a slow rate compared, for instance, to the United States that had a yearly productivity increase of 1.4 percent. The European productivity dynamics was not enough to compensate for the reduced working time per employed and the decline of the employment rate. Whereas reduced working time, in our framework, might be positively interpreted as an increase of time variability over the life course, the main problem is obviously the drastic fall in labour market activity through social exclusion, in particular in the form of unemployment. In the EU-28, the unemployment rate (the mirror of decreasing employment) rocketed during this short period from 7 percent to 10.8 percent, in particular among youth (from 15.8% to 23.5%). In addition, the demographic sustainability indicator (WAP/P) slightly worsened, too.

According to this analytical framework, and in view of the deteriorating labour market conditions in EU-28, we are particularly interested in the impact of NSFE on social inclusion and productivity, which includes also wages.

3.3.2 NSFE and social inclusion in form of labour force participation

Ideally, we would like to measure inclusion both in terms of the variability of working time over the life course (time sovereignty) and in terms of the level of labour force participation (as an essential part of social inclusion). Unfortunately, valid indicators on life-course variability are not available so we have to content ourselves with part-time as a crude indicator.[21] Both indicators are interrelated in the sense that variability increases the individual chances to participate in the labour market. Before starting to test the relationship between non-standard employment and labour force participation, the two main reasons for expecting a positive relationship shall be made explicit.

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

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

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

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

Figure 12 shows, however, a positive relationship between the aggregate share of non-standard employment[22] and the activity rate in 2014 for 28 member states of the EU. As the scatter plot makes clear, the Scandinavian countries and the Netherlands rank highest both in terms of non-standard employment shares and labour force participation. The new member states, and surprisingly also Italy, rank lowest.

The weak correlation is mainly due to two opposing trends within the dimensions of non-standard employment. Whereas part-time work (Figure 13) turns out to be a strong driver of labour participation,[23] self-employment (Figure 14) is negatively correlated for reasons we already mentioned above.[24]

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

Table 6: Correlates of the Shares of Non-Standard Employment and Labour Force Participation over the Time Period 1998–2014; 28 EU Member States, 452 observations

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

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

[22] Notice that we use here the shares of aggregate (part-time, fixed-term, self-employment) non-standard employment in total employment to avoid multi-collinearity, since non-standard employment rates are parts of the activity rate or of labour force participation.
[23] Albeit weakening in the second part of our observation period, not shown here.
[24] Within solo self-employment, we also have two opposing trends: the (still) stronger negative trend due to structural change from agriculture (where many people are solo self-employed) to manufacturing or services, and the other (still) weaker positive trend due to the new ('creative') sector composed of start-ups and free-lancers. The shares of temporary employment and labour market activity correlate positive but only weakly and insignificantly.

Figure 12: Non-Standard Employment as a Percent of Total Employment and Labour Force Participation (2014)

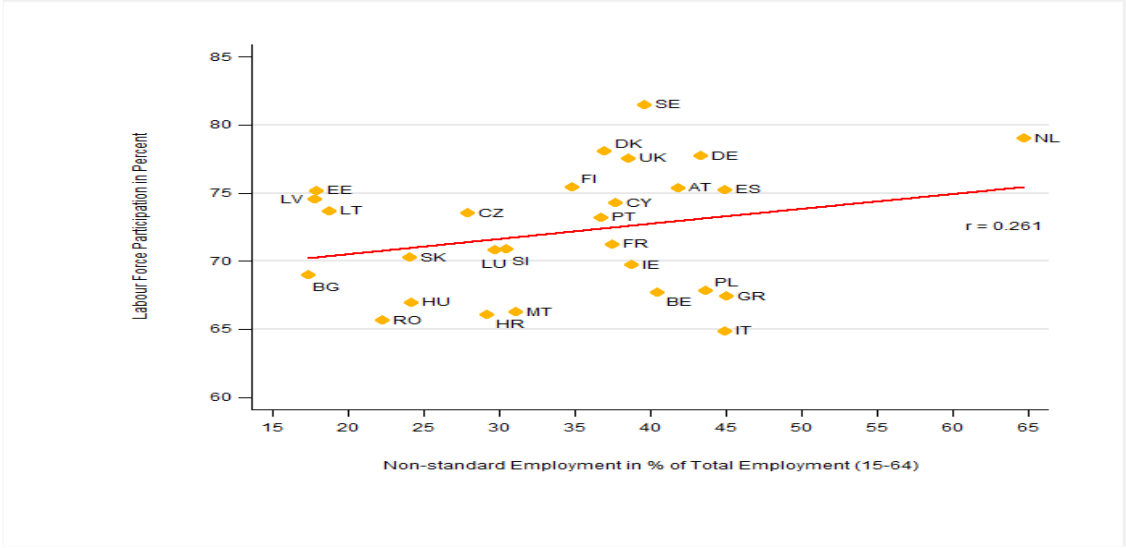


Figure 13: Part-Time Employment as a Percent of Total Employment and Labour Force Participation (2014)

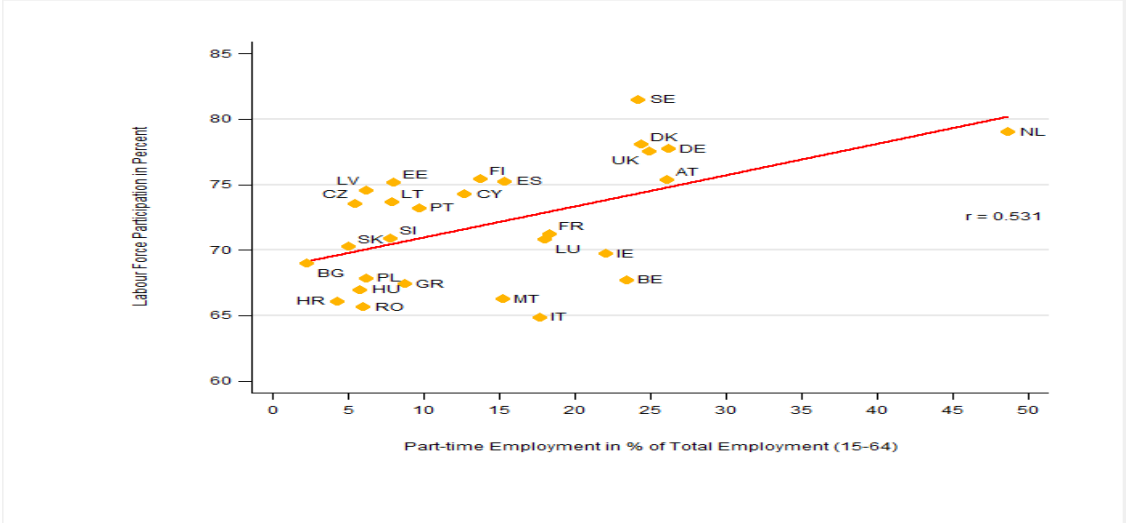
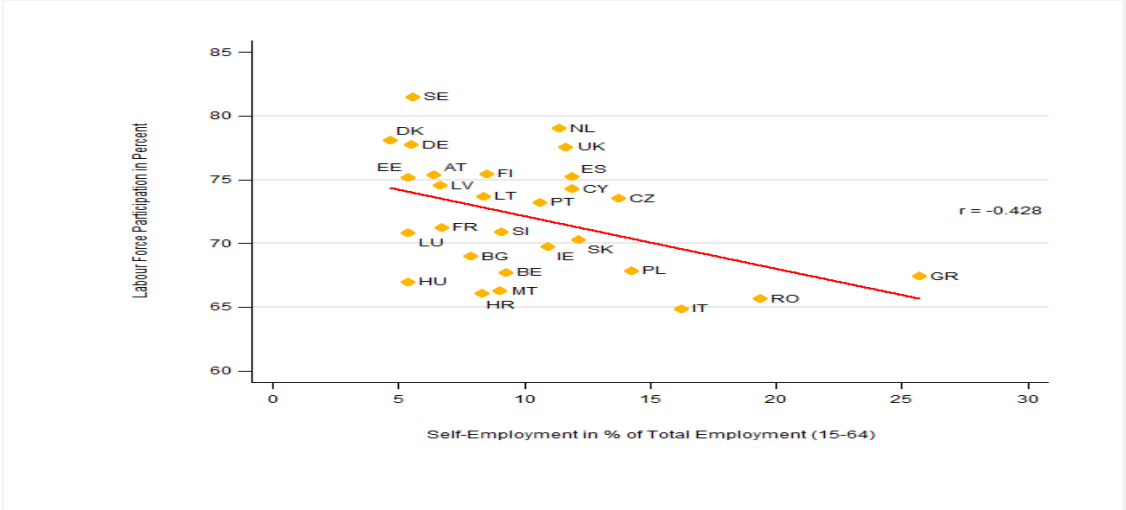


Figure 14: Self-Employment as a Percent of Total Employment and Labour Force Participation (2014)



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

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

When we look at the relationship between non-standard employment rates and GDP per capita ('wealth' indicator) or GDP per hour ('productivity' indicator), we find strong positive correlations in both cases (Figures 15, 16). Although correlations do not allow an interpretation as (one-directional) causal relations (here in the sense that non-standard employment causes higher economic wealth or productivity), the strong connection permits at least reflect on the possible causal relationships behind this empirical coincidence.

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

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

It seems to be open-ended part-time in particular that contributes to higher labour productivity, even (only a bit weaker) for men, whereas solo-self-employment dampens – at the aggregate level – labour productivity, in particular related to women. These results are confirmed by using chain values (2010=100) and focussing on the relationships over time instead on differences between countries, albeit with much lower coefficients.

Figure 15: Non-Standard Employment as a Percent of Working-Age Population and Productivity as GDP per Hour (2014)[25]

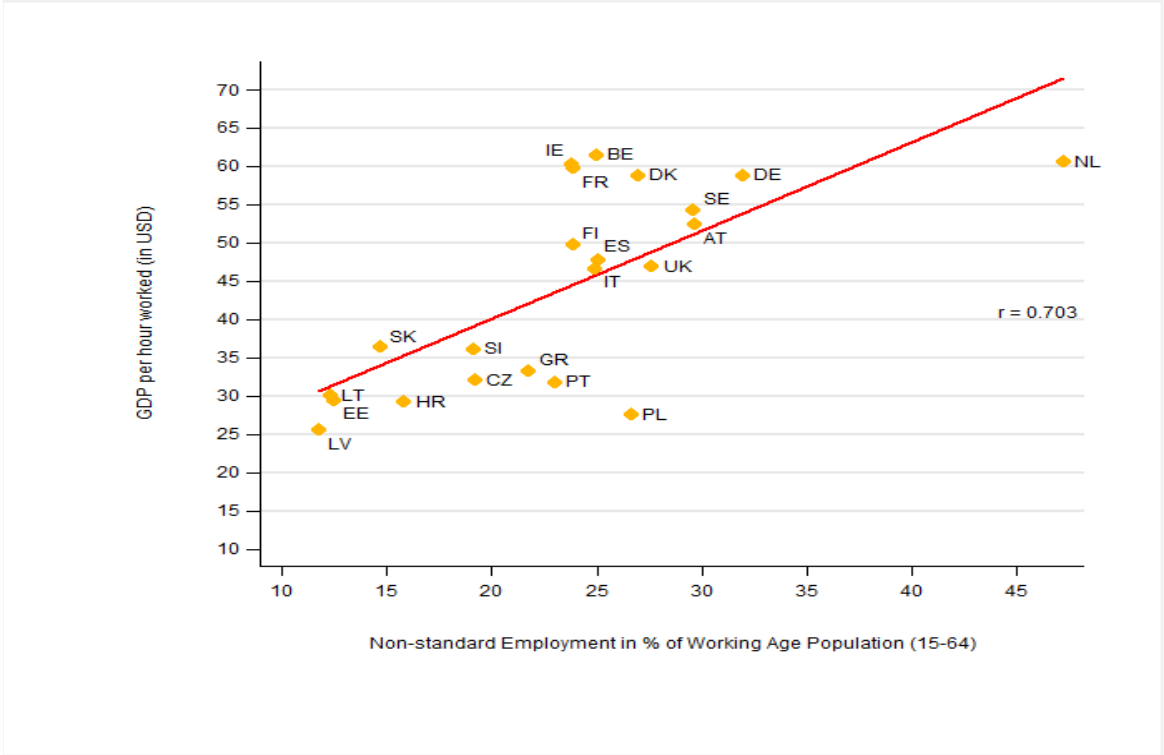
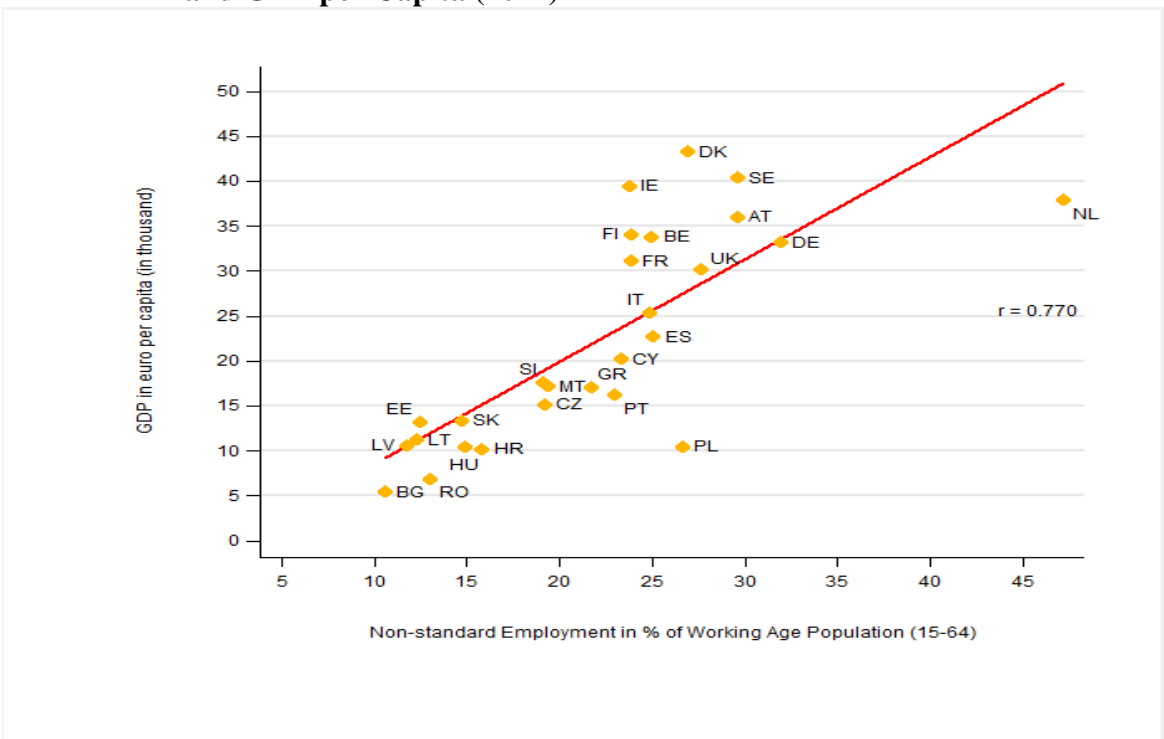


Figure 16: Non-Standard Employment as a Percent of Working-Age Population and GDP per Capita (2014)



[25] Figures 15 and 16 without Luxembourg, which is by (its small) size and specific economic structure (financial capital) a rather unique case and an extreme outlier. Including Luxembourg, the correlates remain significantly and strongly positive (r=0.55 for productivity, r=0.52 for GDP/P).

Table 7: Correlates of Non-Standard Employment Rates and Labour Productivity (GDP/H) over the Time Period 1998–2014 (27 EU Member States, 354 observations, without Luxembourg)

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

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

One reason for this observation can be found in the logic of the service economy which often has to deliver just in time so that variability in the employment contract through part-time contracts contributes to higher productivity. The correlation between temporary (fixed-term) full-time work and productivity is not significant; however, it becomes even significantly negative, if we correlate only involuntary fixed-term contract and productivity (r=-.39). An important reason for this finding is that only open-ended and longer-term employment relationships ensure the return of investments into innovation and skills.[26]

Summing up, standard and non-standard forms of employment seem to be to some extent complementary for knowledge and client-oriented service economies. If we differentiate further, we find – and this is a real astonishing but plausible result – that it is voluntary part-time and not involuntary part-time that contributes to higher productivity.[27] Flexibility through involuntary temporary or fixed-term contracts does not pay off in increasing productivity and economic welfare, rather on the contrary.

The overall correlation of standard employment with GDP/H is just the reverse (r=-.28), however, slightly positive for men (r=.19) but strongly negative for women (r=-.54). The overall negative sign gets stronger for the period 2007–2014. This, at first glance, surprising result might find an explanation for the background of Baumol's productivity dilemma. Whereas we find in (declining) manufacturing a virtuous circle, which means that an easy increase in productivity through new technologies induces an increase of wages, thereby a rise in demand and then employment, the increasing service sector is determined rather the other way round: difficult (low or even no) increases in productivity meet wage rigidities that prevent wage differentiation according to productivity, which in turn makes

[26] This result fits with micro-studies showing that excessive use of fixed-term contracts, especially in the form of temp agency work, dampens productivity and innovation; see among others Kleinknecht et al. (2014), Lisi (2013), Martin and Scarpetta (2011) and Zhou et al. (2011).
[27] The correlation between involuntary part-time and GDP/H (productivity) is significantly negative (-.33).

employment contract differentiation necessary to acquire wage flexibility in services (Baumol 1967). Probably the only way to get out of this dilemma is to radically change the tax structure from labour taxes to (differentiated) commodity taxes (Jansson 2006) or to consumer taxes (Frank 2012). We will come back to this point later (chapter 5).[28]

3.3.4 NSFE, wages and inequality

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

Studies on wage inequality related to NSFE are quite established. A recent study by Dias da Silva and Turini (2015) across the EU member states and using data from the European Structure of Earnings Survey finds that, after controlling for individual and job characteristics, workers on standard employment contracts earn, on average, about 15 percent more than workers on fixed-term contracts with similar observable characteristics. Furthermore, the wage premium of people in standard contracts is higher for men, workers at middle age and with middle or higher education. Wage premiums are higher when employment protection for permanent contracts is strict and the share of non-standard employment high, which supports the view that workers with fixed-term contracts suffer from a negative wage gap due to lower bargaining power and lack of transition opportunities to regular jobs; also long duration of UB contributes to high wage gaps. But there are important differences in the impact of NSFE on wage inequality between the EU member states for which we will present just one example related to part-time because it might teach policy lessons that will be taken up again in the final chapter.

The two panels of the following Table 8 provide evidence of the combined risk of being in a part-time employment and in low wages. The figures have been provided by a seminal study of Janine Leschke (2015) who also backed up the descriptive evidence by multiple regression analysis based on EU-SILC panel data. The table shows the level of part-time work and the low-wage incidence of two occupations that contrast in terms of required skills and tasks: the case of teaching and the case of elementary sales and cleaning. These cases represent in our model the fluctuating vs. contingent type and the (rather) stable/career-oriented type of the demand/supply relationship.

The main results are: First, as to be expected, overall women face not only a higher risk of being in part-time but also a higher risk of receiving low wages; there are only two marginal exceptions, for teaching occupations in the Nordic and Southern countries.

[28] These to some extent paradox results need further research at the micro-level of firms and individuals.

Table 8: The Risk of Entering Part-Time Employment at Low Wages According to Different Welfare Regimes in the EU:

Panel A: *The Case of Teaching Occupations: Levels (%), gender gaps (pp), wages (%, <67% median)*

	Part-time %			**Low Wages (%)**		
	M	F	Gap	M	F	Gap
Nordic	8.4	17.0	8.6	6.3	5.3	- 1.0
Continental	11.9	31.7	19.9	4.1	8.6	4.5
Anglo-Saxon	8.3	30.0	21.7	2.2	4.6	2.4
Southern	6.2	10.1	3.9	3.3	3.0	- 0.4
Central-East	6.4	5.4	- 1.0	0.4	2.6	2.2
TOTAL (20 EU Members)	**8.9**	**20.5**	**11.6**	**3.3**	**5.3**	**2.0**

Panel B: The Case of Elementary Sales and Cleaning Occupations
Levels (%), gender gaps (pp), wages (%, <67% median)

	Part-time %			**Low Wages (%)**		
	M	F	Gap	M	F	Gap
Nordic	23.6	39.3	15.7	25.7	34.1	8.4
Continental	16.8	69.8	53.0	28.4	46.2	17.8
Anglo-Saxon	25.4	60.0	34.5	39.2	60.3	21.2
Southern	10.0	37.0	27.0	24.5	43.3	18.8
Central-East	13.8	19.2	5.4	40.1	52.2	12.6
TOTAL (20 EU Members)	**16.8**	**51.8**	**35.1**	**30.6**	**47.3**	**16.8**

Source: Leschke (2015: tables 12.2a and 12.2c, pp. 331,333)

Second, and also to be expected, is the higher risk of low wages in the elementary sales and cleaning occupation compared to the teaching occupations where the risks of low wages even among part-timers is quite low (only 3 to 5 percent in the EU).

Third and most interesting is the fact that even in teaching occupations, women, for instance, in the continental welfare regime (Germany, the Benelux countries, France, Austria, and the Netherlands) face not only a substantially higher risk of being in part-time but also a higher risk of being in low wages compared to the Nordic welfare regimes (Denmark, Sweden, Finland).

Fourth, the same pattern – but at a much higher level – can be observed in elementary sales and cleaning occupations where 46.2 percent of women in the continental welfare regime get wages below 67 percent of the median wage. In this case, the Anglo-Saxon

women (UK and Ireland) do even worse (60.3 percent), whereas in the Nordic countries 'only' 34.1 percent of women part-timers receive low wages.

Fifth, the multiple regression analysis – confirming the descriptive patterns – provides some hints for an explanation: It is in particular full-time, equivalent childcare provision and public employment which is preventing or at least mitigating the risk of being simultaneously in part-time and in low-wage (Leschke 2015: 339–41).

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

3.3.5 NSFE and social protection

The scarce literature on the relationship of NSFE and social protection is unanimous in demonstrating that people in non-standard employment are less well-covered by social protection (health, pension and unemployment insurance) and underrepresented in active labour market policies (e.g. Schulze Buschoff and Protsch 2009). Since the OECD has already provided a review of to what extent our three components of NSFE (part-time, temporary work, self-employment) are covered by various forms of social protection (family allowances; insurances related to old age; disability and survivors; sickness and maternity; unemployment; work injury), we can leave this issue with a brief summary.

In general, self-employed workers are more likely to experience different statutory treatment than people in other components of NSFE. In most cases, the benefit rules for part-time and temporary workers are the same as for standard workers. In most countries, unemployment and work injury benefits for the self-employed are different than for standard workers. Sickness and maternity, old age, disability and survivors benefits are also different in some countries. The most common difference with standard workers is the exclusion of NSFE from benefits related to unemployment and work injury. The second most common difference concerns variations in the content of the benefits (e.g. the coverage or payment level).[29]

[29] OECD 2015a, in particular Table 4.6: Statutory benefit differences between non-standard and standard work, by benefit, 2010, page 181.

4. NSFE in Selected Countries of Asia, Latin America and Africa

The following case studies are motivated by several reasons. First of all, the concept of non-standard forms of employment (NSFE) obviously stems from the concern of eroding standard employment relationships. The underlying "standards" are a mix of normative and ideal type considerations on how a fair labour contract, should and allegedly looks like, and these standards were derived from Western types of mature, developed industrial (and capitalist) economies: open-ended, yet legally formalised labour contracts related to full-time workers whose labour capacity is assumed to be unrestricted from other work obligations. Apart from ensuring that some kind of "decent" wages were paid, these contracts also more or less guaranteed social protection in terms of job or employment security, earnings security, health and occupational safety and income security in old age. It is obvious that the labour market of these countries never corresponded completely to these standards, but a great majority of employment relationships were not far from this ideal type in the late decades of the 20th century. These standards, however, are more or less absent in so-called developing and emerging countries. The question, therefore, arises as to what extent the concept of NSFE (and implicitly SE) is able to describe the labour market of these countries and whether the concept needs to be broadened or complemented to understand the employment relationships of so-called developing and emerging countries.

The second – and closely related to the first – motivation is to open the mind to learning opportunities in possibly two different ways. By looking at the functioning of established institutions of industrialist countries implanted into 'developing' and 'emerging' countries (e.g. unemployment insurance, collective bargaining, minimum wages and employment protection regulation), and by exploring, so to speak, 'indigenous' institutions that have survived and evolved as potential elements to be implanted into the so-called mature, developed countries.

The selection of the countries was to some extent arbitrary or even guided by some idiosyncrasies (the accidental familiarity of the authors with one or two of the countries), and following some strategic considerations: (South-) *Korea* was selected for a quickly emerging country with astonishing growth rates and now even leading in some modern branches; *India* as the second largest populated giant (after China) with a fascinating mix of most modern and most archaic cultures; *Brazil* as the giant representing Eastern Latin America and (as India) another prominent member of the BRIC countries; *Chile* for representing Western Latin America and world famous for its innovative unemployment insurance system; *Uganda* and *Kenya* as members of the EAC and representing still poor economies in Sub-Saharan Africa, but with interesting elements of youth policies and technological modernisation.

We have chosen to represent the countries in the context of their historical, political, social and economic development to achieve some kind of narrative for a better understanding of how their economies in general, and their labour markets in particular are functioning.

4.1 Korea

South Korea (officially The Republic of Korea, from now on 'Korea') emerged after the Korean War in 1953 rapidly moving from a poverty house to a thriving industrialised economy. Under a military dictatorship until 1987, Korea since then is a fully functioning democracy with a strong presidency and centralised governance. About 50 percent of its 50 million population live in and around its capital, Seoul.

Between 1962 and 1994, Korea's 'tiger economy' soared at an average of 10 percent annually, fuelled by an annual export growth of 20 percent. Korea is presently the world's fifth largest exporter and seventh largest importer and is a member of the OECD. Koreans enjoy high civil liberties with all fundamental rights protected by a highly effective rule of law system. Koreans have Asia's highest average wage and are top performers in education with the highest percentage of young adults holding a tertiary education degree. Driven by a few high-tech multinational companies ('chaebols') such as Samsung and Hyundai-Kia, Korea ranks first in research and development spent per GDP. Korea's economy relies heavily on manufacturing and exports (the world's largest shipbuilder) and has the world's fastest Internet speed (excerpt from Wikipedia). The country easily matches European standards in terms of the Human Development Index (HDI=0.89 in 2013), and Korea's world-famous pop-music crowns its ability of combining hard-work with creativity.

Services, however, are comparatively underdeveloped. The labour relations system is more antagonistic than cooperative, and women's labour market activity is low compared to the high economic and educational standard. Koreans still work long hours, however, moving fast towards the OECD 'standard'. Whereas in 2000 Koreans worked 668 hours more per year than the average worker in the OECD countries (2,512 vs. 1,844), they reduced this difference – partly induced by legislative changes – by more than a half to 312 hours (2,090 versus 1,778) in 2011 (Schmid 2012).

Social protection, social security and labour market policy are still much concentrated on the core workforce in the 'chaebols' or public services. Wage inequality is high: Korea has the highest share of employment in the low wage sector – below 2/3 of the median wage – among OECD countries, and the Korean workforce is rapidly ageing due to the lowest fertility rates in decades (Freeman et al. 2008, OECD 2012, Shin 2012).

The financial crisis in December 1997 had a dramatic impact on Korea's economy and labour market: IMF's bailout was contingent on comprehensive reforms of market deregulation and the starting point of rocketing NSFE from an already high level before that crisis. What is the situation now compared to Europe?

Table 9: Non-Standard Employment Rates in South-Korea as a Percent of Working-Age Population (15–64), 2002 and 2011

	2002	2011	2014 (EU-28)
Standard Employment Rate*)	**27.5**	**27.0**	**38.7**
a Part-time Employment	*2.4*	*4.7*	*8.7*
b Self-Employment	*22.8e)*	*18.8*	*9.4*
*c Limited Workers***)*	*6.1*	*9.5*	*7.7****)*
*d Atypical Workers***)*	*5.2*	*7.0*	
Non-standard (a+b+c+d) Rate	**36.5**	**40.0**	**25.8**
Total Employment Rate	**64.0**	**67.0**	**64.5**
WAP-Unemployment Rate	*3.3*	*2.4*	*7.6*
Total Activity Rate	**67.3**	**69.4**	**72.1**

*) So-called "regular workers" (those with open-ended contracts and working full-time; without part-timers who seem to be counted among the broad category of "regular workers"); **) temporary workers with perspective of extending the contract; ***) encompasses "daily workers, dispatched workers, subcontracted workers, home workers, special employed workers"; ****) due to incomparability, this figure represents the temporary (fixed-term) employment rate in EU-28; e) estimated; for the EU-28 see the Basic Tables A1 and A2 in Appendix. Source: Shin (2012), Table 3, p. 9, and own calculations.

Before we start to interpret Table 9, a definitional caveat is in place. Korea struggled for a long time to provide a definition for its "non-standard" workers; Shin (2012) provides a good overview. Whereas "standard" employment seems to be near the European or ILO definition, the other categories are only approximately comparable. In particular "self-employment" in Korea might overlap with people working in the informal economy, which is still large especially in services related to restaurants, hotels, retail or even teaching.[30]

The total activity rate of Korea almost approaches that of Europe and would be even higher if Korea had the same high level of unemployment (note: all rates here are calculated as a percent of the working-age population). Actual measurement of unemployment is, however, also different. For instance, the major part of Korean youth unemployment is hidden, and marginal or precarious self-employment often serves as an escape from un-

[30] Korea currently has nearly 100 thousand *hagwons,* private education institutions mainly intended for tutoring children to prepare for schools and universities and to enhance their competitive advantage. The *hagwons* have more teachers than the public school system and attract the best ones with higher salaries; the amount of outlays per student in private tutoring is four times higher for the middle-income group than those in the lowest income group. For households with an income of over 6 million won per month, enrolment rates rise to nearly 90%, while outlays per month reach around 450 thousand won (around $400). Students with a better socioeconomic background are therefore more likely to enter a prestigious university and study a subject that he or she would like to. One study found that 16.9% of students from the upper middle income class attended upper level universities compared to only 5.8% for lower-class students. In the meantime, Seoul introduced a 10pm curfew for *hagwons* to control excessive use of this system (OECD 2012: 68, 131–5). It seems not to be sure, to what extent and under which category *hagwon* teachers are counted; the speculation is that some of the *hagwons* belong to the informal sector.

employment (Schmid 2013a). Korea's total non-standard employment rate (40%) is much higher than that of Europe (25.8%) and makes up about 60 percent of total employment (40% in EU-28).

The main differences can easily be seen: First, Korea's peculiarity compared to Europe is its much higher share of self-employment of which about 50 percent are solo self-employed (in Europe 70 percent), and second its much lower share of part-time work which is only half the level of the EU-28. It also seems that atypical work in the form of daily workers, dispatched workers, subcontracted workers, home workers, and other special employed workers is much higher in Korea than in Europe. The overall level of non-standard work increased only slightly in Korea in the last decade, yet the structure shifted towards more temporary and atypical work whereas self-employment decreased.

What are the reasons for this peculiar structure? According to our simple model, low part-time certainly has to do with the underdeveloped service sector[31] and with the fact that Korea's women, albeit highly educated, still seem to be more confined to household and family than in Europe, often preoccupied with coaching their only child to get the best imaginable education.[32] Apart from deep cultural roots that have always fostered meritocracy in Korea by education, there might also be an insurance motive: High educated children will later on support their family in old age. This might change soon, social mobility as one driving factor, indicated by the rapid increase of part-time work in recent years and women's enhanced preference for individual autonomy and an occupational career. Public and private investment in modern services (in particular health and social care) and improved universal income guarantees in old age would foster this development.

The high share of self-employed is to some extent still related to the great importance of the agricultural sector. The main reason, however, is related to the early mandatory retirement of the core workforce in the large enterprises (at age 50 to 55) with modest social protection in old age that forces many early retired people to work as self-employed; average job tenure in Korea (≈5 years) is therefore half the average tenure of OECD or EU countries. Fifty-seven percent of workers aged 50 and over are self-employed compared to 27 percent of younger workers (Freeman et al. 2008: 288).

Age and gender structure reveal even more about the driving forces behind Korea's NSFE. The proportion of non-standard workers among women aged 30 or older is almost twice that of men. The largest gender gap in non-standard employment can be found in the age group in their 40s: 28.9 percent of men in that age group were non-standard workers in 2010, compared to 67.5 percent of women. By contrast, there is only a very small gender difference in the proportion of non-standard workers in their 20s. These differences suggest that the feminisation of (often precarious) non-standard employment has been an important source of the sex segregation of work and gender inequality in Korea (Shin 2012: 11).

[31] As of 2007, the service sector in Korea accounted for 57.6 percent in total value added, which is the lowest among OECD countries except Ireland. In contrast, in most of the OECD countries, the service sector represented about 70 percent of GDP in the 1990s. Moreover, whereas Korea's productivity in manufacturing is close to the OECD average, its productivity in services is far below (Freeman et al. 2008: 217).

[32] In 2004, the employment rate of females with a college-level education between the ages of 25 and 64 in Korea was 57.5 percent compared to the OECD average of 78.5 percent (Freeman et al. 2008: 132).

Korea is also peculiar –as previously mentioned – for its polarised structure of enterprises. A few dominating (and family lead) multinationals (known as the five 'chaebols') on the one hand, and numerous small-sized enterprises on the other hand that often depend on the dominant enterprises by subcontracting, therefore taking up the burden of uncertainty through fluctuating demand and always standing under extreme or even cut-throat competition. It is no wonder, therefore, that NSFE concentrate on small firms. The proportion of non-standard workers in firms with more than 300 employees was 17.2 percent, whereas it was 46.1 percent in firms with fewer than five employees. Almost half of non-standard workers are in small firms with fewer than 10 employees; only about 6 percent of non-standard workers are in large firms with more than 300 employees (Shin 2012: 11).

This peculiar structure is also reflected in stark gender-biased wage inequalities. Compared to standard male workers, women in standard employment earn only 67.3 percent, and non-standard working women only 38.3 percent (Shin 2012: 12). The high wage penalty for women related to NSFE is also confirmed by a recent OECD study (OECD 2015a: 152).

Whereas in some EU member states, at least, NSFE serve as stepping stones to SE or are only an intermediate stage during the life course, Korea is also particular for extreme low transition rates between NSFE and SE (OECD 2015a: 164 ff). Moreover, Korea's transition tax rate (the difference of wage income related to moving from one stage, e.g. part-time to full-time, to another) seems to offer no incentives to move from NSFE to SE.[33]

Sixty-two percent of non-standard employees in Korea are main earners in the household compared, for instance, to 42 percent in Germany (OECD 2015a: 170) which makes non-standard workers especially vulnerable. Whereas the risk of poverty, measured by the proportion of the working population earning below 50 percent of median household, is only 3.3 percent among standard workers, it is 24.8 percent among solo self-employed, 13.2 percent among temporary workers, and 31.8 percent among daily workers (Shin 2012: 13; no gender breakdown available). The recent OECD study also found that – in contrast to most EU member states – taxes and transfers have no impact on poverty reduction in Korea (OECD 2015a: 179) which hints at severe deficits in pension and unemployment insurance, as the following Table 10 shows.

The figures in Table 10 speak for themselves. They clearly demonstrate that the problem of social protection for NSFE in Korea basically relates to pensions and unemployment insurance. The universal system of health care covers almost all people independent of their employment contract or status. The self-employed are not covered in this table, but they also suffer from at least low coverage in terms of pensions and no coverage in terms of unemployment insurance. Whereas the low coverage in unemployment insurance might be compensated to some extent – though insufficiently – by income from informal work, the real grave problem is the low coverage by pensions. The establishment of a universal system of minimum income in old age might help to ensure at least a basic level of income security in old age (Schmid 2013b), a point to which we will turn in the policy section.

[33] This point requires more scrutiny as the (in fact innovative) OECD study provides only preliminary information.

Table 10: Proportion not Covered by Social Protection among Non-standard Workers in Korea by Subtypes in 2011 (%)

	Pension	Health Care	Unemployment Insurance
Standard Workers*)	**1.4**	**0.0**	**2.6**
Non-standard Workers*)	**54.8**	**5.3**	**64.0**
Limited terms	54.8	5.4	66.0
Part-time	81.6	2.8	31.3
Daily	27.0	4.5	44.3
Dispatched	76.1	3.3	28.4
Subcontract	36.7	2.6	25.8
Home	85.7	2.9	91.4
Special	64.7	3.6	96.0

*) "Regular" or "Non-regular Workers" in the Korean terminology
Source: Shin (2012, Table 7, p. 14); with reference to Kim (2011)

4.2 India

India is with 1.31 billion people (2015) after China (1.37) the second most populated country in the world and has emerged as a well-functioning democracy after its independence from the oppressive British colonial rule in 1947. Its federal republic consists of 29 states and seven union territories with a multi-lingual, multi-ethnic and multi-religious society. Although the central government is endowed with a strong national presidency, the states are also powerful and mutually competitive, for instance, related to labour law or its implementation. Since India's start as an independent country, the division from Pakistan (four wars since then) established a traumatic cleavage not only between these two countries but also between the two main religions they are representing: Hindu and Islam. India's capital, New Delhi, delivers the most vivid example of these tensions.[34]

From the beginning and up to the 1980's, the Indian economy was one of the poorest in the world. Only since then has India become the world's seventh-largest country by nominal GDP and third-largest by purchasing power parity (PPP), and is now considered to be an emerging and newly industrialised country. Nonetheless, India continues to face the challenges of poverty, malnutrition and inadequate healthcare. Despite an impressive progress of the Human Development Index[35] from 0.37 (1980) to 0.59 (2013), India is still far below that of China (0.72) and Korea (0.89). And although life expectancy today (66 years at birth) is more than twice what it was in 1951 (32 years), it is still much lower than in China (73) and Korea (81).

[34] Historical and cultural backgrounds of India are, for example, brilliantly described in the three bestselling books or novels by Adiga (2008), Dasgupta (2014), and Swarup (2013).
[35] The HDI combines economic wealth (GDP/Capita), education level and life expectancy to a single indicator; the index runs from zero to 1.0. At the top ranks Norway (0.94), at the bottom Niger (0.34); values for 2013.

Another peculiarity of India is its low adult literacy rate (age 15+): 51 percent for women, and 75 percent for men in 2010, compared with 91 percent and 97 percent respectively for China (Drèze and Sen 2013, Table A.1, p. 291). This feature is rooted in the still vivid caste system of pre-colonial times (Drèze and Sen 2013: 34 ff), but it is also to some extent the consequence of Mahatma Gandhi's curious pedagogic ideas.[36] So, in contrast to China, Korea or Japan, India still suffers from the path dependency of non-inclusive institutions (Acemoglu and Robinson 2012).

The majority (about 70%) of India's population still lives in rural areas, compared – for instance – to about 50 percent in China, 25 percent in Europe and only 17 percent in (South-) Korea. The agricultural sector makes up about 18 percent of GDP, but still employs over 50 percent of the workforce; the service sector produces almost 55 percent but employs only a bit more than one-fourth. So, per sheer size, the manufacturing sector is strong (27% of GDP), but is embedded in a partly still archaic agricultural sector and an underdeveloped service sector. The textile and garment industry, a further historical heredity, is still a backbone of manufacturing but has become more and more dependent on global supply chains (GSC) and is thus exposed to cut-throat competition: 80 percent of garment workers (power-loom industry) are GSC jobs (ILO 2015: 216). The booming modern electronic, communications or automotive industries cannot (yet) fully compensate for these structural deficits.

Related to this peculiar industrial structure is the recent exceptional decline of (an already low) female labour force participation (LFP) compared to the worldwide increase of women's share in employment: Whereas the male LFP-rate (UPSS definition)[37] stagnated or declined only slightly (due to increased education), women faced a spectacular decline from about 42.7 percent (1994) to 31.2 percent in 2012 (Kapsos et al. 2014: 12); this decline can be observed even including domestic economic activities that still make up a substantial part of women's employment in India.

Last but not least, India's labour market is characterised by its strong segmentation into a formal and informal sector, as well as into formal and informal work (Table 11).

Table 11: Formal and Informal Sector and Employment in India, Percent of Total Employment, 2009/10

	Informal Sector	Formal Sector		Total horizontal
Informal workers	91.2 (99.6)	8.8 (51.1)	↑	100
Formal workers	4.5 (0.4)	95.5* (48.9)	↓	100
Total (vertical)	(100)	(100)		

Source: Papola (2013: extract from Table 5, p. 9); *) 65% of the organised/formal sector is public employment; ↑ = significantly increasing during the last decade; ↓ significantly decreasing during the last decade

[36] Compared to the 'socialist' ideology during the 50s and 60s, which put basic schooling for all at the top of cultural priorities, Gandhi's philosophy praised "basic education" with a strong element of handicraft. Drèze and Sen (2013: 25) judge this as an "a home-grown folly, to a great extent reflecting an upper-class – and upper-caste – bias against the education of the masses".

[37] UPSS=usual activity status considering principal and subsidiary status together; the denominator is population 15+.

The formal or organised sector consists of the public sector and private sector enterprises employing 10 and more workers, whereas the unorganised or informal sector is the residual. This dividing line coincides with the threshold application of certain regulatory provisions related to employment protection or social security (Papola 2013: 8). In other words, work in the informal sector usually enjoys neither employment protection nor social security provisions. The informal sector employs more than 90 percent of India's labour force.

Another dividing line is the distinction between informal and formal workers, whereby "informal work" basically means working without any written contract.[38] So, as Table 11 demonstrates, there may be "informal workers" in the formal sector, and vice versa. In 2009/10, 91.2 percent of informal workers were in the informal sector and composed almost 100 (99.6) percent of all workers in this sector; only 8.8 percent were in the formal sector but made up over 50 percent of workers in the formal sector. On the other hand, only 4.5 percent of formal workers (i.e. those with a written contract) were employed in the informal sector, and 95.5 percent in the formal sector, making up less than 50 percent of employment in the formal sector. Table 11 also shows that in recent years, the formal sector experienced increasing 'informalisation' in the sense that employment growth essentially took the form of informal work within the formal sector.

The following sketch on NSFE in India can only be understood from the following background. As paid formal work through written contracts is rather the exception than the rule in India (and in other 'developing' countries), it is obvious that non-standard employment takes completely different forms than in the context of formalised or organised economies.[39] (Formal) Part-time work, the main element of European non-standard employment, is almost completely absent in India, whereas (mainly agricultural) self-employment is the dominant element, as the following Table 12 shows.

Table 12: Share of Employees According to Status in India, Percent of Total Employment, UPSS*)

	Men			**Women**		
	Self-E	Regular	Casual	Self-E	Regular	Casual
Urban						
1987/88	41.7	43.7	14.6	47.1	27.5	25.4
1999/00	41.5	41.7	16.8	45.3	33.3	21.4
2011/12	41.7	43.4	14.9	42.8	42.8	14.3
Rural						
1987/88	58.6	10.0	31.4	60.8	3.7	35.5
1999/00	55.0	8.8	36.2	57.3	3.1	39.6
2011/12	54.5	10.0	35.5	59.3	5.6	35.1
Total**	**50.7**	**20.2**	**29.3**	**54.4**	**16.8**	**28.9**

NSSO (2012: Extract from Statement 5.9, p. 111); *) usual status plus subsidiary status.
**) Total for 2011/12; own calculation based on weighting urban by 0.3 and rural by 0.7.

[38] See Srivastava (2015) for further clearing information on his point.
[39] See the useful overview of Table 1 in Srivastava (2015: 3).

Although Table 12 is self-explanatory, some points shall be emphasised. First, the overall structure of employment according to status is almost the same for men and women: Over 50 percent of the Indian active labour force is in *self-employment*. Because of this dominance, it is worthwhile looking more closely at the definition. "Persons who operated their own farm or non-farm enterprises or were engaged independently in a profession or trade on own-account or with one or a few partners were deemed to be self-employed in household enterprises. The essential feature of the self-employed is that they have *autonomy* (decide how, where and when to produce) and *economic independence* (with respect to choice of market, scale of operation and finance) for carrying out their operations. The remuneration of the self-employed consists of a non-separable combination of two parts: a reward for their labour and profit of their enterprise" (NSSO 2012:16). Self-employed, thus, comprise three categories: own account workers, employers, and "helpers in household enterprises" (engaged in their household enterprises, working full or part time but not receiving a regular salary or wage).

Second, almost 30 percent of the active Indian workforce is in casual work,[40] and 20 percent (men) and less (women) are in regular work.[41] The main difference between men and women relates to "regular" work which is lower for women, but women have caught up, particularly in urban areas. Women are also still slightly overrepresented in self-employment, especially in rural areas which is probably related to the category of "helpers in household enterprises", whereas casual labour among women declined substantially in urban areas.

Table 13: Activity Status of Workers Across Industries in 2011/12, Percent of Total Employment

	Self-Employment	Regular	Casual
Agriculture	65.7	0.8	33.5
Manufacturing	48.5	35.2 ↑	16.3 ↓
Construction	10.8 ↓	4.7 ↓	84.5 ↑
All Services	48.3	44.9	6.8

Source: Srivastava (2015: Extract from Table 4, p. 6); ↑=significant increase since 1983; ↓=significant decrease since 1983.

The sector breakdown (Table 13) adds to the story. Not surprisingly, self-employment is most pronounced in agriculture; no substantial change in the status distribution has taken place since the reference year 1983. The incidence of self-employment is, however, also stark in manufacturing and services and almost half of the active labour force working in these sectors is self-employed. The main changes can be observed in manufacturing and construction, however, with reversed signs. Whereas regular work increased in manufacturing in exchange for a significant decrease of casual work, regular work in construction

[40] "A person, who was casually engaged in others' farm or non-farm enterprises (both household and non-household) and, in return, received wages according to the terms of the daily or periodic work contract, was considered as a casual labour" (NSSO 2014:17).

[41] "These were persons who worked in others' farm or nonfarm enterprises (both household and non-household) and, in return, received salary or wages on a regular basis (i.e. not on the basis of daily or periodic renewal of work contract). This category included not only persons getting time wage but also persons receiving piece wage or salary and paid apprentices, both full time and part-time" (NSSO 2014: 17).

(already at a low level) decreased further in exchange for a drastic increase of casual work. Regular work is, in contrast with Europe, most common in services, and even slightly increasing. Since "regular" work includes part-time work, it may however well be that – like in Europe – the increasing importance of this status in services is related to the spread of regular part-time, especially among women.

To sum up these observations: Despite the differences in the categories of NSFE in India, the overall structure of the activity status of employees confirms our simple hypothesis, that non-standard work is most pronounced in sectors where demand is – for various reasons – fluctuating and labour force supply contingent.

If it comes to the consequences for employment protection and the social security of India's 'non-standard employment' – which is, as we have made quite clear, the rule rather than the exception from a European point of view – we only have to sum up the excellent report by Trilok Singh Papola to the ILO (highlights in italics by the authors) : "[...] *most Indian labour laws are limited in their application by size of establishment, type of economic activity, type of employment relationship and/or the type of employment status*. In the first instance, all labour regulation apply to hired workers, leaving out over one-half who are self-employed, as the laws apply to 'establishments' not 'workers' directly. Even among the hired workers, only those directly hired by establishments (or contractors, in the case of contract workers) are covered, leaving out a large number of indirectly employed workers such as home workers. *Even among the directly hired workers most employment security and social protection provisions of laws apply to the category of 'regular' employees*, leaving out, casual workers, who constitute about one-third of the total and two-thirds of the hired workers. And within the category of the hired workers, working for wages and salaries, those employed in the enterprises in the so-called unorganised or informal sector are mostly outside the purview of the protective and welfare legislation. As previously noted, workers in such establishments constitute 85 percent of all workers. And then there are another 7 percent of those working in the organised sector but not eligible for the benefits of job security and/or social protection under any laws. *Thus 92 percent of all the workers are outside the purview of labour legislation on job security and social security*." (Papola 2013: 15/6)

This assessment demonstrates that it is obviously not only a lack of regulation – in particular related to employment in small firms – but also a lack of application that prevents the majority of India's active labour force from enjoying decent employment and social security. A report from India's Finance Ministry brings this to the point: "India has the dubious distinction of having some of the most comprehensive labour laws in the world, even while having one of the largest fractions of the working population unprotected" (Ministry of Finance 2013: 49). Furthermore, the cleavages between informal and formal sector or informal and formal work becomes wider once actual coverage and compliance is brought into consideration. India's Minimum Wages Act, for example, can be applied to 83 percent of hired workers, but it is made applicable only to 9 percent (Papola 2013: 16). The impact of wage regulation is further hampered by a multitude of minimum wages set by the 29 Indian state governments.

The question thus arises: Does this drastic segmentation of the labour market, leading to the exclusion of the majority of the workforce from decent social protection, at least produce some positive effects in terms of productivity, labour force participation and prosper-

ity in combination with low wage costs and extremely high flexibility as fundamental libertarians would argue? Does such a cleavage at least lead to a rising tide that lifts the boat for all, even if it does not reduce the drastic inequality in income and prosperity? Does employment, where the labour and social law is stringently applied (in the narrow formal sector), stagnate or even decline on the costs of higher unemployment?

As to the latter question, the answer is clearly negative. Most recent research points towards a statistically insignificant effect of the stringency of employment law on unemployment rates, in advanced as well as 'emerging' and 'developing' economies. It is (as already noted in our theoretical framework) rather the reverse: greater relative strength of EPL stimulates higher innovation, based on employee input into new products and processes (Acharya et al. 2013; Adams and Deakin 2014; Aleksynska and Cazes 2014). With respect to 'lifting the boat for all' there is some evidence that the decline in organised sector employment has recently been reversed and that the earnings of workers have significantly increased in all segments of the Indian labour market (Papola 2013: 18/9). Yet this has not mitigated inequality, and millions of Indians still live below the poverty line although the official standards of this line have recently been slightly increased: "What is really startling is not so much that the official poverty line is so low, but that even with this low benchmark, so many people are below it – a full 30 per cent of the population in 2009–10, or more than 350 million people" (Drèze and Sen 2013: 190).

The impact on productivity, labour force participation and prosperity growth, however, is rather gloomy. The 2013 report of the Finance Ministry is quite outspoken in its analysis. The first problem is low labour force participation, especially among women. The second problem is the informal sector. India's high rate of informality, says the report, "is a drag on its economic development and a source of considerable inequity. Productivity differences between workers in the formal and informal sectors are large, suggesting that moving a worker from an informal to a formal firm would bring about sizeable gains from improved allocation of resources. In fact, rough estimates suggest that an informal job in the formal sector has double the value added than an informal job in the informal sector. And importantly, the value added per worker in a formal job within the formal sector is almost ten times that in an informal job in the formal sector [...] Therefore, loosely speaking, the benefits of moving into contracts within the formal sector are likely to be substantial and significantly higher than the gains from moving an informal sector worker into an informal job within the formal sector" (Ministry of Finance 2013: 47).

The report, in particular, acknowledges the negative sides of informality on productivity and innovation. Although, from the point of view of firms, informal work arrangements may be attractive (lower price and greater flexibility in adjusting the quantity of labour in response to fluctuating demand), these benefits are partly offset by costs, such as low worker loyalty and inadequate incentive to invest in worker skill building. Moreover, any net benefits need to be weighed against the social costs to the workers and the economy as a whole. Finally, persistent high levels of informality come at a significant fiscal cost in terms of forgone fiscal revenue. In 2004–5, the unorganised sector contributed roughly half of India's GDP, implying a significant expansion of the tax base if the informal sector were to join the formal economy. The high prevalence of informality also hampers the ability of economic policies to have direct and quick impact on the economy (Ministry of Finance 2013: 48).

Finally, the Finance Ministers report recognises the value of labour market security in the form of stable employment relationships with internal flexibility and unemployment insurance as supportive institutions for structural change, i.e. moving people from low productive agricultural employment to high productive service and industrial employment. Open-ended formal employment contracts provide incentives to the firm to nurture skill building and to the worker to develop skills. Such contracts, says the report, "necessitate backloading of pay and incentives – compensation increases with experience – so that workers do not avail of the training and leave. In contrast, informal and temporary contracts are in fact flat and sometimes even frontloaded, absolutely the inverse of the desired architecture. Long-lasting employment does not mean tenure for life, which is the other extreme of the contract space commonly found in India. Permanent employment not only limits firm flexibility, it also reduces some workers' incentives to learn or exercise effort. An intermediate structure that exists in most countries is contracts that allow termination in situations of firm distress or for poor worker performance, but with carefully designed and effective redress mechanisms if the employee is fired without cause, as well as compensation for severance and unemployment benefits" (Ministry of Finance 2013: 48).

The urgency of a "suitable unemployment insurance scheme" is also emphasised in Papola (2013: 23), and – in concurrence with the *Social Protection Floors Recommendations* of ILO (2012)[42] – one can only agree with his general conclusion: the most important strategy for the Indian labour market would be to streamline the multitude of labour laws, to put more emphasis on compliance with these laws across all Indian states, and to establish minimum standards of working conditions and basic income security, including a national statutory minimum wage (Papola 2013: 23).

With respect to basic income security, India may, to some extent, even serve as a model for other so-called developing or emerging countries because it is unique in collecting experiences with the world's largest public works programmes, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).[43] We will come back to this point in the policy part.

4.3 Brazil

Brazil ranks with 204 million as number five in the list of countries by population. It is the largest national economy in Latin America, and the world's seventh largest economy in purchasing power parity. A long time under dictatorships, Brazil's political system has been a democratic federation composed of 26 states only since 1988, with a strong presidential system (the president being both head of the state and the government). Its economic system is mixed. powerful in agriculture and endowed with abundant natural resources including a strong mining sector, but in the meantime also strong in some manu-

[42] Referring to Article 22 *Universal Declaration of Human Rights* (1948): "Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international cooperation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality." For a good summary of the background and intentions of this Initiative see Behrendt (2013) and Cichon et al. (2011).

[43] The programme was renamed the Mahatma Gandhi National Rural Employment Guarantee Scheme in 2009, but the abbreviation MGNREGA or the shorter version NREGA is still widely used.

facturing industries and services. Altogether, however, the industrial sector is low compared to other middle-income countries. Brazil has been the world's largest producer of coffee for the last 150 years, a market which is seasonally affected and in the meantime highly contested. Other major export products include crude oil and natural gas, coke for oil products and biofuel, chemicals, aircraft, electrical equipment and automobiles.[44] As a member of the BRICS[45] group, Brazil had one of the world's fastest-growing major economies until 2010, with its economic reforms giving the country new international recognition and influence. Most recently (2015/16), however, Brazil's economy seems to be in turmoil.

Brazil's life expectancy at birth increased by 11.2 years since 1980 (2013 at 73.9), due in large part to the introduction of a universal health care system. Also mean years of schooling increased by 4.6 years (2013 at 7.2), expected years of schooling rose by 5.3 years (2013 at 15.2), and GDP per capita increased by about 60 percent between 1980 and 2013; these trends combined improved the HDI from 0.55 to 0.74.[46]

Unemployment in Brazil's major metropolitan areas fell to below 5 percent in early 2015, from around 11 percent in 2005, but recently started to rise again (8.9% in the third quarter of 2015). Compared to the OECD average, the overall employment rate, however, is low (56.9% vs. 65.7%), in particular among women (46.4% vs. 57.9%). The low labour force participation may relate to some extent to Brazil's low average retirement ages compared to the average of OECD countries, where men retire, on average, at age 64 and women at age 63 (OECD 2015b: 8).[47]

Trade unions enjoy high legitimacy based on their role as the spearhead in the struggle for democracy; yet they only succeeded in anchoring themselves at local level in a few plants and regions. There is no collective bargaining at national level and regional wages, therefore, vary to a great extent, not least due to competitive 'fiscal wars' between the 26 states (Jürgens and Krzywdzinsky 2016: 276ff). A nationally mandated minimum wage has existed since the 'Estado Nuovo' regime of Getúlio Varga (1937–1945). In addition, the Brazilian States and trade unions can set their own minimum wage as long as it exceeds the national one, which often seems to be the case.

Labour productivity growth slowed down in the last 10 years compared, for example, to China or even India. Furthermore, compared to highly industrialised countries productivity is low, in particular in manufacturing, which – to some extent – seems to be related to

[44] Of the automobiles, however, only 15% are exported, which implies low integration in the international production chain (OECD 2015b: 75; Jürgens and Krzywdzinsky 2016).
[45] BRICS embraces the countries Brazil, Russia, India, China and South Africa; sometimes, Indonesia is included (BRIIC).
[46] Sources: Wikipedia and UNDP (2014).
[47] Official minimum retirement age for men is 65, for women 60. Retirement with full pension claims, however, seems to be possible for some people after 35 (men) resp. 30 (women) years contribution. The OECD (2015b:8) reports figures of average retirement age of 55 for men, 50 for women. Simon Romero paints the situation in more drastic colours: "Brazilians retire at an average age of 54, and some public servants, military officials and politicians manage to collect multiple pensions totaling well over $100,000 year. Then, once they die, loopholes enable their spouses or daughters to go on collecting the pensions for the rest of their lives, too. The phenomenon is so common in Brazil's vast public bureaucracy that some scholars call it the "Viagra effect" — retired civil servants, many in their 60s or 70s, wed to much younger women who are entitled to the full pensions for decades after their spouses are gone" (New York Times, October 20, 2015).

the "Brazil cost" and referring to Brazil's notorious intransparent tax system. Also infrastructure bottlenecks (roads, railroads, ports and airports), and a low education level of the labour force add to this productivity deficit: The share of students both at the secondary and tertiary levels enrolled in professional and technical degrees in Brazil is low in international comparison, and wage premiums of up to 20 percent for secondary level graduates with technical training over those without reflect Brazil's dearth of technical skills (OECD 2015b:31f).

On the positive side, it has to be acknowledged that Brazil achieved remarkable success in reducing poverty and inequality.[48] Absolute poverty declined from about 20 percent (1995) to 8 percent of the population (2013); relative poverty slowed a bit down from 27 percent to 24 percent; and the Gini Index fell from about 0.57 to 0.50, yet is still one of the highest among developed or emerging countries.[49] Apart from Russia and the USA, Brazil is also an exception in so far as its employment dynamics was mainly driven by the increase in full-time employment during the last decade, whereas part-time work – as demonstrated in the previous chapters – was the main driver of employment in the European case (ILO 2015: 29). Moreover, informal employment fell from 54.8 percent of total employment in 2001 to 44.2 percent in 2013 (ILO 2015: 57).[50]

One reason for these – at first glance – positive three features is Brazil's integrated policy of social protection and labour market measures during the last decades to which we now turn. Before starting with the policy part, however, the statistical situation of Brazil's NSFE shall be briefly displayed in the following Table 14.

Within salaried work, the share of formal wage earners increased, which means that these workers have access to social protection, in particular health and unemployment insurance. Related to total employment, the informal sector, however, is still large and is around 40 percent.

The share of *temporary workers* is very low compared to other Latin American countries (Maurizio 2015: Table 2, p. 16). The reason for this exceptionality is not fully clear. Massive use of probationary periods (90 days), trainees and work experiences for the young may be one part of the explanation. Another part is that many employment contracts are terminated within one or two years, especially among the low skilled, so that – despite an increasing share of 'standard' employment – Brazil's labour turnover is quite high.[51] The most important negative side effect of excessive labour churning is that the incentive of

[48] *Poverty* is defined as the percentage of the population with per capita income below a poverty line. *Absolute poverty* refers to poverty at below US $2 a day (set out in the Millennium Development Goals of the United Nations); *relative poverty* is measured at below 50% of the median income; the *Gini coefficient* measures the inequality of income distribution on a scale between 0 and 1 with higher values representing more income inequality.

[49] See OECD 2015b: Figure 19, p. 38; ILO 2015: Figure 2.5, p. 48/9; the average Gini level in European countries is about 0.30.

[50] In Brazil, informal employment is defined as those who are not registered to social security and/or do not have a formal contract.

[51] According to the Instituto Brasileiro de Geografia e Estatistica, the percentage of workforce remaining at their job within two years, however, fell from 42.35 (2002) to 32.38 (2015); own calculation from: http://www.ibge.gov.br/english/estatistica/indicadores/trabalhoerendimento/pme_nova/defaulttab_hist.shtm.

investing in firm-specific human capital is low, both for employers and employees. To what extent such a high labour turnover depends on the increasing share of non-wage costs related to job-tenure is an open question. Fact is, the real wage costs of 'standard' employment for employers are at least twice the nominal wage., which stems from various social security contributions: pensions, health care, unemployment insurance plus FGTS (Fundo de Garantia do Tempo de Serviço), but also fringe benefit payments related to life-insurance, private health insurances, transportation and even meals.[52]

Table 14: Non-Sstandard Forms of Employment in Brazil, as a Percent of Salaried Workers

Six Urban Areas	2003	2013	Hourly wage gaps related to regular employment in percent
Formal Wage Earners	69.7	81.8	
Temporary Employed	4.2	3.0*	
Temporary Employed Informal		13.0	- 7.7
Temporary Employed Formal		1.0	- 13.3
Part-time Employed Total	15.3	15.5**	36.5 Formal/ 32.7 Informal
Part-time Involuntary	3.1	1.0	35.5 Formal/ 31.8 Informal
[Self-Employed, year 2008]***		29.0	n.a.

Source: Compilation from various tables in Maurizio (2015); data based on household survey in six urban areas;
*) Share of women 60%; incidence highest in construction, agriculture and domestic services; no negative correlation with education;
**) Proportion increasing with wage level: 9% for lowest quintile, 29% for highest quintile
***) Percent of total employment (source: www.tradingeconomics.com/brazil); Bargain and Kwenda (2011: S104) estimate this figure at 34%.

Part-time work, in Brazil defined as work below 25 hours per week, remained stable at the level of 15 percent. The incidence of part-time is higher in the informal sector compared to the formal sector, and the majority of part-timers are, as among temporary workers, women. Most of the part-time is voluntary and – in contrast to Europe – concentrated among the upper quintiles of the wage distribution. Furthermore, there is no wage penalty related to part-time. On the contrary, there is a premium in the range of 30 to 35 percent, slightly higher in the formal compared to the informal sector. We will come back to this point in the case study of Chile where we find an even higher wage premium related to part-time.

Self-employment is about 30 percent of total employment. Brazil is also peculiar in this respect as the average annual earnings of the self-employed are higher than for permanent/formal workers (Table 15). The reason for this exceptionality is also not fully clear. One part of the explanation could be that – although self-employed, legally, they would have to pay a contribution to the common social insurance funds (pension and health) – 95 percent do not do so (Bargain and Kwenda 2011). Another explanation could simply be

[52] Information by Germany Trade & Invest (Brasilien: Lohn- und Lohnnebenkosten, May 2015), www.gtai.de.

related to the fact that about 50 percent of salaried workers receive just the minimum wage. So, a large part of Brazil's self-employment seems to be quite risky in terms of social security, not to speak of (quite often) indefinite working time and critical working conditions.

Table 15: Average Annual Wage Income of NSFE as a Share of the Average Annual Wage Income of Permanent/Formal Employees for Selected European Countries Compared to Brazil and Argentina, latest year available

	NL	UK	AUT	FRA	SWE	POL	BRA	ARG
Temporary Work	70	65	64	59	50	63	41	46
Self-Employment	83	93	95	92	65	66	108	66

Source: ILO (2015: roughly rounded values taken from Figure 2.1, p. 36).

Coming to the political and institutional framework that explains the peculiarities of the Brazilian labour market, at first place it has to be noted that unlike most other Latin America countries (see Chile in particular, next section), where civil servants working in the social security system were instrumental to market deregulation, officials in Brazil were deeply committed to the principles of a universal and public social security regime, as reaffirmed by the 1988 Constitution. This group of experts were also fervently supported by the new labour movement, the CUT (Central Única dos Trabalhadores – Unified Workers Central), and the strongest opposition party, the Workers Party (PT) that eventually took over the government (Bizberg 2004: 157/8).

In its recent World Employment and Social Outlook, ILO summarized the current impact of this stance (ILO 2015: 57). The Brazilian *minimum wage* not only serves as a floor for formal sector wages, but also provides a benchmark for informal wage agreements and a minimum payment level for pensions, enabling this one policy lever to have a wide-ranging impact on poverty and inequality. There have been significant increases in the value of the minimum wage, rising from BRL 291 (Brazilian Real) in January 1995 to BRL 422 in January 2002 and BRL 788 in 2015. Rural non-contributory pensions were significantly expanded from 1991, linking payments of non-contributory pension schemes to the minimum wage for informal workers in agriculture, mining and fishing and for the elderly and those with disabilities.

Another important social policy transformation was scaling up a non-contributory cash transfer scheme into a national programme, Bolsa Escola, in 2001. The programme and its followers are based on the concept of conditional cash transfers which have been successfully implemented for the first time in Mexico (Fiszbein et al. 2009). Bolsa Família was subsequently introduced in 2003, combining and reforming existing programmes and significantly expanding coverage from 5.1 million families under Bolsa Escola to some 14 million families under Bolsa Família by 2014. As a result of these various schemes, by 2007, 45 percent of Brazilians were living in a household that received some form of public transfer. This approach has been described as "basic universalism" – the combination of social insurance and intentionally broadly targeted social assistance, framed as a citizenship right. Although estimates of the relative contribution of different programmes and policies to the decline in inequality vary considerably, one of the most widely cited studies suggests – according to ILO – that about half of the decline in inequality to 2007 was the

result of greater equality in the distribution of labour income, while the remainder was the result of social spending.

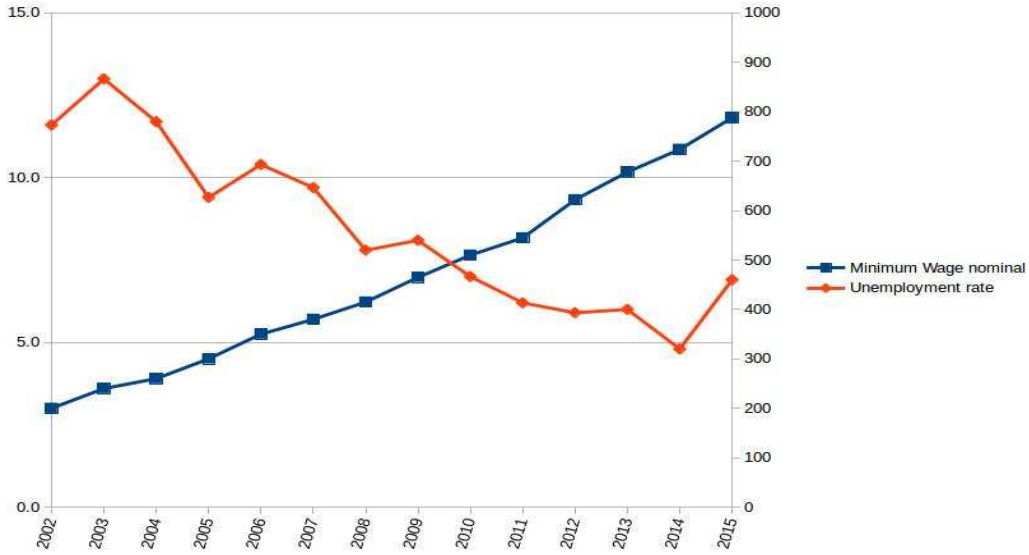
In particular, investment in education since the 1990s has resulted in a decline in the skills premium, while the increase in the minimum wage has raised earnings for unskilled workers, both of which contribute to reduced inequality in labour income. Meanwhile, about 30 percent of the change in inequality is due to increasing social security benefits, which are tied to the minimum wage, about 10 percent due to Bolsa Família and 10 percent due to the BPC (Benefício de Prestação Continuada), a non-contributory pension scheme for the elderly and those with disabilities. This "basic universalism" approach seems to be successful and uncontested even during the most recent debates about Brazil's economic crisis. We will therefore come back to this point when discussing the possible lessons for other countries.

ILO (2015: 58) explains the rise in formal employment by multiple causes: strong economic growth and job creation, in part linked to the commodities boom; reduced labour supply as a result of demographic change and increased educational enrolment; regulatory change for small and micro enterprises that reduced taxation and bureaucratic requirements – notably the "Simples" law – and thus reduced informality; and improved labour inspection practices. "Simples", introduced in 1996, aimed to formalise informal enterprises by simplifying and reducing taxes, social security contributions and tax regulations for micro and small enterprises. Further reforms in 2008 also targeted individual micro-entrepreneurs, providing a simplified registration and a unified tax and social security scheme with contributions paid in one monthly payment.

The OECD (2015b: 69) takes a more critical stance in its latest Economy Survey related to the regulatory framework of the Brazilian labour market which we are not able to comment on in detail. We restrict ourselves only to one point which relates to our emphasis on the impact of labour market institutions on productivity and the dynamic of employment. The OECD report draws a relatively short-cut conclusion from Brazils allegedly "outdated" and strict employment protection rules, and in particular its minimum wage policy during the last decade to the uncontested diagnosis of a slow-down of Brazil's labour productivity.

Yet, 14 million formal wage jobs were created in the 2000s whereas at the same time the real MW increased by 80 percent. So, the rise of Brazil's NMW in the last decade seems to have been quite necessary to compensate for its declining real value in the previous decades. Its uplifting obviously did not lead to higher unemployment due to its positive impact on effective demand and mitigating inequality (see Figure 17). The concern of the OECD probably makes sense, however, for the most recent and future period. As long as further raising the minimum wage is not accompanied by vigorous education and training policies targeted to the low skilled, MW might indeed lead to wages pressures beyond productivity with potential negative effects on employment and unemployment.

Figure 17: Brazil's Federal Minimum Wage Development and Unemployment Rates



4.4 Chile

The Republic of Chile, known as the "country of poets",[53] has, compared to Brazil, a small population of 17.4 million (2012), about half with an early emigration background (especially from Spain), and about half of various American origins. As a member of the OECD, Chile's economic upswing in the last 20 years was so remarkable that it elevated the country to the most prosperous economy of Latin America in terms of GDP per capita. Chileans average life-expectancy of 78.3 years (2012) corresponds to European standards and contributes – together with a relatively high education level – to a Human Development Index (0.82) in the upper ranks of the world. Over 80 percent of Chile's citizens reside in urban areas, bunched largely in the Central Valley, southward from Santiago.

Chile's constitution makes provision of a strong presidency and a congress composed by a 38-seat senate and a 120-member chamber of deputies which are democratically elected. In view of its labour market institutions it is remarkable that Chile experienced extreme changes in the political system during the last 50 years. The short period of left-wing government under Salvador Allende during the early 1970s was overthrown by the military putsch of Augusto Pinochet in September 1973. His brutal military dictatorship from the beginning, in particular against members of trade unions, was ended only at the end of the 1980s, followed by a centre-right grand coalition (*Concertación* of 17 parties) until the end of the 1990s, introducing – among others – libertarian social reforms advised, among others, by Milton Friedman. Since 2010, Chile is ruled by centre-left governments, currently under the presidency of Michelle Bachelet from the *Movimiento Amplio Social*.[54]

[53] Chile is famous, for instance, for its poet-diplomats Gabriela Mistral (Nobel Prize 1945) and Pablo Neruda (Nobel Prize 1971).
[54] About Chile's recent political history, social and economic system see, e.g. Solimano 2012.

Chile's economy relies heavily on natural resources. It produces almost a third of the world's copper, representing more than half of Chile's exports. It is also the world's second largest producer of salmon and the fourth largest wine exporter. This feature is noticeable in terms of our simple causal model (Figure 9) in as far as copper prices strongly fluctuate on the world market, and salmon as well as wine production is to a large extent seasonally affected.

Despite great success in reducing (relative) poverty from a level of 38.6 percent (1990) to 7.8 percent (2014) and unemployment from 15 percent (1990) to 7.8 percent (2013), Chile still ranks relatively low at some important economic and social indicators. Total factor productivity stagnated in the last decade in contrast, for instance, to India and China (OECD 2013: 34). Social inclusion in terms of female labour force participation is low (50.2 percent compared to the OECD average of 57 percent), and youth unemployment in terms of NEET[55] is high, in particular among women (over 30% for women aged 15 to 29). Income inequality is the highest in the OECD (Gini-Index at 52.1 in 2013), with the top 20 percent of the population earning 13 times as much as the bottom 20 percent, further aggravated by marked inter-regional differences. Further peculiar weaknesses are the long average working hours (2029 hours/year compared to the OECD average of 1766 hours/year), indicating low variability of working time (OECD 2013: 6, 12). Deficits in the education system led repeatedly to spectacular students' revolts (*revolución de los pingüinos*) in recent times (2006 and 2011).

Table 16: Non-Standard Forms of Employment in Chile, as a Percent of Total Salaried Employment

	2003	2011	Hourly wage gaps related to regular employment in percent
Formal Wage Earners	77.7	82.3	
Temporary Employed	24.4	24.2*)	
Temporary Employed Informal		12.1	- 13.2
Temporary Employed Formal		12.1	- 15.2
Part-time Employed Total	13.4	12.0**)	77.9 Formal / 62.6 Informal
Part-time Involuntary		6.7	42.3 Formal / 24.2 Informal
Self-Employed		25.4***)	

Source: Compilation from various tables in Maurizio (2015); data based on Encuesta de Caracterización Nacional (CASEN). *) 1.8% of total employment are temp-agency workers; **) Source OECD Stat provides the figure of 16.5% for year 2013; Chilean statistics counts "part-time" as employment at two-thirds of regular employment; ***) OECD Stat for year 2013.

The first remarkable feature related to NSFE (see Table 16) is the high level of *temporary employment* contracts, including a strong element of temp-agency work (triangular employment) and in particular outsourcing (contract work) within temporary work – a feature that was to be expected according to our simple model (see above). In fact, the data show

[55] NEET=not in education, employment or training.

that temporary workers absorbed the entire employment adjustment during the crisis in 2009 (Hunneeus et al. 2012: 11).

Part-time work seems slightly 'underdeveloped' compared, for instance, to other members of the OECD club: only 12 percent of total employment compared to 16.5 percent (OECD)[56] and 17.6 percent (EU28). Over 50 percent (56.3%) are reported to be involuntary part-time employed, and the probability of part-timers being in temporary jobs is higher than among full-timers (Maurizio 2015: 20, 23). Part-time is – as in Europe (see Table 2) – common, in particular in domestic services, in contrast to Europe, however, slightly concentrated among the higher wage distribution like in Brazil.

Self-employment, however, is much stronger represented in Chile than compared to the OECD average: a quarter of all employed are counted as self-employed compared to 16.8 percent (OECD) and 17.6 percent (EU-28) in 2013.[57]

Lastly, although the *informal sector* – containing those workers without a contract – declined, it still encompasses almost a fifth of the active labour force (17.7% in 2011). Those workers have low wages, do not pay social security contributions, generally receive no vocational training, have the shortest tenures and rotate frequently between low quality jobs, cannot unionise, and are not entitled to severance pay or unemployment insurance (Sehnbruch and Ruiz-Tagle 2014: 8f).[58]

Related to the impact of NSFE, some interesting peculiarities of Chile compared to the overall picture so far can be noted. *Temporary workers* make up 50 percent of all informal workers, which however, as noted, is small compared, for instance, with Brazil. Controlled for other characteristics, men have a smaller probability of being in temporary work; the same holds true for high educated people (Maurizio 2015: 19). Cazes and de Laiglesia (2015) find a positive correlation between a higher prevalence of fixed-term contracts and wage inequality, even controlling for its other determinants. This is confirmed by Maurizio (2015: 28ff), adding however, three interesting specificities for Chile. First, the incidence of temporary work decreases with higher wage levels (38% lowest quintile, 12% highest quintile); second, the wage penalty is higher for temporary workers in the formal sector and, third, the wage penalty is almost the same over the wage distribution in contrast, for instance, to Brazil where the penalty is highest among the lower deciles – probably explained by the fact that people in corresponding open-ended contracts receive more on-the-job training in Chile than in Brazil.

Related to *part-time*, the excellent econometric study by Maurizio (2015: 30–33) finds, controlling for individual and job characteristics, an astonishing high wage premium in the range of 24 to 80 percent related to part-time, which stands in contrast to most studies related to the European situation.[59] The wage premium is much higher in the formal sector compared to the

[56] New Zealand (21.6%) or Norway (19.5%) might be better reference points.
[57] Again as other reference points: New Zealand (15.4%), Norway (7.0%).
[58] Note, however: "Although Chilean labour law recognises the existence of a working relationship even if a contract did not exist, obtaining this recognition (and therefore the associated entitlements) requires the worker to take legal action, which is time consuming and costly, and therefore not an option available to most workers in Chile. In practice, therefore, not having a contract is equivalent to not having any legal protection at all" (Sehnbruch and Ruiz-Tagle 2014: 9).
[59] For an extensive and comparative estimation of wage penalties between standard and non-standard workers see OECD 2015a: 154–160.

informal sector, and higher in the case of voluntary part-time work; the premium also increases with higher wage quintiles. Maurizio, referring to the corresponding literature in labour economics, discusses various reasons for this astonishing feature.

The most plausible candidates to explain wage premiums related to part-time work are the following. First, shorter working hours can cause an increase in labour productivity (remember the related debate in our European part of analysis), thanks to the inexistence of the "fatigue effect", which leads to higher hourly wages. Second, to account for part-time employment premiums it has been stated that it is particularly frequent in sectors that suffer from seasonality, where high labour demand cannot be adjusted through extra hours, which leads to the need to offer higher hourly wages to find workers available for specific periods. Third, the compensating differences make this higher wage an incentive for workers to accept a position they would not accept otherwise; for instance, retailers often agree to pay higher wages due to staff requirements on weekends. Fourth, the fact that the premium occurs more on the upper than on the lower scale of the wage distribution (this is also the case in Brazil) might reflect the higher bargaining power of educated or skilled people related to the unskilled.

Another peculiarity of the Chilean labour market is high factual and legal labour turnover (which we already observed in Brazil). Fifty-eight point four percent of formal wage earning jobs do not last more than 13 months. What makes this labour market an extremely flexible labour market, however, is especially the so-called *Multirut* system, described by two experts in this way: "The high levels of job rotation do not reflect the fact that many workers are employed continuously, even though they are rotated contractually between different tax identification numbers pertaining to a single holding company. This mechanism in Chile is known as "Multirut", and constitutes a common practice used by employers to restrict the labour rights of their employees. For example, workers may be hired by one tax ID in a holding company for several months before being rotated to another, and another, and so on. Workers whose contracts never last longer than a year do not accumulate severance pay rights. Equally importantly, by splitting a holding company into multiple legal entities, workers cannot organise effective unions (Sehnbruch and Ruiz-Tagle 2014: 10)." The extent of this phenomenon is unknown because respective data is not available. The main reason for this practice, however, is evident. Employers have an incentive to hold the contracts shorter than one year to avoid still relatively high severance payments.[60]

The study quoted above also provides a well-designed econometric analysis of transition probabilities related to 'regular' (open-ended) and non-standard ('atypical') jobs that are worth being briefly summarised (Sehnbruch and Ruiz-Tagle 2014:15–20).

- First of all, open-ended contracts are associated with a lower probability of losing a job, a higher probability of finding a new one, and higher income levels.
- Second, this advantage is reinforced by education in finding a new job: higher levels of education are associated with higher probabilities of finding employment. Secondary education implies a 23 percent larger probability of exiting unemployment compared to

[60] Mandatory severance pay (SP) amounts to one month of gross monthly earnings per year of work. The SP is regulated by the labour code. It states that any worker with a permanent contract who is fired for economic reasons and has at least 12 months of continuous work with the same employer has the right to receive SP (Hunneeus et al. 2012: 5).

the base category of primary education, for women however only 2 percent; this gender gap disappears with tertiary education which increases the probability of finding a job by 25 percent for men and 23 percent for women.

- Third, the length or "density" (the term used in this study) of staying in a contract type plays an interesting intermediary role: the longer a person is used to working in non-standard employment relationships, the less likely she is to lose her job, but if she does, it will be harder for her to get a new one. Work experience, often involving training on the job, obviously pays off in labour market security but increases the risk of not getting a new job due to specialised (instead of generalised) experiences and skills.
- Fourth, the density of the open-ended contract increases income levels for both genders, but significantly more for women than for men (27% and 17% respectively).[61] The density of atypical contract has no significant effect for women, but a 10 percent positive impact for men. The densities of no contract and self-employed (both professional and non-professional), however, have negative effects on wages. Thus, gaining experience in formal open-ended contracts is associated with larger wages, whereas other types of contract experience do not involve such a premium.
- Fifth, formality measured as social security contributions has a positive effect on the probability of exiting unemployment for both men and women (5% larger and 14% larger correspondingly).
- Sixth, having received vocational training in the current job implies a reduction of 28 percent of the probability of losing a job for men and women.

The authors conclude that the Multirut problem would be best solved by outlawing this practice. Being aware, however, that such a regulation requires effective oversight that might not be effective due to inappropriate resources, complementary incentives and institutional responses might be considered to which we come back in chapter 5.2. The Chilean case, however, cannot be closed without taking a closer look at its most innovative institution of unemployment insurance (UI), which was established in 2002 and is in the meantime widely recommended (in particular by the World Bank) as a potential model for 'developing' and 'emerging' countries (e.g. Acevedo et al. 2006; Vodopivec 2013). We will present and evaluate this important element of the Chilean labour market in the policy section of this study.

4.5 Uganda

Uganda is a member state of the East African Community (EAC) with a growing GDP per capita rates of 7.6 percent (in current US$) between 2000 and 2014. Nevertheless it is counted as one of the poorest countries in the world and is currently ranked as number 164 out of 187 countries in the Human Development Index (0.48). The recent history of Uganda was marked by several military conflicts, the last being the attacks of the infamous rebellion group LRA leaded by Joseph Kony in the early 2000s, which was ended

[61] This surprising advantage of women might be, however, an effect of wage discrimination at the beginning of a contract (GüS).

by the Ugandan Army in 2008 with a few attacks remaining in regions around the Congolese Border in the West.

The political system of Uganda is dominated by the strong presidency of Yoweri Museveni, who has been in power since 1987 and has established a formally democratic system with its party NRM (National Resistance Movement) as the dominating political group. Despite the strong role of its president, Uganda is one of the most decentralised political systems in Sub-Saharan Africa. In contrast to most other countries local governments dispose a high share of financial expenditure and are more transparent than the central government.

Viewed in broad demographical terms Uganda is best described as a very young country with a median age of 15.6 and one of the highest fertility rates in the world with 5.9 births per woman in 2013. In combination with increasing life expectancy and decreasing mortality rates this led to a sharp rise in population numbers from 28 million people in 2005 to almost 38 million in 2013, and an expected 60 million by 2040 (Rwabizambuga et al. 2015).

To take a look at non-standard employment in Uganda implies changing the perspective from industrialised countries to an underdeveloped economy with a still evolving set of labour market institutions. That means we have to be sensitive of the different settings our assumptions are built on. To get a better picture we first consider the general characteristics of the Ugandan labour market. We concentrate on the data of the most recent surveys of the National Labour Force and Child Activities Survey, which was implemented by the Ugandan Bureau of Statistics (UBOS) in 2011/12 with the technical support of the World Bank and the International Labour Organisation (ILO).[62]

The Ugandan Labour Force is dominated by two patterns (Table 18). First of all it can be seen that most Ugandans are in self-employment work with 62.2 percent of all employed people while only 17.3 percent of the Ugandan workers are in paid or salaried employment. Directly related to the number of self-employment is the dominating role of agriculture, forestry and fishing as the biggest sector in Uganda, with a 71.4 percent share of employment. Roughly one-fifth of Ugandan workers are employed in the service sector and 7 percent in industry (UBOS 2013); agriculture, however, contributes only 27 percent of GDP, and manufacturing 10.6 percent (Rwabizambuga et al. 2015).

Together with the category ‘contributing family workers’, self-employment accounts for a share of 82.7 percent of the active labour force. People with no formal education at all or only primary education have the highest likelihood of ending up in self-employment with almost 80 percent respectively 61.9 percent (not shown in Table 18). In contrast, people with post-secondary education are much more likely to end up in paid employment with

[62] As a more differentiated complement, we refer the reader to a recent report by Dumas and Houdré (2015) for the ILO. This informative study is closely related to the conventional definition of NSFE using data of the Uganda National Panel Survey (UNPS) collected by UBOS in 2009/2010, 2010/2011 and 2011/2012 which allowed some econometric work on transition patterns. These data, however, provide only a picture for employment in urban areas, and the reference of NSFE transition probabilities to the status of unemployment is a bit problematic in the context of underdeveloped countries where the measurement of unemployment is neither reliable nor valid.

rates above 65 percent (UBOS 2013: 38). This feature hints at the key function of education as a door opener towards paid employment. In addition, educational attainment was found to be the most important factor related to the income of Ugandan workers. Descriptive transition patterns show that NSFEs could have a stepping stone effect for educated (and young) workers but be a dead end for low educated ones (Dumas and Houdré 2015: 5).

It is also worth mentioning that 15 percent of self-employed workers in agriculture are working "only for own family use (subsistence agriculture)" (UBOS 2013: 41). That is a considerably large group of the labour market, which almost does not exist anymore in industrialised countries. Especially for this group, self-employment seems to be a dead-end form of labour, which lacks further perspectives into paid employment or any forms of standard employment. This assumption is confirmed by recent findings that self-employment leads to lower probabilities of moving to standard employment (Dumas and Houdré 2015: 23).

Table 18: Employment Statistics in Uganda as Percent of Working-Age Population (15–64), 2011/12

	Male	**Female**	**Urban**	**Rural**	**Total**
Labour Force Participation Rate	81.5	78.9	70.2	82.4	80.2
% in informal employment	92.6	95.0	91.0	95.3	93.5
Share of self employment	58.1	66.3	52.6	63.9	62.2
Share of paid employment	23.3	11.3	39.5	13.3	17.3
Contributing family workers	18.6	22.4	7.9	22.7	20.5
Labour underutilisation components					
Unemployment Rate	1.8	2.4	7.7	1.1	2.1
Time related under employment	10.4	8.4	7.2	9.8	9.4
Skill related under employment	16.6	20.5	22.3	15.0	18.0
Wage related inadequate employment	27.9	43.8	23.7	37.8	33.1

Source: Ugandan National Labour Force Survey 2011/12, UBOS

The second important pattern next to the high share of self-employment is the astonishingly high number of people counted as "informal" workers: 93.5 percent.[63] The utilised

[63] Other ILO data estimate the share of the informal sector in Uganda at around 70 percent, probably due to a narrower definition: The ILO (2013) defines the "informal sector" as the group of household enterprises or unincorporated enterprises owned by households that includes: a) Informal own-account enterprises, which

concept of informal employment here follows the definition of the 17th International Conference of Labour Statisticians and covers all kind of informal work, whether carried out in formal sector enterprises, informal enterprises or households, during a given reference period. Within this category own account workers, who are working for their own household use, are predominant with almost 50 percent of all informal work, followed by employees without formal contracts in formal or informal enterprises with a share of 41.8 percent (UBOS 2013: 44f).

The lack of formal employment contracts illustrates the absence of effective rules and organisation for the vast majority of workers, but it also leads to the question of whether our categories of formal part-time and temporary work are useful to describe the highly informal labour market of Uganda. We therefore follow the approach of the Ugandan Bureau of Statistics which describes different components of labour underutilisation as indicators of precarious working conditions. These components shown in Table 18 give a better picture of the supply-demand balance within the Ugandan labour market than the unemployment rate (UBOS, 2013: 59ff).[64]

Unemployment rates are rather low for Uganda, with 2.1 percent of the overall employment. However, this number should be interpreted carefully. Because of changing estimation procedures they might give a misleading picture of the labour market situation. Nevertheless, it is worth mentioning that the unemployment rate is much higher in urban areas than in rural ones. This holds especially true for Uganda's capital, Kampala, with rates above 10 percent of unemployment.[65] With a growing increase in population more and more young people are entering the labour market and the pressure to accept all kinds of employment is accordingly high. In addition there is no social protection or unemployment security for those who are not employed in Uganda. Precarious working conditions are the logical consequence of this unbalanced situation between labour supply and demand.

One of the components of labour underutilisation is *time-related underemployment*, which is not comparable to the standard concept of part-time work because it only covers cases of insufficient volume of work and, therefore, involuntary part-time work. For almost 10 percent of people who are in employment there is not enough work to do,[66] with rates be-

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may employ contributing family workers and employees on an occasional basis; and b) Enterprises of informal employers, which employ one or more employees on a continuous basis. A broader notion is that of "informal employment". The WIEGO-ICLS-ILO definition of employment in the informal economy (WIEGO: Women in Informal Employment: Globalizing and Organizing; ICLS: International Conference of Labor Statisticians; ILO: International Labor Organization) comprises informal employment of two kinds: (1) Self-employment in informal enterprises (small unregistered or unincorporated enterprises) including: employers, own account operators and unpaid family workers in informal enterprises; and (2) Paid employment in informal jobs (for informal enterprises, formal enterprises, households, or no fixed employer) including: casual or day laborers, industrial outworkers, unregistered or undeclared workers, contract workers and unprotected temporary and part-time workers (taken from Fields 2013: Footnote 2).

[64] There is no unemployment insurance or related form of social protection in Uganda, which forces people into all kind of employment even under precarious circumstances and explains why the low number of unemployment is not necessarily a sign of the well-being of the working force. The pressure of missing social protection is also highly related to the creation of small informal self-employment (UBOS, 2013: 60).

[65] In fact, the unemployment rate might serve as a reverse indicator of formalised labour markets in underdeveloped countries. The higher the share of informal sectors and employment, the lower unemployment.

[66] Per definition the number counts workers, who are working less than 40 hours a week but were available

ing slightly higher for men than for women (UBOS 2013: 63). Another effect of the high pressure on the labour market is that people are forced to accept jobs under their qualification. The category s*kill-related underemployment* counts those people who have a higher educational attainment than the level required by their current job (UBOS 2013: 66). Overall rates are high with 18 percent and in particular for women, who are more affected than men (20.5% vs. 16.6%). Women with post-secondary education are suffering even rates of 40.4 percent of *skill related underemployment* (not shown in Table 18). In addition people in urban areas are more likely to be in *skill-related underemployment*, which can be partly explained by the high numbers of "relatively highly educated persons migrating to Kampala" (UBOS 2013: 67).

Women are also more affected than men by *wage-related inadequate employment*, with 43.8 percent being inadequately paid in comparison to the still high number of 27.9 percent for men. "Inadequate wage" is defined by monthly earnings of less than two-thirds of the median income in Uganda (UBOS 2013: 68).[67]

Another characteristic is the different reality between rural and urban areas, which is showing us the two sides of the same coin. While the working situation in rural areas is described by high numbers of subsistence agriculture and a lack of accessible work outside the agricultural sector, urban areas are facing an oversupply of workers. Without effective regulation this leads to the direct exploitation of employees. Next to the number of wage-related inadequate employment is the number of excessive hours of work, which is defined by ILO as more than 48 hours of work per day. In Kampala almost three-quarters of the working population work excessive hours with 66 percent of those who are working in the service sector and 62 percent in industry (UBOS 2013: 47).

It may be a key aspect of the informal labour market that workers can be efficiently allocated and replaced – at least from the perspective of the employers. That this view does not lead to sustainable development, however, has been discussed extensively in our Indian case study. Moreover, informal workers, especially the uneducated ones, are in an inferior position to their employers. The unfortunate position of workers against employers is also represented by the small number of labour union members, which consist of only 11 percent of the already low number of paid employees or roughly 1 percent of the working age population in Uganda (UBOS 2013: 56).

The results for Uganda are exemplary for a national context where the overall labour market is mainly described by high quantities of young and unqualified workers who are not organised and are without much protection. According to our theoretical assumptions, this leads directly to a high proportion of precarious forms of employment. Another feature of the Ugandan labour market (and most other Sub-Saharan countries) is the predominant role of agriculture and rural areas. This might be regarded as a problem due to the fact that most informal jobs in agriculture are not very likely to transform into formalised paid employment or standard employment. On the other hand, it might be more helpful to focus on agriculture not as a problem but as a possible solution for precarious work situations. Increasing efficiency and innovation in agriculture might have a strong impact on poverty

to work more hours (UBOS 2013: 64).

[67] Median Income in Uganda was 123.000 Ush in 2013 or less than $40 a month.

levels with rural areas already contributing a share of 89 percent of the national poverty reduction levels but still remaining significantly poorer than urban areas (Ssewanyana and Kasirye, 2014).

There are several pathways to follow for improving the situation of Ugandan workers that deserve further attention. One of them is the ongoing integration into the arrangements of the East Africa Community (EAC) with the East African Trade Union Confederation (EATUC) as one of its bodies. The EATUC represents workers' interests on a supranational level within the community. In fact such supranational bodies seem to have more influence on labour policies than their national counterparts. The EATUC have already managed to promote social issues on the level of EAC, with the effect that the harmonisation of social security and protection rights, especially related to the most vulnerable group of self-employed workers, became an integral part of the core articles of the community.[68] Although the implementation of such treaties is a political and therefore open question, it is reasonable to assume that the establishment of supranational bodies, that have direct influence on transnational binding labour market policies, can support the position of workers at an institutional level.

Several programmes for tackling Uganda's main problem, youth unemployment or youth underemployment, have been tried during the last decade, however, with mixed and to some extent disappointing results. A telling example is the *Youth Venture Capital Fund* (UYVCF) in 2011, which distributes around US $10 million in cooperation with three leading banks in Uganda. In 2013 an additional programme spending $100 million US$ over a period of five years called the *Youth Livelihood Programme* (YLP) was initiated. Both funds aim to increase enterprise development, job creation and business skills, especially regarding the youth. They especially address the creation of micro, small and medium enterprises, which are considered to be the most important driving force of the private sector. Despite high participation rates it is argued that those programmes lack efficiency. A more comprehensive approach with a better combination of credit and training, as well as a strong institutional framework (cooperation between state and civil society, transparent, non-corruptive and with accountable implementation) are recommended. And most importantly, it is necessary to direct funding resources into areas with a high potential for employment creation like agriculture instead of the persistent emphasis on retail trade which is not employment intensive (Ahaibwe and Kasirye, 2015).

Another crucial aspect is the creation of more formalised jobs and at the same time the effective[69] implementation of social policies with the aim to secure and strengthen the position of workers in relation to their employers. For this purpose public institutions play a vital role. Institutions like the National Social Security Fund (NSSF),[70] which is providing pensions for employees of both the public and the private sector; or the Kampala Capi-

[68] As described in Articles 5, 10 and 12 of the EAC Common Market Protocol (Friedrich-Ebert-Stiftung 2010).

[69] An example of inefficient social policy is the Employment Act of 2006 (section 53) which roughly defines 48 hours a week as the maximum working time, which is far from the reality of Ugandan workers as we summarised above.

[70] The NSSF is the only relevant pension fund in Uganda and was recently awarded the African Pension Leadership Initiative of the Year Award at the Africa Investor Institutional Investment Awards for overall performance and efficient investment strategies.

tal City Authority (KCCA),[71] which is a publicly-funded organisation with the aim of implementing work programmes, educational training and infrastructure projects to improve working conditions in the capital Kampala. Well-organised public institutions can have a strong impact on the living conditions of Ugandan workers as long as they follow a management path that is accountable with a strong position against any forms of corruption, and certainly further supported by national and international politics. The Ugandan government has recently initiated a long-term multidimensional approach to address social and labour issues in its *Vision 2040*, which aims at improving the overall situation of the people in Uganda instead of just addressing one problem or one sector of the labour market.[72]

The issue of introducing a national minimum wage (NMW) is currently hotly debated in Uganda.[73] Enacting an NMW wage would not only protect Ugandan workers directly, but it would also increase the scope of formal employment, which seems to be crucial for the labour market situation in Uganda. While international organisations like the EATUC and ILO argue much in favour of a minimum wage, local experts (like Sarah Ssewanyana of the Kampala-based Economic Policy Research Centre) are emphasizing that general employment patterns have to improve first and that a minimum wage in the current situation would rather have negative than positive effects on the workers' situation. In fact local studies have shown that economic growth is the key factor to reduce the level of poverty in Uganda (Ssewanyana and Kasirye, 2013). Most recently the president, Museveni, appeared to follow this view and declared that the minimum wage should not be rushed into.

To conclude, the situation of workers in Uganda is characterised through a high amount of informal employment and very precarious forms of NSE. Effective regulation is also needs to be first established. A political narrative focussed on efficient and flexible economic development is not very likely to improve the situation of workers. On the contrary, a higher degree of formalisation and regulation of social protection seems to be necessary to guarantee minimum standards of employment protection for employees. Public institutions on the national and the supranational level will have to play a crucial role for the implementations of such regulations. As the high incidence of self-employment in 'developing' countries reminds us, however, the further formalisation of the labour market will take its time but basic income security for the poorest and especially for the young is of utmost priority. The *Youth Opportunity Programme* based on the idea of unconditional income transfers for the poorest and launched in 2005 by the Ugandan government shows a way to deal with this situation, which might be generalised for other 'developing' countries. We will come back to this point in the final chapter.

[71] Funded in 2011 the KCCA is investing in a wide range of public programmes, e.g. financing infrastructure in cooperation with international partners and implementing training programmes with a budget of US $20 million in 2013 and development programmes of $260 million for the next five years.

[72] The proposed Vision 2040 is among other things committed to the principles of good governance, effective implementation, monitoring and evaluation. Even though we do not make the mistake of confusing words with reality, the emphasis of those topics is surely pointing towards the right direction.

[73] According to Bhorat et al. (2015), Uganda already has a national minimum wage which, however, is extremely low: US $65 ppp per month.

4.6 Kenya

Kenya only became independent from British colonial rule in 1963 and was established as the Republic of Kenya in December 1964. Its current president, Uhuru Kenyatta, is a son of Kenya's first strong president Jomo Kenyatta, representing the largest ethnic group of the Kikuyu which led the Mau-Mau rebellion in the 1950s. The president is both the head of the state and the head of the government. The political leadership is characterised through the concentrated power of a small elite, and political tension often breaks through ethnic lines with clashes between tribal groups as seen in the last elections 2008 and 2012.[74] The country tried to address these conflicts and unequal leadership through political reorganisation and a new constitution in 2010 (AEO, 2015: 158f). Since then, Kenya has been subdivided into 47 semi-autonomous counties headed by governors and politically represented in the senate, whereas the 290 members of the parliament are nationally elected out of a multi-party system. Nevertheless, politically Kenya is a rather centralised state with Nairobi as its economic, political and cultural centre. One of the main current conflict lines is the claim to raise national government financial transfers to county governments from currently 15 percent to 45 percent (Odero et al. 2015).

Kenya has a young and fast-growing population of about 45 million (July 2014). In economic terms Kenya is the wealthiest country in the East African Community (EAC) with a GDP of US $1.564 per capita in 2014 and strong growth rates (5 to 7 percent) in the past decade (EAC, 2015: 83, Odero et al. 2015: 3). Yet its HDI is still low although it increased from 0.45 (1980) to 0.54 (2013), mainly driven by improved education but to be depreciated by high income inequality compared to other Sub-Saharan countries (UNDP 2014b). Currently, Kenya also suffers from terrorist attacks by the Somalia group Al-Shabaab and an unsecured boarder region in the north (AEO, 2015: 158).

The new constitution of Kenya has made much progress towards gender equality. For instance, one-third of all appointments in the public sector are reserved for women as a way of increasing the number of women in decision-making positions (Odero et al. 2015: 12). Some progress can already be observed. According to KBNS (2015: 66), the number of female members in the National Assembly was 69 constituting 19.8 percent of the total number of legislators. Female cabinet and principal secretaries constituted 33.3 percent and 26.9 percent, respectively.

The majority of people in Kenya live in rural areas. Agriculture, forestry and fishery together build the largest sector of employment (about 80% of the rural population) and contribute 27.3 percent to the national GDP; it is also the fastest-growing sector with a contribution of 14.5 percent to the overall national growth. Within this sector the production of crops has by far the highest proportion and accounts for 19.7 percent of the national GDP. Coffee, tea and flowers are the main agricultural export goods in a highly contested and therefore vulnerable market. The second largest sector is manufacturing (especially the production of cement, pharmaceutical products, fabricated metal products and furniture) with a share of 10 percent, followed by transport and storage (8.3%), wholesale and retail trade (8.2%) (KNBS 2015: 23).

[74] In contrast, for instance, to Tanzania whose first president, Julius Nyerere, succeeded (apart, maybe, from Zanzibar) in creating a strong national identity (Collier 2015: 254).

Kenya's mobile telephone market and its mobile payment system (M-PESA) is the most developed in the world. M-PESA is now used by over 17 million Kenyans, equivalent to more than two-thirds of the adult population. Around 25 percent of the country's gross national product flows through it. M-PESA lets people transfer cash using their phones. This is particularly useful in a country where many workers in cities send money back home to their families in rural villages. Electronic transfers save people time, freeing them to do other and more productive things instead (The Economist, 27 May 2013). M-PESA even became an export example to other countries, like India.

Mobile payment systems are obviously a functional equivalent of low-developed or even inexistent banking systems particularly in rural areas of poor economies. Furthermore, the deeply rooted bribery culture (often along ethnic or clan lines) prevents people from saving through bank deposits. In the public sector Corruption Perceptions Index (CPI), Kenya is ranked 145th out of 175 assessed countries with a score of 25 out of a possible 100 in 2014 (Transparency International 2015).[75] The downside is a chronic lack of reliable credit capacities especially in the rural areas for which the mobile telephone payment system cannot fully compensate.

Table 19: Employment*) in Kenya according to Employment Relationships

	2010 Td	% of Total	2014 Td	% of Total	% Change
Wage Employment	2,016.2	17.6	2,370.2	16.6	18
Self-employment**)	69.8	0.6	103.0	0.7	48
Total 'Modern Sector'	*2,086.0*	*18.2*	*2,473.2*	*17.3*	*19*
Informal Sector	9,371.1	81.8	11,843.5	82.7	26
Total	**11,457.1**	**100**	**14,316.7**	**100**	**25**

*) Excluding small scale agriculture and pastoralist activities (subsistence economy)
**) Including unpaid family workers
Source: KBNS (2015: Table 4.1, p. 67), own calculations

Employment numbers were rising in Kenya parallel to GNP by about 6 percent on average in recent years (Table 19). Most jobs were created in the informal sector, which increased its share of total employment to 82.7 percent. Self-employment beyond the (still large) subsistence economy so far plays only a tiny role. The informal sector,[76] known in Kenya as the *jua kali* sector, plays a crucial role for the labour market in Kenya. It is believed that the *jua kali* sector "provides jobs to complement the formal sector. The majority of small businesses such as retailers, hawkers, *boda boda* operators[77] and other service providers fall into this sector […]. Over the years, the sector has expanded into activities of manufacturing, transport and information, communication and technology" (KNBS 2015:80).

[75] Low figures reflect high corruption, high figures low corruption. In 2014, Denmark ranked highest with a score of 92, Somalia and North-Korea lowest with a score of 8. A large majority, 70 percent, of respondents to Transparency International's Global Corruption Barometer 2013 indicated that they had paid a bribe to at least one of eight public services in the 12 months preceding the survey (Odero et al. 2015: 10).
[76] The definition is not fully clear. Informal employment seems to cover paid employment without a formal employment contract. In contrast to other definitions, it does not exclude the possibility of being covered by some kind of social insurance. In such an environment, the distinction between part-time and full-time employment does not make much sense; corresponding data are not available.
[77] Small motorcycle taxis.

The bulk of informal employment, however, is in wholesale and retail trade, hotels and restaurants (57%) and in rural areas (60%).

The NSFE categories of part-time and temporary employment used for Europe are not reported in official Kenyan statistics. ILO, referring to the World Bank Enterprise Survey 2014, displays a figure according to which about 18 percent of all Kenyan male workers and about 30 percent of all Kenyan female workers are temporary workers. Part-time might be indirectly reflected in figures estimating the extent of underemployment. In Kenya, the underemployed are considered as persons involuntarily working less than the normal duration of work and are available for additional work. They work shorter hours or engage in lower skilled jobs as an alternative to open unemployment; they experience time-related underemployment if they work less than 28 hours a week. Of the total employed in the 2005/06 Kenya Integrated Household Budget Survey, over 20 percent were underemployed, almost five times more than in the 1998/99 Integrated Labour Force Survey; moreover, 55.4 percent of the underemployed in 2005/06 were females located in rural areas (Vuluku et al. 2013: 9).

More than 2 million Kenyans are without gainful employment, which corresponds to an estimated unemployment rate of 13 percent, with youth unemployment at 25 percent. In light of this situation, the current government has pledged to create 1,000,000 jobs every year. The unemployment rates are highest among the low skilled, and in particular among women in urban areas. Moreover, underemployment and inactivity rates are high in rural areas, again, especially among women (Odero and Reeves 2014; Zepeda et al. 2013b). The gender gap can mainly be explained by a lower secondary education level of women compared to men. Young women's opportunity costs in taking up informal or formal jobs are also higher than for men because they are supposed to contribute unpaid work to the household. Furthermore, crop diseases of other natural disasters hit women's work in the rural areas harder than men (Vuluku et al. 2013).

About 52 percent of Kenya's population has access to basic health services within 5km but significant disparities exist between rural and urban areas. Pensions and old age savings systems give some level of income security to about one half of those employed in the formal sector. Private pension and insurance systems supplement public programmes for higher income groups, with significant recent improvements in their regulation and oversight. The National Social Security Fund (NSSF) and National Health Insurance (NHIF) schemes are now open to non-salaried individuals and their memberships continue to grow (Odero and Reeves 2014).

Kenya has a long history of minimum wage (MW) policies which were introduced as early as the country gained its independence. It therefore owns a complex range of MW orders which differentiate not only among sectors or occupations but also among regions. For example, the average monthly basic minimum wages for Nairobi, Kisumu and Mombasa were higher than in all municipalities, town councils and other towns. Altogether, there are 55 MW. In general the MW applies to workers aged 18 and older who are formally employed. Two wage boards, the Agricultural Wages Advisory Board (AWAB) and the General Wages Advisory Board (GWAB), recommend new MWs on Labour Day every year. The tripartite structure of the boards is dominated by the Ministry of Labour, which effectively implements MWs for different occupations and regions.

According to Bhorat et al. (2015:13), Kenya's upper floor of MW is US $264 ppp monthly and covers only 2 percent of employees; the lower floor amounts to $116 ppp and covers only 7 percent of employees. The Kaitz ratio, i.e. the ratio of the MW to the mean wage is with 0.34 relatively high.[78] The same authors also discovered a tendency towards aggressive MW setting in Sub-Saharan Africa compared to other low-income countries. Also, the levels of non-compliance with minimum wage laws are high in this area. On average, 58 percent of workers earn below the minimum wage legislated for them, compared to an average of 30 percent for the non-Sub-Saharan-Africa countries.

The reach of collective bargaining beyond the MW seems to be low. Only 90.856 workers (of 2,370.00 wage earners) were covered in 2014 (KBNA 2015: 82). Evaluations of the MW are scarce, provide mixed results and suffer a lack of suitable data. One of the more sophisticated studies finds that compliance rates were higher in occupations other than agriculture, and that minimum wages were positively associated with wages of low educated workers and women in non-agricultural activities. Higher minimum wages were also associated with a lower share of workers in formal activities in a given occupation and location: A 10 percent point increase in the minimum to median wage ratio could be associated with a decline in the share of formal employment of between 1.2–5.6 percentage points and an increase of between 2.7–5.9 points in the share of self-employment (Andalón and Pagès 2008). Since the study is only based on one cross-section data set (2005/6), it is not clear whether less formal jobs are substituted by more informal jobs which could, in theory, be the case. Most recently, the Kenyan government decided not to increase the statutory MWs in 2014 with the argument that industrial expansion needs to be supported through a non-expansionary wage regime and that an increase in productivity has a higher priority for the country's economy (KNBS 2015: 81).

To foster labour market integration for typically marginalised groups is one of the key ambitions of politics in Kenya. Besides several programmes the government is also committed to the reservation of 30 percent of all government job opportunities for the youth, women and persons with disabilities (KNBS 2015:67).

An older fund is the *Youth Enterprise Development Fund* (YEDF), which was introduced in 2006 and transformed into a state cooperate in 2007. The fund cooperates with private financiers to enable entrepreneurship of the youth, either as individuals or as organised entities. This policy is supposed to tackle the challenge of youth unemployment in a highly informal labour market. "In the absence of opportunities in the formal labour market, many young people are engaged in the informal sector which is largely unregulated and are subjected to hazardous conditions for low earnings and long working hours, without any formal contract." The programme is meant to empower young workers to improve their working situation. It provides financial opportunities for youth, but suffers from structural problems, which need to be addressed to improve the impact of the programme.

The YEDF has so far given loans to 158,000 youth enterprises, but due to insufficient sums and implementation most of the enterprises "becoming shadows of their true potential" (Maisiba and George 2013:133). Effective access of funding is harmed by several requirements of the fund, e.g. an own bank account and missing guidance. The average

[78] The usual ratio related to the median is about 0.55.

nominal loan values disbursed was found to be low (about Ksh 40,000)[79] and in most cases insufficient, in particular to reach the sustainability of the enterprises. Regional case studies (mostly descriptive, without an experimental design) recommend aggressive marketing of the youth products, engaging the youth in entrepreneurship training before and after obtaining the loans, providing market information to the youth so as to gain a competitive advantage in their areas of operation, and an easier access to credit for extending start-ups (Maisiba and George 2013). In addition, the programme lacks monitoring and rigorous evaluation.

Similar to Uganda Kenya has a multidimensional development programme called *Vision 2030*. One of its key pillars is the *Uwezo Fund*, which was launched in 2013 and is aimed at enabling women, youth and persons with disability access to finances to promote businesses and enterprises.[80] Robust information on the functioning and effects of this fund are not yet available.

In the following chapter, we turn to the second main aim of this study: What policies are best suited to dealing with the risks of NSFE in favour of improved social protection without affecting productivity and social inclusion, now including the much broader spectrum of employment relationships or job opportunities we discovered in emerging and 'developing' countries.

[79] This corresponds to about €400.
[80] http://www.uwezo.go.ke/home

5. Managing Social Risks Related to NSFE

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

Second, individuals are faced with and affected differently by various risks over the life course, but they are endowed with different capabilities to cope with these risks (Anxo et al 2007; Sen 2001). From a life course perspective, unemployment may be the main risk of unsteady income flows or even a permanent loss of decent earnings; but is not the only one. Income risks can also occur through changes in the individual earnings capacities related to parenthood, illness or eroding skills, or just by the bad luck of having chosen the wrong occupation. Some of these risks can and should be shouldered by the individuals. But sometimes even these risks accumulate or the shoulders are too small to carry the burden. Anticipating the respective need of solidarity requires building up redistributive capacities to take differences in individual risk exposure and individual adaptive capabilities into account.

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

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

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

1. Social insurance benefits are better protected against discretionary political decisions than means-tested benefits due to targeted individual or employers' contributions,

often complemented by targeted fiscal budgets for reasons of redistribution. The way of financing (taxes or contributions) is thereby not the decisive point; the important point is long-term fiscal targeting. The digital revolution, however, might require an increasing share of general tax financing (preferably consumer taxes) to enhance the redistributive capacities and relieve wage income in exchange for burdening capital income.

2. Social insurance benefits are usually implemented through independent institutional bodies (often in tripartite arrangements) that develop over time a specific professionalism that is immune to short-sighted policy intervention.
3. Individual and wage-related benefits can be calculated much easier and more fairly than means-tested benefits.
4. The incentives of work-related social insurance benefits to work are stronger than for means-tested benefits, not least due to the entitlement effect.
5. The macro-economic stabilisation impact of wage-related replacements is higher than those of (usually lower) means-tested benefits.
6. Generous short-term UB (up to about nine or 12 months) have various positive external effects: they reduce cut-throat competition between insiders (covered by insurance) and outsiders (not [yet] covered by insurance). They also provide individual workers with the choice to reject non-standard work especially in its precarious forms; and they protect – at least for a reasonable time – people from taking recourse to costly consumer credits.
7. Jobless people covered by U-/Employment insurance remain healthier and more self-confident than jobless people without such benefits or only means-tested benefits.

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

These are big words. What could it specifically mean for managing the social risks related to NSFE? It is obvious that the following considerations to this big question have to be separated both for the different forms of NSE as well as for the different context conditions between the world of work in Europe (with highly formalised labour markets) and the world of work in so-called developing or emerging economies (with high shares, if not the dominance of informal sectors on the labour market). We start with reflections and good practice examples for Europe before we extend these reflections to the world of 'developing' and 'emerging' countries based on the experiences of our case studies.

5.1.1 The case of part-time work

As shown in the previous chapters and sections, *part-time employment* is the most prominent feature of NSFE in Europe. Figure 18 gives an overview of possible strategies (com-

plemented with best practices) of social risk management based on the matrix of labour market institutions developed in the second chapter. We will concentrate on a few examples often illustrated with German experience because this is our home country which we know best.

Figure 18: Managing Social Risks Related to Part-time Employment

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

*) CEVT=Continuous education and vocational training.

Inclusion of part-time work into unemployment insurance is quite common yet insures only pro rata the reduced wage income due to part-time work. Income loss caused by transiting from full-time to part-time, due, for instance, to parental leave, has so far not been covered in most European countries. The Canadian employment insurance, however, as a model for such an inclusion has already been noted in the introduction (Figure 1, page 4).

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

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

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

A much-neglected opportunity would be the easy transition from full-time to (temporary) voluntary part-time and to provide part-time unemployment benefits under the condition that the other part of the 'working' time is used for labour market education or training. In principle, this seems to be possible in Germany but is not much used as it requires a flexible work-organisation. Small and medium enterprises lack this institutional capacity which could be compensated by employment services or regional labour pools.

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

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

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

dard employment relationship. Such a development would also facilitate the sharing of care responsibilities between men and women.

5.1.2 The case of temporary work

Institutional responses related to *temporary employment* (Figure 19) often trade-in flexibility with new securities ('flexicurity'): efficiency-enhancing reforms of employment protection that allow greater flexibility are compensated by efforts to provide adequate income support to temporary workers facing higher risks of unemployment than standard employees. As the Danish flexicurity model, however, reminds us: such deals have to be coupled with the institutional capacity of effective re-employment services to facilitate their reintegration into employment and to thereby balance efficiency with equity considerations.

A review by Martin and Scarpetta from the OECD (2011) suggests that unemployment benefits appear to have a positive impact on average worker transitions, with particularly strong effects on youth and young adults who are over-proportionally employed in temporary jobs. Reforms in unemployment or employment insurance, should therefore consider two issues. First, the regulation of the waiting period for entitlements should be adjusted to the new situation of an increase of temporary jobs. Many EU member states require a contribution period of two or even three years which many, if not most of the temporary workers, cannot fulfil. In general, shorter waiting periods are to be recommended.

Figure 19: Managing Social Risks Related to Temporary Employment

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

Another institutional response could be *mobility savings accounts* which owe their inspiration to the 2003 Austrian reform of dismissal law ('Abfertigungsrecht'). This reform converted uncertain firing costs for employers into a system of individual savings accounts, funded by an employer payroll tax (1.53% of wages). From the employer's perspective,

this system guarantees certainty about the cost of any future dismissal at the time of hiring; dismissal decisions became independent from the length (and accumulated entitlements of severance payments) of the employment relationship. For the workers, costs associated with labour mobility are reduced because they do not lose their entitlement to 'severance pay' when quitting to take a new job; accumulated entitlements are paid out if transiting into retirement. The new law is inclusive because all workers are covered, independent of the number or duration of employment relationships, whereas the old law privileged insiders with 'standard' contracts. The state supports the corresponding funds through establishing and controlling private mobility administrations (*Mitarbeitervorsorgekassen*) which ensure the portability of accumulated individual entitlements and liquidity of the various funds (Schmid 2011: 123/4).

A further possible and widely discussed institutional reform would be to tackle the asymmetry between temporary and permanent contracts more directly by relaxing the stringency of EP for the latter while at the same time increasing the degree of stringency for the former. Steps in this direction have been repeatedly made in the Netherlands, most recently with the *Flexwet* in July 2015 that stipulated a maximum period of three fixed-term contracts within a period of two years after which a fixed-term contract is automatically transformed into a permanent contract.[81] The same law made dismissal again easier in exchange for an individual entitlement to a *transition budget* replacing severance payments. Every employer (with 25 or more employees) has to provide a transition allowance in the case of he or she initiating the termination of the employment relationship if that relationship exceeded two years. The transition allowance would be calculated as follows. For every year of service less than 10 years, the employee receives one-third of his monthly salary; for every year of service that exceeds 10 years, half of his monthly salary is granted. When the employee is over 50 years old, he or she is entitled to one monthly salary for every year of service that exceeds 10 years. A maximum of 75,000 Euros in total applies, unless the employee's annual salary exceeds this amount, in which case this higher amount counts as the maximum. The decisive difference to the severance payment is that the transition allowance has to be utilised – in a mutual agreement between the employer and employee – for reintegration to another job, in particular through training or other employability measures. The law intends to reduce the pressure on firms to rescue to fixed-term contracts, transforming 'passive' security into 'active' security.

Another concrete step towards this strategy could be the establishment of a single employment contract in order to move away from a dual EP system of the type which exists in many European countries today, with relatively strict EP for permanent workers and relatively lax EP for temporary workers. A single employment contract would set firing costs at initially low levels and rising with firm tenure, requiring, for instance, the transition from a temporary to a permanent or open-ended contract after three years at the latest (Casale and Perulli 2014). There are, however, serious doubts about the effectiveness of single contracts because the thresholds of such legal frameworks produce dismissal costs below which employers prefer to replace a worker with a new one whose protection starts from zero. This effectively means that newly recruited workers still face the same insecurity, at least for a certain length of time and for the weakest group on the labour market.

[81] www.english.szw.nl/

Depending on how the single-employment contract is modelled, it is quite possible that it would make the situation of some workers with short tenure even more precarious than it would be with a temporary contract (Eichhorst et al. 2016).

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

Finally, minimum wages (MWs) are an effective instrument to prevent miserable wages below a decent level and are therefore an essential element for a social protection floor to NSFE. Germany only recently introduced a mandatory minimum wage of €8.50 (January 2015), which the government – according to the recommendation of the German Minimum Wage Commission – decided to increase to €8.84 in January 2017. Contrary to expectations of some mainstream economists, this MW has had – so far – no evident damaging effects on employment. It is, however, too early to definitively assess its impact (Mindestlohnkommission 2016). In theory, the employment impact is indeterminate (Manning 2003) so that positive or negative effects depend much on the implementation of MW. An evidence-based setting of MW is, therefore, indispensable.

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

5.1.3 The case of self-employment

When we come to *self-employment* (Figure 20), the basic issue for proper institutional responses is certainly to ensure social security in old age. Schulze Buschoff and Protsch (2008) argue, on the basis of comparative studies, that contributory financing systems with income thresholds down at the bottom (e.g. mini-jobs) are not suitable for covering the specific risks related to non-standard employment, especially not for the new self-employed. They propose an extension of tax-financed basic income guarantees in old age to cover the risk of extreme income disparity or volatile income streams related to self-employment: Tax-financed basic income guarantees (‘folks’ pensions) would prevent or at least mitigate extreme poverty for the self-employed in old age. As a complement, self-employed could – or even should – also be included in the existing unemployment or employment insurance schemes for two reasons: a universal coverage would ease transitions between or combinations of the two employment relationships, and the corresponding individual contributions of those self-employed with a very low income could be supported by loans or credits that are paid off in times of higher or stable income.

One of the most effective labour market programmes in Germany (even in times of mass unemployment) was a start-up scheme that transformed individual unemployment benefit

entitlements into capitalised loans combined with subsidies for contributing to social security (e.g. Caliendo and Künn 2011). At the height of this measure, 350,000 unemployed (about 10% of the unemployed) were supported in their bid for self-employment. Despite these high figures, the majority were still self-employed after two years, and about 30 percent of these start-ups even expanded to small entrepreneurs with employees (Schmid 2011: 145). Apart from the financial incentives, institutional capacities were built up to ensure a careful selection of candidates and an examination of their business plans according to quality standards, thus contributing to the success. The programme, however, was substantially reduced through the government's drastic austerity measures in 2011/12, although repeated evaluations confirmed the effectiveness *and* efficiency (at least for parts) of the programme.

Figure 20: Managing Social Risks Related to Self-Employment

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

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

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

Parallel to employment protection and fair wage regulation, there is also a need to protect the royalties or exploitation rights for the self-employed and to take care to enforce these rules.

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

5.2 Managing Social Risks of NSFE in the 'Developing and Emerging World'

Related to NSFE, the most important difference between Europe and so-called emerging or developing countries is the high share or even (in some countries) the dominance of the informal sector (Table 20). Workers in this sector are almost by definition excluded from social protection as we know it in Europe. They are not covered by unemployment insurance, employment protection, old age insurance and are more often excluded or badly covered by health insurance compared to workers in the formal sector.

Table 20: Key Indicators Comparing Employment Relationships between Europe and Emerging or Developing Countries (ranked after HDI)

	HDI	Pop Mio.	ER-Men	ER-Women	U-Rate	Share Informal	Share Self-E	Share Temp.	Share Part-T
Korea	0.89	50	75.8	55.1	3.5	n.a.	≈ 27	≈ 24	≈ 7
Chile	0.82	17	72.4	51.9	6.4	≈ 17	≈ 25	≈ 24	≈ 12
Brazil	0.74	204	69.0	46.0	≈ 7.0	≈ 18	≈ 29	≈ 14	≈ 16
India	0.59	1310	90.0	32.0	≈ 5.0	≈ 90+	≈ 50	≈ 30	n.a.
Kenya	0.54	45	n.a.	n.a.	12.7	≈ 83+	≈ 66*)	n.a.	n.a.
Uganda	0.48	38	82.0	79.0	2.1	≈ 90+	≈ 60	n.a.	n.a.
EU-28	n.a.**	508	70.2	58.5	9.3[1]	n.a.	≈ 8	≈ 8	≈ 17
EU-19	n.a.	338	69.5	58.2	10.8[1]	n.a.	≈ 8	≈ 9	≈ 19

Source: OECD Stat, Eurostat; most recent figures; many figures, especially the last five columns are not strictly comparable or rough estimates; n.a. = not available; HDI=Human Development Index; Pop=Population; ER=Employment Rate; U-Rate=Unemployment Rate; 1) September 2015; EU-19=Eurozone; +) wider definition; *) according to Fields (2013), **) The Netherlands ranks at the top of EU-28 (0.92), Bulgaria at the bottom (0.77).

The second significant difference is the great importance of self-employment in the form of own account workers. A majority of these workers are also excluded from mainstream social protection schemes, and poverty in old age is probably the most relevant risk related to this form of employment.

Temporary work in the emerging or developing world is also more widely distributed than in Europe, in particular in the form of contract work and – in a few countries – even in temp agency form. Earnings in temporary work are usually connected with a large negative wage gap compared to open-ended contracts, and the volatility inbuilt into this employment relationship often excludes these workers from full coverage of the whole portfolio of social protection.

Part-time, the dominant and still thriving component of NSFE in Europe, plays no or only a marginal role in emerging or developing countries. Nevertheless, those countries catching up with European countries in terms of HDI, already have a substantive or increasing (e.g. in Korea) share of part-time work. Formal part-time work is usually better covered by social protection measures than the other components of NSFE, particularly better than workers in the informal sector. In a few countries we even found a wage premium related to part-time work (Chile and Brazil). Higher marginal productivity and compensations for unusual working time (weekends, seasonality) have been identified as the likely main reasons for this interesting feature. The greatest risk related to this NSFE is less the non-coverage in pension insurance than the insufficient coverage in terms of income security due to low or reduced benefits as long as this employment relationship does not lead to 'regular' work.

Due to these substantive differences it does not make much sense to use our institutional framework in the same way as we did for the European case. Despite good intentions to raise the size and importance of the formal sector, strongly argued in particular in the Indian case, we cannot expect a dramatic change in this respect for the coming two or three decades. The debate on managing social risks related to NSFE in 'emerging' or 'developing' countries seems to profit more from concentrating on a few key institutions that have a positive influence both on fostering the formal sector and providing minimum standards of income security (as preconditions for being employable) to workers in the informal sector and in the large segments of risky self-employment, temporary, casual or contract work.

The following Figure 21 provides an overview of some selected institutions which seem to have been successful in our selected six countries and promising to be adapted or further expanded in other so-called emerging or developing countries. The rest of this section is devoted to exemplify and to discuss these strategies. Due to limitations of information, we have to deal with the listed strategies in Figure 21 with different intensity.

5.2.1 The Chilean case of unemployment insurance

In brief, the Chilean unemployment insurance (UI) ideally combines three elements: individual savings accounts, private management of these accounts and a redistributive solidarity fund (UISF) co-financed by the government. This combination is thought to fairly share the risks by distributing resources from employed to unemployed workers, and from stable firms to workers with low incomes and unstable jobs. Mainstream economists even claim that this combination of personal accounts and redistribution reduces moral hazard problems endemic to traditional UI schemes and keeps costs at manageable levels. The system was reformed in 2009 in particularly to extend (UISF) coverage to fixed-term contracts, increasing benefits and making individual access more flexible. In detail, the system works in the following way (for more information, see Hunneeus et al. 2012).

Figure 21: Institutional Strategies to Enhance Social Protection in 'Emerging' and 'Developing' Countries Related to NSFE

Institutions/ Strategies	Making Work and Transitions Pay	Making Workers fit to Market and the Market Fit to Workers
U/E -Insurance	Chile: Combining individual accounts with solidarity funds	Brazil: Conditional cash transfers. Ensuring decent minimum income
E-Services	Ugandan: Promote youth transitions towards entrepreneurships	Endow public employment services with proper long-term financial base
E&T	Korea: Investing in a universal high formal education system	Korea: Complementing high formal education with dual learning
EP	Brazil: Simplify the threshold for regular self-employment	India: Stricter enforcement and extension of existing labour law
W-Formation	Brazil and Kenya: Minimum wages to promote formal sector + backloading instead of frontloading wages	All Countries: Enforce wage discrimination related to NSE, in particular temporary work and part-time work
T&B	Korea: Provide tax incentives for transitions from NSFE to SE	Enforce these incentives
Public E&S	India: Public works programmes (NREGA)	Enforce proper implementation of these programmes

Chilean UI is funded by workers, employers and the government. The amount contributed by workers and employers is a fraction of the workers' wages and it depends on the type of contract. For permanent ('standard') contracts, employees contribute 2.4 percent of their wages, out of which 0.8 percent co-finances the UISF. The remaining 1.6 percent goes to employees' individual accounts (UIIA). For these contracts, employers contribute an additional 0.6 percent to the UISF. For fixed-term contracts, only employers contribute 3 percent to workers' individual accounts, of which 0.2 percent flow (since 2009) to the UISF. The larger contribution to the UISF for permanent workers vis-à-vis fixed-term is justified by their higher benefits. The maximum period of uninterrupted contributions set by law is 11 years, after which neither employers nor workers are obliged to contribute. Individual accounts are indexed to the Consumer Price Index, and funds in the UIIA are transferred to individual pension fund accounts after retirement. The government contribution to the UISF is around US $14 million per year (figure for 2010), fixed in real terms.

To stimulate transitions from unemployment to employment, benefit recipients first have to draw resources from their UIIA's and, upon depletion, from the solidarity fund. To reach target replacement rates, solidarity funding may top resources drawn from UIIA's also during initial withdrawals. Most importantly, in contrast to conventional UI systems, withdrawals from individual accounts are triggered by separation from the employer, regardless of the reason. Only those who prior to unemployment worked under permanent contracts and were laid off for reasons attributable to the employer can access solidarity funding; however, since 2009 fixed-term contracts have access to UISF, too. Withdrawals from the common fund can also be triggered by insufficient resources in individual accounts, if the claimant satisfies the usual conditions of continuing eligibility under UI. But even if the unemployed (voluntarily or involuntarily) qualify, workers may opt not to

choose the option of using SF. One reason could be to avoid additional conditions for continuing benefit eligibility imposed under the SF option, another reason, to utilise the individual account for savings and early retirement.[82]

Table 21: Contributors to the Chilean UI System by Contract

Year	*Permanent* Total	% Women	*Fixed-term* Total	% Women	*Total* Men %*	*Total* Women %*
2004	620.603	33	773.183	27	28	22
2010	2.127.525	37	1.186.356	33	52	44

*) In percent of respective total employment; these figures correspond to the potential coverage rate because some contributors might not yet be entitled to benefits (e.g. those in short-term contracts).
Source: OECD Stat and Hunneeus et al. 2012: Table 3, p. 11; own calculations.

The system is mandatory for all wage and salary workers aged 18 and over when they start a new appointment in the private sector, which is the main reason for the growing contribution rate since 2004 (Table 21) and for the skewed distribution in favour of the young and more mobile workers. Public sector workers, as well as apprentices, domestic servants, and self-employed do not participate in the system. Workers can also join voluntarily, but there have been few such enrolments. Men are overrepresented among the contributors, but women seem to catch up. In 2004, only 22 percent of all employed women contributed to the UI system, a figure which had doubled by 2010 (Table 21).

The regulation of benefit entitlement is quite complicated and is strictly guided by moral hazard considerations. We report here only the rules for the post-reform (2009). Permanent and fixed-term workers can only apply for access to their UIIA after 12 continuous or discontinuous contributions in the previous 24 months. Temporary workers with constantly short contribution periods might therefore never accumulate the required contribution period. If they fulfil this condition, from their individual accounts they can withdraw digressive monthly payments with replacement rates of 50, 45, 40, 35 and 30 percent of their average gross wage calculated over the last 12 contributions. After the fifth month, they can withdraw all remaining funds.

If permanent workers meet the access requirements, they can choose the UISF. To reduce moral hazard, however, workers can access the UISF only twice every five years. Benefits are first financed with the resources accumulated in the worker's UIIA, and then with UISF resources, in case the money in the UIIA is not enough to cover guaranteed benefits. Two additional payments of 25 percent in case of high unemployment are possible.

Workers with previous fixed-term contracts that fulfil the conditions can withdraw all of the funds in their individual accounts during the first month they are unemployed. Workers who fulfil conditions to access the solidarity fund are only entitled to two payments with replacement rates of 35 and 30 percent, financed first from their UIIA and then from

[82] In August 2008, the programme had 2.9 million active contributors, representing 77 percent of private sector wage and salary workers the target population, and distributed benefits to 105,000 members, approximately to one in four unemployed workers (Hunneeus et al. 2012).

the UISF. In periods of high unemployment, i.e. when the monthly unemployment rate is one point higher than the average of the last four years, workers who exhausted the last month of their benefits from the UISF are entitled to two extra payments with a replacement rate of 25 percent.

These are quite restrictive conditions, which lead – compared to conventional UI schemes – to quite meagre real replacement rates and low utilisation of the solidarity fund. In 2010, for men who qualified to use the UISF, the replacement rate was 36.9 percent for those who only used their UIIA, and it was 46.7 percent for those who decided to use the UISF. Of those who could only access their UIIA, the replacement rate for their first payment was 36.5 percent for fixed-term workers, and 35.8 percent for permanent workers. These replacement rates were slightly lower for women. Before the 2009 reform, more than 90 percent of those who claimed benefits only qualified for the UIIA. After the reform, this group decreased by around 10 percentage points. What is more, not every individual who qualifies to use the UISF ends up using it. For example, in 2010, of those who qualified to use the UISF, around 43 percent of workers did so. Those with permanent contracts used the UISF more than workers with fixed-term contracts, and women used it more than men. Of those who paid for permanent contracts, 82 percent had no right to access the UISF. Among those who had the right to access the USIF, 55 percent chose to do so. In 2010, the average number of benefits paid represented 25 percent of the total of unemployed workers each month (Hunneeus et al. 2012: 11).

The final assessment of the Chilean UI system related to NSFE therefore comes with mixed results. Some positive features should be mentioned: First, individual accounts made mandatory with each initial new formal employment contract in the private sector will automatically extend the potential insurance coverage over time, including the large share of temporary employed in Chile (see Table 21). Second, access to individual accounts independent of the reason for unemployment (dismissal or quit) contributes to individual sovereignty and supports mobility[83] in the labour market. Third, individual accounts combined with a solidarity fund co-financed by general tax revenues provide an inbuilt redistributive feature from high to low wage earners. Last, high monitoring costs to reduce moral hazard connected with conventional UI systems are avoided.

The Chilean UI-system, however, also has some severe problematic features. First, beyond the excluded public sector it does not cover the informal sector and self-employment that together make up over 40 percent of the labour force. Second, the replacement rates are quite low even at the start of the unemployment spell, and the duration of benefits – five months plus a possible two-month extension in high unemployment – is short. Both features together weaken the macro-economic stabilisation effect and quickly reduce coverage to low levels during recessions.[84] Furthermore, although the digressive monthly bene-

[83] Paula Nagler (2013) finds – in an econometrically sophisticated study – that Chile's UI indeed significantly reduced employment duration. That mobility, however, is a double sword (labour churning might be costly and might reduce training incentives on the one hand while mobility chains might increase allocative efficiency on the other) has already been mentioned several times.

[84] The limited coverage of the Chilean UI system became evident in the economic crisis of 2009. Owing to the recession unemployment climbed to near 1 million (about 11%) but insurance benefits reached only 180,000 beneficiaries (Solimano 2012: 116).

fit rates might solve some moral hazard problems,[85] they do not compensate for the meagre impact on social risk-sharing and the macro-economic stabilisation expected from a well-functioning UI system. Third, many temporarily employed, in particular women, do not fulfil the contributory conditions for benefit entitlement, and women have a lower hazard of changing to a new employment, but a higher hazard of becoming unemployed or inactive compared to men. Fourth, the redistributive capacity of the solidarity fund is quite limited due to low public spending, but also owing to the fact that mandatory contributions of workers and employers finish after 11 years of continuous contributions.[86] Fifth, the possibility to revert the UIIA into pension entitlements might have the adverse effect of utilising these accounts as pure saving accounts instead of using them during the life course for employability measures, e.g. training or retraining.

Research suggests the following modifications to improve the effectiveness of Chilean UI related to NSFE: One way would be by charging employers higher contribution rates to the unemployment insurance system at the beginning of the new working relationship, and letting this contribution decline over time in line with its duration. This would correspond to the strategy of internalising risks mentioned in our conceptual framework. The results of the reported studies also imply connecting these incentives with certifiable investments in vocational training. Labour market segmentation produced by severance pay regulation (see 'Multirut' as a way of circumventing these payments) could be addressed by replacing severance pay with higher contributions to social security systems (particularly pensions and unemployment insurance) that would be mandatory regardless of the type of contract. These contributions could also be structured in such a way that they make unnecessary job rotation unattractive by charging employers higher contribution rates at the beginning of the new employment relationship, and letting these decline over time. Furthermore, once unemployed workers access benefits, they may reduce their job search effort to obtain the maximum amount of social benefits (moral hazard). To reduce these adverse incentives, policymakers may establish a range of programmes, such as job search assistance, subsidised work experience, and public labour exchanges to facilitate job finding and to raise transition rates out of unemployment. These programmes, if successful, would improve the match between workers' skills and job vacancies and lead to higher hourly wages for formerly unemployed workers.[87]

[85] Hartley et al (2010) find that unemployed using UISF have significantly longer spells of unemployment than unemployed using only their individual accounts. The effect, however is small, and – for the whole economy – even smaller if considering the low take up of the solidarity fund. In addition they observe that the selection effect of the 2009 reform became stronger, which means that unemployed with lower probability of finding a new job were using the UISF to a larger extent than those with better re-employment chances. They estimate that the selection effect is even stronger than the moral hazard effect.

[86] In 2015, the Chilean government announced new proposals to increase unemployment benefits. Workers would be entitled to claim a higher level of benefits from the individual accounts; the maximum number of SF claims would increase from five to 10 in any five-year period; temporary workers would be entitled to an additional payment; during employment, workers would have the option of diverting a portion of their SF contributions to their individual pension funds https://www.towerswatson.com/en/Insights/Newsletters/Global/global-news-briefs/2015/01/chile-proposed-increase-to-unemployment-benefits (download 26.11.2015).

[87] In this vein see also Powell (2015: 56–7) for the whole Latin America.

5.2.2 The Brazil case: Conditional cash transfers to make the market fit to workers

As already explained in the theoretical outline, labour markets can only function properly when (potential) workers dispose of a minimum income for a decent livelihood as well as of a minimum education for understanding the tasks and communication related to a market based on labour division. Apart from the modern efficiency wage theory (e.g. Akerlof and Shiller 2009), even the original concept of "neoliberalism" was accepting this truth in its famous 1938 critique of market radicalism.[88]

The idea of conditional cash transfers (CCT) came about in recent decades and was first introduced as an experiment in Mexico (PROGRESA). In a way the concept started from the insight that children in extremely poor families often contributed substantially to the family's livelihood instead of going to school. The idea, therefore, is to give regular payments to poor families, in the form of cash or electronic transfers into their bank accounts, if they meet certain requirements. The requirements vary, but many countries employ those originally used by Mexico (renamed *Oportunidades*). Families must keep their children in school and go for regular medical check-ups and the family head (in 'developing' countries, mostly mothers) must attend workshops on subjects like nutrition or disease prevention. The payments almost always go to women, as they are the most likely to spend the money on their families. Extreme poverty is prevented today while breaking the cycle of poverty for tomorrow which starts when there is no opportunity for an income generation due to the absolute priority of caring for the minimum of existence.

Virtually every country in Latin America has such a programme, but Brazil and Mexico have the largest. Elsewhere, there are large-scale programmes in Bangladesh, Indonesia, and Turkey, and pilot programs in Cambodia, Malawi, Morocco, Pakistan and South Africa, among others. Interest in programmes that seek to use cash to incentivise household investments in child schooling has spread even from so-called developing to developed countries – most recently to programmes in New York City and Washington, DC (Fiszbein et al. 2009: 1).

The Brazil programme *Bolsa Família*, for which the government spends 0.44 percent of its GDP, covered about 58 million Brazilians in 2013, about a quarter of the country.[89] It pays a monthly stipend of about $13 to poor families for each child aged 15 or younger who is attending school, for up to three children. Families can get additional payments of $19 a month for each child of 16 or 17 still in school, up to two children. Families that live in extreme poverty get a basic benefit of about $40, with no conditions.[90] Bolsa is implemented by the municipalities which use social workers to bring additional support and diagnostics to households where children fail to meet their co-responsibilities. Compared with *Oportunidades* its focus is more on the redistributive transfer side than on the conditional side. A robust evaluation of this programme, however, does not (yet) exist to our

[88] The modern identification of "neoliberalism" with libertarian or radical market ideas was, by the way, channelled through the Pinochet reforms in Chile which relied heavily on the radical market philosophy of Milton Friedman and others scholars from the so-called Chicago School. The original "neoliberal" concept, striving towards a "Social Market Economy", was consciously developed as a "third way" between market and socialist economy, but has now turned almost into its perverse form.
[89] Figures relate to 2013: http://www.iadb.org/en/research-and-data//social-transfers,7531.html (13.12.2015).
[90] The other figures relate to the situation around 2010 (see Fiszbein et al. 2009).

knowledge. Its different focus compared to Mexico, nevertheless, seems to be justified related to recent experiences collected with CCT.

Banerjee and Duflot (2011) report results of studies which asked whether an *unconditional* programme could have the same effect as a conditional transfer. A World Bank study found, provocatively, that conditionality does not matter at all. An experimental programme in Malawi again confirmed the tremendous positive effect of cash transfers to poor families in terms of improved schooling of their children, but a control group (unconditional) did as well as the treated (conditional) group. Subsequently, another study that compared conditional and unconditional transfers in Morocco found similar results. Several factors explain this result, among others, the fact that income transfers, by moving parents out of extreme poverty, may also have given the mental space to take a longer view of life: schooling is something where the costs are thus paid (you have to nag – or drag – your children into school now) and it only pays off when they are older – a reason which corroborates our principle of ex ante redistributive strategies.

To sum up, income per se matters for education decisions. In their 18-country study, Banerjee and Duflot found that the share of spending on education increases as we move up from those who live on 99 cents a day to those in the $6–$10 category. Basic income security for the extreme poor, be they conditional or not, have without any doubt a positive effect on the income-generating potential of the very poor.

Yet, what matters, too, are effective employment or social services at the decentral level to implement such programmes. Furthermore, because income differentials are reflected sooner or later in educational differentials, the entitlement to basic education should be a human right for all, which is a common good that – at the end of the day – will have to be enforced through the mandatory schooling of children because financial incentives might not be sufficient. Public provision of the respective infrastructure is also necessary. Moreover, legal enforcement also seems to be required for the service delivery through teachers having a sufficient standard of knowledge.

Absenteeism of teachers is a chronic failure in 'developing' countries, especially in rural areas.[91] A survey of Ugandan schools found that teachers typically worked less than three hours per day, although contracted to work seven hours (Collier 2015: 254). Enforcement, however, is not just a legal or policing issue but is closely related to the culture of identity building, an important issue which we cannot properly address in this study. Paul Collier (2015), referring in particular to the seminal study by Akerlof and Kranton (2011), draws attention to the experience of introducing value added taxes (VAT), recommended by the World Bank or the International Monetary Fund, which turned out to be a drastic failure in many African countries because tax officers concentrated not on maximizing tax collection but on maximizing tax rebates for which they expected to receive some bribes. Such behaviour is completely rational in cultures where the well-being of relatives counts more than the well-being of the common good, i.e. of the nation or country. Teachers' behaviour, just mentioned, can probably be explained by the same feature.

[91] For India see Drèze and Sen (2013: 119).

5.2.3 The Ugandan and Kenyan case: Promoting youth entrepreneurship

Youth unemployment is the central problem of low-developed countries, as we noticed in our case studies of Uganda and Kenya. As a reminder and illustration of the dramatic situation, we quote a recent report from Kenya: "Youth (15–34 year olds), who form 35 percent of the Kenyan population, have the highest unemployment rate of 67 percent. Over one million young people enter into the labour market annually without any skills, some having either dropped out of school or completed school and not enrolled in any college. A further 155,000 join the labour market annually after completing training in TVET or at the university. A total of over 1.3 million new employment places have to be created annually to meet this demand. It is also noted that the skills acquired by college and university graduates often do not meet the expectation of employers. There is therefore urgent need for the government to strengthen and scale up successful measures targeting quality skill development and employment creation for the youth" (Kaane 2014: 3). We also noticed that there are good intentions and programmes to improve this situation, however, with little sustaining impacts so far. One important reason was insufficient implementation and lack of monitoring and robust evaluation of these programmes, in particular related to youth programmes for entrepreneurship.

Uganda recently made an additional effort which seemed to be successful and worthwhile to be looked at in more detail. The *Youth Opportunities Programme* (YOP) was launched in 2005. The goal of the programme was to help the poor and unemployed to become self-employed artisans, to expand skilled employment, to increase incomes and to lower poverty and ultimately promote social stability. The YOP provided 'unconditional' cash transfers, however intended to pay for vocational training, business start-up costs, and tools and materials.[92]

The programme was experimentally implemented, based on randomly selected treatment and non-treatment groups. On average, a treated group received a one-time unconditional cash transfer of about $7,500, i.e. almost $400 per group member. This roughly corresponds to the average annual income in Uganda. Funds were distributed between July and September 2008, i.e. about five to seven months after the baseline survey had been conducted. Of the treated groups, 89 percent actually received their funds. Shortly after the cash transfers had been received the groups started training and most groups had completed training by mid-2009.

The groups that were formed invested a substantial share of the cash transfer in skills training, but large amounts were also spent for tools and materials. Group members typically started their own businesses individually rather than forming firms or cooperatives as a group, but they commonly shared tools and materials. Ninety percent reported that they felt the cash transfer was equally shared among group members.

The estimated impacts of YOP are positive and rather large. After four years, treated individuals were more than twice as likely to practice a skilled trade, typically working as a self-employed artisan, than members of the control group. Additionally, the capital stocks

[92] The following is based on a report by Eichhorst and Rinne (2015) which summarises the actual monitoring and analysis of this programme by Blattmann et al. 2014.

of participants were 57 percent higher than those of members in the control group, their earnings were 38 percent higher, and their hours-of-work were 17 percent higher. Moreover, treated individuals were between 40 and 50 percent more likely to keep records, to register their businesses, and to pay taxes than non-treated individuals. One in four treated individuals had been able to employ and pay for at least one additional part-time employee in his or her business. Significant impacts on social cohesion, pro-social behaviour or protest could not be measured.

A gender difference in treatment effects can be attributed to differences in the respective control groups: While non-treated men also experienced earnings growth, the earnings of non-treated women remained roughly at the same level. After four years, the earnings of treated women were thus 73 percent higher than those of non-treated women – compared to a gain of 29 percent for treated men. The estimated programme impacts thus support the general idea of providing unconditional – yet somehow guided and informed – cash transfers to the poorest. It seems that poor young people are able to invest cash transfers wisely when they are unsupervised (Eichhorst and Rinne 2015: 39).

5.2.4 The Korean case: Massive investment in education and training to be complemented by dual learning systems

Whereas the support of self-employment and sustainable small business start-ups seems to be a highly recommendable policy strategy for 'developing' countries, the experience of self-employment in emerging or already 'developed' countries obviously needs a more differentiated view. Here, self-employment is often an escape from involuntary and – maybe threatening permanent – unemployment. A large part of self-employment in Korea, for example, was found to belong to this highly risky NSFE. This feature is further enhanced by the enforced early retirement of mature-aged workers who once enjoyed strong employment protection in open-ended contracts. Confronted with the perspective of low or even no pension benefits, self-employment or casual, contract or temporary work then becomes a necessity for surviving.

A universal minimum income guarantee in old age based on citizenship – as repeatedly recommended for the European case – may be one solution to at least mitigate this risk. Full pensions at decent levels, however, are often not ensured even through such a guarantee. Accumulation of individual entitlements through employment-related insurance contributions during the life course are usually necessary for decent social protection in old age. The opportunity to stay longer in standard employment or at least in open-ended part-time at substantial working hours per week would be a solution. Institutional requisite for such a strategy is an efficient coordination of the educational system with the labour market, including continuous education and training during the life course to remain employable at competitive productivity levels during the life course.

Korea seems to be on the way to creating the institutional conditions for such a policy strategy. Induced by increasing problems of formally high educated young adults to get jobs corresponding to their education and an increasing mismatch between acquired skills or education and labour market needs, Korea started to rethink its vocational education and training system (VET), bringing it closer both to the preferences of the workers and to the needs of the labour market. The common denominator of this strategy is to enhance

the concept of dual learning systems, which means a combination of practical training and formal schooling like the established systems of community colleges (USA), university colleges (Denmark), apprenticeships or universities of applied sciences in the German-speaking countries.

This will not be an easy way because the solution has to attack the well-known *rationality trap* previously evoked in the second chapter. A recent study by Kis and Park (2012) lucidly describes the problem for the Korean case: In Korea, student preferences and employer preferences are part of a potentially vicious cycle. Employers prefer university graduates because vocational degrees from the Korean Junior Colleges fail to adequately signal occupational skills. These colleges do not require mandatory practical training in firms, and their quality assessment is low or non-existent. Thus, employment outcomes for vocational graduates are weak. When high school students observe this behaviour of employers, they have an even stronger preference for university programmes, so that only those with the weakest scores in the Korean Scholastic Ability Test (KSAT) end up in vocational programmes. In fact, most graduates from the two-year programmes of Junior Colleges enrol in university programmes. This in turn reinforces employer perceptions that university graduates have a higher ability, so that their preference for university graduates is even stronger, a vicious cycle that can clearly aggravate the mismatch problem.

Turning this vicious cycle into a virtuous requires a whole set of interlinked policy changes. As we know from theory, the most important strategies to overcome rationality traps are behavioural rules (norms) whose compliance is enforced, quality standard regulation and public provision of the required infrastructure. Kis and Park (2012) provide a series of recommendations in this vein to which we can here only selectively point. First of all, as junior colleges have strong incentives to respond to student choice, improvements in student choice (in terms of alignment with skills needs) would affect the behaviour of junior colleges (*e.g.* in terms of programmes provided, staffing practices), making them more responsive to labour market needs. The authors mention Denmark as a potential role model for reaching this goal.

In Denmark, participation in workplace training has been mandatory in all post-secondary VET programmes since 2009. The aim of this policy change was to ensure that programmes are professionally-oriented and relevant to employers and students. In the majority of occupations vocational provision is limited to the availability of workplace training opportunities – institutions cannot increase student intake if work placements are not available for additional students. In a small number of occupations (e.g. teachers, nurses) provision is regulated by government defined quotas. The duration of the work placement is three months in short-cycle (academy) programmes and six months in medium-cycle (professional bachelor) programmes and it can take place at one or several companies. VET institutions are responsible for ensuring that the work placement is adapted to the content of the programme. Although not required by law, many institutions prepare an agreement with the company that offers workplace training, setting out the content of the work placement. At the end of their placement students are individually assessed to check that they have acquired the targeted competences (Kis and Park 2012: 113).[93]

[93] The authors refer to the following source: Danish Agency for Higher Education and Educational Support

Other recommendations include the improvement of quality assurance in junior colleges by revising quality indicators used in funding allocation and accreditation to better reflect aspects of quality relevant to vocational programmes; revising mandatory requirements for junior college programmes; improving steering instruments that encourage continuous quality improvement. Furthermore, degrees have to be made more transparent to potential employers, and it has to be ensured that curricula in junior college follow common (national) standards combined with conducting systematic and rigorous assessments of learning outcomes in junior college programmes and linking them with degrees of national competency standards and national (technical) qualifications whenever relevant (Kis and Park 2012: 11).

To come back to our initial argument, such an effort would also be the foundation of proper institutions for continuous education and training for adults to enhance their opportunities to stay longer in SE and to thereby prevent their transition either into unemployment or – in the majority of cases – into NSFE, in particular risky self-employment or casual work. Research shows that Korea – albeit at the top of OECD countries in terms of general, high *and* gender equal education – indeed has a deficit in terms of continuous VET. The participation of adults in formal or non-formal education in Korea is below the OECD average for all levels of education. In 2007 overall 30 percent of 25 to 64-year-olds participated in formal and/or non-formal training, while the OECD average was 41 percent (Kis and Park 2012: 23).

5.2.5 The case of minimum wages as instrument to formalise employment relationships: Backloading instead of frontloading wages

Minimum wages as a wage floor at the bottom are an important element in the portfolio of any social protection floor. All 'developing' or 'emerging' countries we looked at (maybe with the exception of Uganda) introduced minimum wages or took over this institution from quite early times of their independence. The experiences are quite mixed with one important exception: we found no study that proved seriously damaging negative employment impacts as long as MW are carefully balanced and properly differentiated, especially with respect to young entrants into the labour market who need to accumulate experiences to get fully productive. The positive impact on decent earnings for the low skilled and poor is without any doubt, yet this impact is also limited.

Bhorat et al. (2015), who screened the literature with special reference to 'developing' countries, summarise their review as follows: By and large, introducing and raising the minimum wage has a small negative impact or no measurable negative impact. However, there is significant variation around this average finding: the employment elasticities are neither constant nor linear. Where increases in a minimum wage are large and immediate, this can result in employment losses, but more modest increases usually have very little observably adverse effects and may have positive impacts on wages. The great variability in findings on employment could be due partly to the great variation in the detail of the

(2012), Skills beyond School: OECD Review of Post-Secondary Vocational Education and Training – National Background Report for Denmark, http://en.fivu.dk/publications/2012/oecdreview-skills-beyond-school/oecd-review-skills-beyond-school-denmark.pdf

minimum wage regimes and schedules, country by country, and also by the variations in compliance. The authors find that higher Kaitz indices are associated with higher levels of non-compliance and they strongly recommend the release of country-level earnings and employment data at regular intervals for a robust minimum wage research agenda in Africa.

In theory, too, the impact of MW is not determinate because it has opposing effects on job creation. Although an MW reduces demand for labour by raising the marginal cost of employing a new worker *(the demand-side argument)*, a higher minimum wage increases the gap between the expected returns to employment relative to unemployment, inducing additional search effort from unemployed workers *(the supply-side argument)*. By increasing the pool of searching workers (and the intensity of their searching), the minimum wage improves the quality of matches between employers and employees, potentially generating a surplus. The theory thus has ambiguous predictions for the effect of a minimum wage on job creation.

To what extent minimum wages affect the transition from NSFE to SE (or vice versa) has, to our knowledge, however, not been carefully or systematically studied so far. The Kenyan and Indian experiences seem to indicate that low minimum wages might even be a barrier because wages in NSFE, in particular casual or temporary work, are often front-loaded as an incentive to accept these risky jobs. Backloading wages, i.e. starting with lower wages and upgrading these wages as productivity increases through learning on the job or additional training, would be the better strategy at least in view of the whole economy – again a case for the rationality trap. Too high minimum wages, on the other hand, might indeed have negative side effects, especially for the inexperienced young or might provoke employers to cheat by manipulating working time records or circumventing the regulation by contracting-out to fake self-employed, casual or contract workers.

Regional differences (like those mentioned in the Kenyan case study) are considered to be problematic in economic theory because they create incentives of asymmetric mobility streams. In particular young workers from rural areas might be attracted to the cities, adding to the competitive labour force leading to further downward wage pressures or unemployment. Sectoral or occupational differentiation can make sense if sparsely used; however, their potential negative effect on inter-sectoral or inter-occupational mobility should be kept in mind. Kenya's exceptional high number of MWs (55), however, is quite certainly not a model for adaption because simplification improves transparency and the possibility to enforce compliance (Bhorat et al. 2015: 17).

All these complications call for a careful and transparent procedure to set minimum wages, and as international experiences show, an MW setting also requires careful monitoring and rigorous evaluation of its impact on various dimensions (income distribution, employment, unemployment, productivity, and so on). The evidence-based procedure and the structure of the British Low Pay Commission might encourage other countries to learn from the UK, which successfully introduced a unique national minimum wage, only slightly differentiated according to age, in 1997 (Metcalf 2008; Butcher 2012; Brown 2014).

5.2.6 Transition tax rates as incentives to move from NSFE to SE

What pecuniary incentives would non-standard workers have to move into standard jobs? In other words: What is the transition tax rate (TTR) that determines how much earnings will increase or decrease through higher taxes and lower benefits by moving from NSFE to SE? In the Korean case we reported findings that there were no or only small incentives to move from NSFE to SE. According to an innovative OECD study, however, there are wide differences between the different components of NSFE as well as between countries. For example, the income incentives to move from part-time to full-time employment tend to be higher than those for moving from inactivity to part-time employment. On average, the transition tax rate for moving from working 20 hours per week to working 40 hours per week is 48 percent, ranging from less than one-third in Korea, Spain and Portugal to two-thirds or more in Denmark, the United Kingdom, Ireland, Japan and the Netherlands (OECD 2015a: 187). In general, personal income taxes are the main drivers for such differences, and social contributions the second largest, whereas the role of social benefits is scattered depending in particular on family size and whether the benefits are contingent on work (in-work-benefits).

Another example is the transition from part-time self-employment to full-time self-employment. The average TTR for 19 ECD countries is about 45 percent, ranging from about 15 percent in Spain to 75 percent in Hungary, in this case due in particular to increasing social contributions (OECD 2015a: 188).

Unfortunately, even this innovative study does not tell us to what extent TTR actually influence the real transition rates in either way: from NSFE to SE or vice versa. A lot more research is needed, in particular for so-called developing and emerging countries where we almost completely lack any background information to answer this question. In general, however, it seems plausible that for many countries there still exists great room to manoeuvre, to change tax and benefit structures in a way that encourages people to transit between various employment relationships over their life course and to prevent people from getting stuck in risky NSFE. As personal income taxes (in most cases taxes on wage earnings) are the main drivers for potential disincentives of TTR, a general move from taxing wages towards consumer taxes would be part of the solution (Frank 2012).

5.2.7 The Indian case of NREGA: Public works programme as an element of social protection floor for poor countries

In 2006, the Indian government launched the Mahatma Gandhi National Rural Employment Guarantee Act (NREGA), which guarantees up to 100 days of work each year to rural Indians. Since then the NREGA has developed the largest social protection programme in the world by generalising and extending previous experiences; the programme also drew much attention from international experts. NREGA is based on the revolutionary *principle of self-selection and the right to work*: "anyone who joins the worksites is recognised to be in need of social support" (Drèze and Sen 2013: 200). Households can apply for work at any time of the year, and men and women are paid equally at the minimum wage. At its height in 2012/13, about 50 million rural households were covered at a cost of US $8.9 billion or about 1 percent of the GDP – the average employment per rural household is 44 days per year. The costs of the programme are shared between the federal government (75%) and the state governments (25%). At least one-third of the NREGA

workforce in a village is required to be female, yet in reality women's share reached almost 50 percent.

Many studies have followed up on its impact and the majority of them came up with a positive balance.[94] Currently, however, the programme is under fire from the scathing critic of Prime Minister *Narendra Modri* who condemned the programme as a "monument to 60 years of failure". The critics in his footsteps call the programme wasteful, ineffective, leaky and argue that it hurts the poor by fuelling inflation. They claim that the assets created by NREGA works are of poor quality, that the money would be better spent on skill-development, and that promoting economic growth and private investment is the only way to battle rural poverty (The Hindu, 31 May 2015).[95] The author of the quoted article in "The Hindu", however, vividly defends NREGA by summarising the positive results found in many evaluations.

First of all, contrary to the claim that public works distorts the rural economy, the summary report of the Minister of Rural Development (2012) acknowledges that the scheme has actually boosted agricultural productivity through the development of wasteland/fallow land and the construction of post-harvest storage facilities and worksheds. According to this report, far from being a wasteful expenditure, the works under the NREGA have helped create rural assets and infrastructure, ranging from *anganwadis* (local centres to combat child hunger and malnutrition), toilets for individual households, crematoria, cyclone shelters, and playgrounds for children, to drought-proofing, flood protection and control, water conservation and harvesting, and rural road connectivity. NREGA works also contributed to improved ground water levels, increased water availability for irrigation, increased area irrigated by ground and surface water sources, and increased availability of drinking water for humans and livestock, and regenerating the rural ecosystem.[96]

Second and no less important, NREGA has been a critical source of income for female-headed households, providing as much as 15 percent of the household income in some states, and it has encouraged rural entrepreneurship, with households using the supplementary income to start rural businesses. In many states, up to half of the NREGA income was spent on food, which improved health and nutrition – a critical factor in a country plagued by malnutrition. And since – the report maintains – only the poorest sought work under this Act, it was an accurate self-targeting scheme, with a major proportion of the beneficiaries (much higher than their percentage in the general population) belonging to scheduled castes or tribes and other marginalised communities. Other studies, however, find that NREGA was less successful in terms of reaching the most deprived population as claimed

[94] The official view is summarised in a voluminous report by the Ministry of Rural Development (2012).

[95] http://www.thehindu.com/sunday-anchor/is-the-mgnrega-being-set-up-for-failure/article7265266.ece; download on 5.11.2015. Zepeda et al. (2013: 236), however, concede that: "There has been no evaluation instrument proportional to the programmes magnitude that could provide a reliable picture of just how generally successful (or not) it has been." Their own extensive report is, however – apart from its valuable descriptive information – a bit strange as they start with the explicit (yet unproven) assumption "that the programme is effectively creating jobs for poor people in rural areas, that workers are being paid the official programme wage and that the nation's castes and tribes are being employed in proportions similar to those stated in the programme's official figures" (236). Their following macroeconomic simulation exercise coming up with quite positive results is therefore doubtful.

[96] For more and systematic details see Zepeda et al (2013), in particular Table 6.4 (p. 244).

and expected. And although the benefits in terms of local infrastructure, water provision and land cultivation has to be acknowledged, the programme did much less well in providing health and child-care facilities for working women (Zepeda et al. 2013).

Third, NREGA also has a multiplier effect on the rural economy, with the additional purchasing power generated from it spent on items produced in the rural economy (second round effects). Furthermore, the programme effectively reduced the differences in minimum wages across the states and guaranteed to some extent an effective wage floor (Zepeda et al. 2013: 243–5). Compared to pre-NREGA (2000/1–2005/6) in which real wages of women for all rural labour declined, growth rates of post-NREGA (2005/6–2010/11) were 3.83 (Dréze and Sen 2013: 202); wages of casual work in non-agricultural labour increased correspondingly. In this way, the programme may also have altered the power balance in favour of the landless poor against their employers (agricultural landlords, labour contractors). In addition, by raising rural incomes, NREGA has decreased distress migration to the cities, thereby reducing the numbers of the reserve army of labour and increasing the cost of labour.

The latter point, of course, is one of the main critics of evaluation studies guided by mainstream economists. Increasing labour costs and reduced wage differentials might fuel inflation, deter private investors or reduce regional mobility. This critique seems to be justified to some extent as several studies indeed found that the relatively high wages of NREGA works (corresponding the regional minimum wages) had both a creaming (attracting the 'richer' poor) and a rationing effect due to scarce means compared to the high demand for public works.[97] The rising prices of consumption goods through increased demand (second round effects) may further disadvantage the poorest even more.

Yet – and to sum up – even mainstream and sophisticated econometric studies agree that NREGA effectively fulfils a social protection function in the absence of a universal social insurance scheme (like in most European countries). In particular, public works serve quite well as income safety nets, especially for poor women in agricultural areas, in terms of improving both their economic *and* social power. The take up of publicly guaranteed employment follows external shocks, such as heavy rainfalls or droughts, so that a continuity of family income – even if small – is guaranteed.[98] Many evaluation studies, however, also agree that the impact of public works on sustainable and regular employment is small (Zimmermann 2014a, 2014b; Esid 2014; Zepeda et al. 2013).

Two main strategies could improve the effectiveness of such employment guarantee programmes. First, *capacity building* for better implementing, monitoring, controlling and evaluation of the programme to prevent (or at least to mitigate) various forms of corruption. Many studies found that local ruling parties were channelling funds to its base in

[97] Superficially, one would expect demand for NREGA employment to be higher in poorer states, but poorer states like Bihar and Odisha have provided less employment than richer states such as Kerala and Tamil Nadu (esid 2014). This observation confirms our conceptual statement at the beginning, that organisational capacities (which are poor in poor states) play a central role for the effectiveness of institutions or policy interventions. Civil society activities may compensate such deficits only to some extent.

[98] The positive impact of a continuous income streams for the healthy development of children cannot be overestimated, not least for economic reasons. Studies show that labour productivity of formerly undernourished children is only half of their potential after 30 years (e.g., Schmid and Schmid-Heidenhain 2012: 51).

swing constituencies; local functionaries still seem to have the potential to act as 'valves' to direct funds to certain constituencies. Drèze and Sen (2013: 203), while acknowledging a great deal of embezzlement, correctly turn the corruption critique, however, on its head: "NREGA is in fact a potential weapon against corruption [...] has also been a lively laboratory for anti-corruption efforts, involving a whole series of innovations [...] the use of Internet to place all essential records [...] in the public domain, the payment of wages through bank accounts, and the practice of regular social audits." This capacity building should, in particular, be addressed to three accountability provisions of NREGA that are still largely unused and dormant. The duty of the state government to pay unemployment allowances when work is not provided, a right to compensation when wages are not paid on time, and a penalty clause whereby any officer who fails to do his or her duty under the law is liable to a fine (Drèze and Sen 2013: 2001).

Because implementation deficits often cause supply constraints of public works, the second strategy for improvement should ensure a *stronger demand orientation* that guides the content of public works programmes more towards an infrastructure that has immediate effects on skilled labour supply (e.g. better schools, hospitals, day care centres) and sustainable job creation (e.g. risk capital for start-ups, intermediary wage-cost and training subsidies for small firms that increase employment, public transport systems, and public investments in education, health and care infrastructure). We are, however, aware of the tension between the flexible relief and basic income guarantee function of public works programmes and the demand for improving their sustainable job creation function that, in principle, follow different logics.

6. Main Findings and Policy Recommendations

This study looks at the extent, structure, dynamics, causes and consequences of non-standard forms of employment (NSFE) in the European Union (EU28) and in six selected countries of so-called developing or emerging countries: Korea and India (Asia), Brazil and Chile (Latin America), Kenya and Uganda (Africa). We started with an original exposition of an analytical framework for the whole set of labour market institutions (LMI) by sketching their potential role in the management of social risks related to NSFE. We thereby emphasised that institutions always have to be considered both as restrictions as well as opportunities to be analysed in their historical context and mutual interplay, and we drew attention, in particular, to the concepts of institutional path dependency, institutional complementarity, institutional incongruence, institutional trade-offs and equivalents, and illustrated them by examples.

The study proceeded by providing rich information on the extent, structure and development of NSFE in all member states (MS) of EU28 on the consistent database of the European Labour Force Survey (ELFS) in the period 1998 to 2014. Standard employment (SE) is considered as employment in open-ended contracts, in full-time work and in a wage or salary relationship. We distinguished three basis components of NSE: part-time work, temporary work, and self-employment, which are – for the first time compared to earlier studies – further differentiated into open-ended part-time, temporary part-time, part-time self-employment, full-time self-employment without and with employees, and full-time temporary work (including temp-agency work).

For reasons of internal comparability, all figures are provided as a percent of the working-age population (aged 15 to 64). A rich appendix provides further differentiation by age groups (15–24, 25–54, 55–64) and by education level (low, medium and high skill) for all MS, and aggregated for EU-28 and EU-19 (Eurozone). The analysis goes beyond description by testing possible causes of this development and by demonstrating the consequences of NSFE for economic performance and social inclusion.

The main results are the following:

1. In EU-28, the NS employment rate increased to a level of 25.8 percent (2014). In other words, about a quarter of the working-age population is either in part-time, temporary work or in self-employment (controlled for overlaps). Since the overall activity rate (SE + NSE + unemployment rate) is 72.1 percent, the share of non-standard employment is 36 percent. Related to the total employment rate of 64.5 in 2014, the share of NSE is 40 percent.
2. The dynamics of NSFE, however, slowed down drastically after the economic crisis (here measured for the sub-period 2007–2014); only part-time employment increased further with a moderate tempo; temporary work as well as self-employment decreased.
3. Country differences within EU-28 are huge: The NSE rate in the Netherlands is 47.2 percent (share of total employment: 65%), compared to only 10.6 percent in Bulgaria (share of total employment: 17%). Part-time explains the majority of this difference.
4. The same holds true for gender. Women are slightly overrepresented in total NSFE. Their NSE rate in EU-28 is 27.9, varying between 7.5 percent in Romania, and 57 percent in the Netherlands.
5. In the recent period, part-time increased especially among senior workers (55–64).
6. Temporary part-time work and open-ended part-time work are complementary: both tend to increase together, probably to some extent in sequence (i.e. transformation of temporary part-time into open-

ended jobs); the methodology of this approach, however, does not allow conclusions of individual transition patterns.

7. Full-time self-employment and open-ended part-time are substitutive: both tend to develop in opposite directions.

8. A simple causal model suggests a two-dimensional approach based on whether labour supply is contingent or career-oriented and whether labour demand is fluctuating or stable: When contingent supply and fluctuating demand come together, the likelihood of precarious NSFE is high; when career-oriented supply and stable demand come together, the likelihood of SE is high – in both cases relatively independent of labour market institutions. In the two other combinations (contingent supply + stable demand; career-oriented supply + fluctuating demand), labour market institutions play a stronger role in determining whether the employment relationship is 'standard' or 'nonstandard'. This simple model is quite powerful in explaining the following descriptive patterns of NSFE according to sectors, education and age.

9. Part-time employment is – in all countries – most common in services and least common in manufacturing. Within services we find most part-time in hotels and restaurants, health and social services and household activities. Temporary employment is common in all sectors, even in manufacturing, particularly, however, again in hotels and restaurants and in household activities.

10. The probability of (career-oriented) high-skilled workers being in NSFE is lower than for low skilled.

11. The probability of (career-oriented) middle aged workers (25–54) to be in NSFE is lower than for the two 'marginal' age groups.

12. Employment protection is one of the major institutional determinants for NSFE. It is especially strong individual employment protection which induces employers to utilise NSFE, in particular full-time, fixed-term employment; strict employment protection related to temporary work coincides with lower levels of (all kinds of) part-time work.

13. For men, the strongest reason for being in part-time is "not finding a full-time job" (40% in 2014); another strong reason is combining part-time with education or training (19%).

14. For women, the strongest reason for being in part-time is "looking after children or incapacitated adults" (27%); 26 percent are involuntarily part-time working; less than one in 10 combine part-time with education or training. Over the time (1998–2014), involuntary part-time is increasing.

15. There is no significant gender difference related to temporary work or fixed-term contracts: on EU-28 average, about two-thirds prefer a permanent full-time job. Almost one in five workers combines temporary work with education or training. The figure for most of the EU member states, however, is much lower.

16. Related to the consequences of NSFE, the study provides original results in particular related to productivity and social inclusion in the form of labour market participation. The correlation between the aggregate share of NSFE and total activity rate for all 28 member states of the EU is weak due to two opposing trends. Whereas part-time work turns out as a strong driver for labour participation (in particular, but not only, for women), self-employment is negatively correlated with overall labour market participation; temporary (fixed-term) full-time work is not at all related to labour market inclusion.

17. NSE rates show a strong positive correlation with GDP per capita ('wealth' indicator) and with GDP per hour ('productivity' indicator). Although correlations do not allow an interpretation as (one-directional) causal relations (here, in the sense that NSE causes higher economic wealth or productivity), there are good reasons for a generic causal links, which are confirmed by micro-studies at the firm level.

18. Our aggregate and cross-section study corroborates the results of such micro-studies. Excessive use of temporary work or fixed-term employment does *not* contribute to wealth or productivity; it is rather the contrary because thriving innovation and high productivity require a high-quality work organisation which again needs open-ended employment relationships that foster skill accumulation, cooperation, loyalty and high commitment to work.

19. The strong positive correlation between NSFE and economic prosperity and productivity at the aggregate level stems only from the component of part-time work, and even more specifically, from voluntary part-time work. There are, among other reasons, five plausible explanations for this astonishing result. First, part-time work allows the tapping into of (otherwise) underutilised resources of high quali-

fied women (work-life balance). Second, as economies move towards (often knowledge intensive) services, many employers need a more flexible work organisation (24 hours economy). Third, increasing the variability of employment contracts (e.g. through part-time work) further enhances labour division which is often related to higher productivity (remember old Adam Smith). Fourth, voluntary part-time work is often combined with training and education fostering the employability and productivity of all workers (life-long learning). Fifth, marginal individual productivity (after increasing at the beginning) decreases with the length of working time (U-shaped productivity curve).

20. In the meantime, myriad studies on the consequences of NSFE confirm that NSFE leads more or less to lower wages, higher inequality and (gender) segmented labour markets. Apart from briefly summarising such studies, we only refer to one recent seminal study that reports results from the intermediary role of institutions: Overall, women face not only a higher risk of being in part-time but also a higher risk of receiving low wages, in particular in occupations requiring only low skills; institutions do not matter much here. In occupations requiring high skills, however (e.g. teaching), institutions matter. It is in particular full-time equivalent childcare provision and public employment which is preventing or at least mitigating the risk of being in part-time and in low-wage at the same time.

21. The literature on the relationship of NSFE and social protection is unanimous in demonstrating that people in NSFE are less well-covered by social protection (health, pension and unemployment insurance) and underrepresented in active labour market policies. The most common difference with standard workers is the exclusion of NSFE from benefits related to unemployment and work injury. This report hints only at the most relevant recent studies providing details and interesting country differences.

The study went on to ask whether the concept of NSFE is able to describe the labour market of so-called developing and emerging countries or needs to be broadened or complemented; we were also motivated by the question of whether Europe can learn from looking to the outside world of work. Six countries were selected: (South-) *Korea* for a quickly emerging country with astonishing growth rates and now even a world leader in some modern branches; *India* as the second largest populated giant (after China) with a fascinating mix of most modern and most archaic cultures; *Brazil* as the population giant representing Latin America and prominent member of the BRIC countries; *Chile* also representing Latin America but (like South-Korea) being a member of the OECD due to its booming economy; *Uganda* and *Kenya* as members of still poor economies representing Sub-Saharan Africa with interesting elements of youth policies and digital modernisation. We have chosen to represent the countries in the context of their historical, political, social and economic development to make them readable stories and to support the understanding of why their labour market function or do not function properly.

The most important results are the following:

22. Korea's total NSE rate (40%) is much higher than that of Europe (25.8%) and makes up about 60% of total employment; the figures, however, are not strictly comparable. The country's peculiarities compared to Europe are its much higher share of self-employment of which about 50% are solo self-employed (EU-28: 70%), and second its much lower share of part-time work which is only half the level of EU-28. Atypical work in the form of daily, dispatched, subcontracted, home and other special employed workers is also much higher in Korea than in Europe. NSFE increased only slightly in Korea during the last decade, yet the structure shifted towards more temporary and atypical work whereas self-employment decreased. Korea is also peculiar for its stark gender bias. Inclusion of women (even of highly educated women) into the labour market is low, compared to standard male workers women in SE earn only 67.3 percent, and women in NSE only 38.3 percent. Whereas the universal system of health care covers almost all people independent of their employment contract or status, only about half of the NS workers are covered by pension insurance, and two-thirds are not covered by unemployment insurance.

23. For the Indian labour market, Europe's concept of NSFE fails completely. The informal sector employs about 90 percent of the labour force. Furthermore, India's labour market is strongly split between urban

areas (comprising, however, only about 25% of the population!) and agricultural areas. In contrast to China, India's labour market suffers from the low adult literacy rate (51% for women and 75% for men). India's labour force participation of women is also one of the lowest in emerging countries. Within the informal sector, self-employment is most common (about 50%), next comes casual work (about 30%) and a tiny layer of regular work (about 20%). Part-time work, albeit certainly existing to some extent in urban areas, is not even existent in India's (otherwise) extremely differentiated official statistics. Over 92 percent of all workers in India are outside the purview of labour legislation on jobs and social security. The Indian government is undertaking steps towards a much stronger formalisation of the labour market with obvious positive results in urban labour markets, but poverty is still looming large especially in rural areas. India, however, is unique in collecting experiences with the world's largest public works programmes, the National Rural Employment Guarantee Act, introduced in 2006 and covering at its height 50 million households in rural areas.

24. Brazil has achieved remarkable success in reducing poverty, but inequality is still one of the highest among emerging countries. In contrast to Europe, Brazil's employment dynamic was mainly driven by formal full-time employment, and informal employment fell from about 55 percent to 44 percent of total employment. Among NSFE, self-employment is the strongest part (30%), temporary work and part-time work have about equal shares (15%). Brazil's labour market is exceptional for its high labour turnover on the one hand, and for its wage premiums related to part-time work and self-employment. Trade unions play an important role, and the formalised sector is strongly regulated in terms of minimum wages and employment or social protection. In the informal sectors of the metropolitan areas (*favelas*) and particularly in rural areas poverty looms large but it has recently been successfully attacked by interesting social policies (*Bolsa Família*) inspired by the concept of conditional cash transfers (CCT).

25. Chile developed, like Korea, quickly from a poor to now the richest country in Latin America; also like Korea, its Human Development Index stands high even according to European standards. Despite great success in reducing poverty, Chile's income inequality is the highest in the OECD countries, and its female labour force participation is, like in Korea, underdeveloped. The first remarkable feature related to NSFE is the high level of temporary employment contracts (25%), whereas part-time is at a modest level (12%). There is still a substantial share of the informal sector (17%), and a quarter of earners are self-employed. Part-time in Chile is even stronger than in Brazil and is connected with a wage premium. Although the formal sector is well regulated in terms of social protection, real coverage is often much lower due to extremely high labour turnover, among others due to the peculiar system known as *Multirut*, which is an enforced job rotation through gaming with legal rules by employers. In terms of the labour market institution, Chile became world famous for its innovative unemployment insurance mixing individual account elements with a solidarity fund and recommended by many as a model for 'developing' and 'emerging' countries.

26. Uganda, a member state of the East African Community (EAC), is a poor but thriving economy. In social terms, Uganda is best described as a very young country with a median age of 15.6 and still one of the highest fertility rates in the world. Like India, the Ugandan labour market cannot be described in terms of NSFE. About 90 percent of work in the informal sector with corresponding low or no social protection. The majority (two-thirds) are self-employed, many still work in the subsistence sector. People with no formal education at all or only primary education have the highest likelihood of ending up in self-employment, a feature that hints at the key function of education as a door opener towards ('standard') paid employment. Time-related underemployment ('involuntary part-time') makes up about 10% of all employed; underemployment in terms of skills is also high (18%), in particular among women. Like in India, labour market segmentation between rural and urban areas is tremendous. Youth unemployment, albeit not open, is – corresponding to the demographic structure – the most important problem. The government undertakes enormous efforts to create more jobs and to extend social protection in the informal sector. One of the most interesting and seemingly successful measures was a Youth Opportunity Programme fostering self-employment and entrepreneurship on the basis of unconditional cash transfers.

27. Kenya, the 'richest' member of EAC, seems to have – compared to Uganda – some advantages due to the relatively well-developed educational system and a highly developed internet economy (world leading in mobile payment, M-PESA). Yet always under tremendous internal political tensions along ethnic lines, Kenya's economy and labour market are making only slow progress. Youth unemployment is the biggest problem, but Kenya also suffers from a still large subsistence economy and a high informal sec-

tor (83%). About two-thirds in the informal sector are self-employed. The NSFE categories of part-time and temporary employment used for Europe are not existent in official Kenyan statistics, but surveys report about 18 percent Kenyan male workers and 30 percent Kenyan female employees working only temporary. As in Uganda, involuntary part-time work makes up about 20 percent, the majority of them women. In contrast to Uganda, Kenya's labour market is interesting for its long history of minimum wage policies. There are altogether 55 minimum wages, differentiated according to regions, sectors or occupations. The reach of collective bargaining beyond the MW, however, is very low. Similar to Uganda, Kenya has a multidimensional development programme called Vision 2030 with the *Uwezo Fund* as its key pillar aimed at enabling women, youth and persons with disability to access finances for promoting businesses and enterprises.

In its final section, the study tried to draw some policy lessons for managing social risks related to NSFE. We have consciously chosen the term "Managing Social Risks" for the following reasons. First, social risk management re-emphasises risk prevention and mitigation as alternatives to reactive risk-coping. Second, individuals are differently affected by various risks over the life course, but they are endowed with different capabilities for coping with these risks. Third, labour market risks are to a large extent risks that require some kind of collective action to build up reliable redistributive capacities of social protection. Fourth, the intrusion of the term risk management on the employment policy discourse can be taken as a "moral opportunity" to reconsider the balance between solidarity and individual responsibility in managing risky labour market transitions over the life course.

As strategies for managing social risks, the study follows the concept of transitional labour markets (TLM). In this framework, ex ante risk-sharing to empower individual actors to adjust to structural changes on the labour market plays a predominant role for protected mobility. Furthermore, as a preventative strategy, not only workers have to be made fit for the market, but also the market has to be made fit for the workers, in particular by continuously investing in human capital and in the workplace environment. The institutional framework at the beginning of the report is taken up again to illustrate and discuss good practices related to these two general strategies, and are respectively displayed in matrix form for the different components of NSFE and differentiated for Europe and the 'developing world'.

The more important points are briefly summarised:

28. As regards involuntary part-time work, inclusion into unemployment insurance – as already practiced in a few countries – is recommended.
29. Voluntary part-time (often 'enforced' by unpaid social obligations) could also be covered, for instance, through parental leave or care-leave allowances for sick children or dependent elderly.
30. Partial unemployment benefits are in particular recommended to foster part-time work as stepping stones into full-time work for unemployed people.
31. A case of making the market fit to workers could be to subsidise UI insurance contributions for low-wage earners by choosing, for instance, a progressive contribution scale for UI contributions.
32. A much neglected opportunity would be the easy transition from full-time to voluntary part-time and to provide part-time unemployment benefits under the condition that the other part of the 'working' time is used for labour market education or training.
33. Strict individual taxation is recommended for being gender neutral in choosing the working time in the household context where women are often incentivised to choose and to stay in part-time.
34. Tax and contributory systems also have to be checked for whether they contain disincentives for mature-aged workers to take part-time in gradual retirement.

35. Anti-discrimination (equal treatment) of wages related to part-time should be enforced.
36. Finally, the importance of the state not only as employer of last resort but also as a model employer for flexible and protected working time arrangements over the life course should not be neglected.
37. With respect to temporary employment, the generic 'flexicurity' strategy makes sense. To compensate efficiency-enhancing reforms of employment protection that allow greater flexibility by efforts to provide adequate employment protection and income support to temporary workers.
38. Reforming unemployment insurance could also consider adjusting the waiting period for entitlements to the new situation of spreading temporary jobs; in general, shorter waiting periods are to be recommended.
39. Specific insurance schemes, where the state plays the role of initiating, co-financing and last insurer resort, could be established for occupations particularly prone to temporary work schedules, like artists.
40. Another institutional response could be mandatory individual savings accounts as 'active' securities (encouraging mobility) replacing severance payments as relics of 'passive' securities. Austria's new dismissal law (mobility accounts) and the Netherlands (transition budget) provide examples.
41. The establishment of a single employment contract in order to move away from dual employment protection systems could be considered, however with caution due to possible counter-reactions of employers through increasing labour churning.
42. Minimum wages, finally, are an effective instrument to prevent miserable wages below a decent level and are therefore an essential element for a social protection floor to NSFE, in particular temporary work.
43. In the case of self-employment the basic issue for proper institutional responses is certainly to ensure social security in old age. Universal basic income guarantees based on citizenship would substantially mitigate the high poverty risks in old age for own-account workers.
43. More specifically, self-employed could also be included into the existing unemployment or employment insurance schemes; vice versa, entitlements to unemployment benefits of formerly 'standard' workers could be transformed into subsidies for start-ups of unemployed, as a successful programme in Germany shows.
45. Parallel to employment protection and fair wage regulation, there is also a need to protect the royalties or exploitation rights for self-employed and to take care to enforce these rules.
46. Finally, contract work is becoming more and more widespread and often involves self-employed or freelancers as contractors. A minimum income regulation seems to be necessary – corresponding to minimum wages – to ensure a minimum level of decent income.

Related to NSFE, the most important difference between Europe and 'emerging or developing countries' is the high share or even (in some countries) the dominance of the informal sector. Workers in this sector are almost by definition excluded from social protection as we know it in Europe. Moreover, self-employment (mostly within the informal sector) is, so to speak, the 'standard employment relationship' in the world of work in 'developing countries'. A majority of these workers are also excluded from mainstream social protection schemes, and poverty in old age is probably the most relevant risk related to this form of employment. Temporary work is also more widely distributed in the 'emerging or developing world' than in Europe, in particular in the form of contract or casual work and – in a few countries – even in temp agency form. Earnings in temporary work are usually connected with a large negative wage gap compared to open-ended contracts, and the volatility inbuilt into this employment relationship often excludes these workers from full coverage of the whole portfolio of social protection. Part-time, the dominant and still thriving component of NSFE in Europe, plays no or only a marginal role in so-called emerging or developing countries. Due to these substantive differences, the study took a different stance by concentrating on the strategies of social risks management to establish-

ing better pathways into formal work, job creation in particular for the young people and mechanism of social protection for the poorest people in the informal sector.

Based on the country case studies, a few prominent examples are briefly summarised:

47. The Chilean unemployment insurance combining individual savings accounts, private management of these accounts and a redistributive solidarity fund is indeed an innovative system from which not only 'developing' but also highly industrialised countries could learn. After describing this system in detail, we summarised the pros and cons in the following way. Positive features are, first, individual accounts made mandatory with each first new formal employment contract will stepwise extend the potential insurance coverage over time, including the large share of temporary employed. Second, access to individual accounts independent of the reason for unemployment (dismissal or quit) contributes to individual sovereignty and supports mobility in the labour market. Third, individual accounts combined with a solidarity fund co-financed by general tax revenues provide an inbuilt redistributive feature from high to low wage earners. And lastly, high monitoring costs to reduce moral hazard connected with conventional UI systems are avoided. The Chilean UI system, however, also has also some severe problematic features that should be considered in adapting this model. First, among others mentioned in the report, it does not cover the public sector, the informal sector and self-employment that make up a large segment in 'developing countries'. The replacement rates as well as the duration of benefits are quite low, which may solve the moral hazard problem, but not – as the other side of the coin – foster structural change and mobility; in its present design, the macro-economic stabilisation effect is meagre, and the redistributive capacity of the solidarity fund is quite limited due not only to low public spending, but also to the fact that mandatory contributions of workers and employers finish after 11 years continuous contributions.

48. The Brazil Bolsa Família, based on conditional cash transfers (CCT), is certainly a social protection measure from which other countries, especially those with large informal sectors and masses of very poor people in slums or rural areas can learn from, both in its strengths and weaknesses. Such programmes can quickly cover the majority of the target groups. Conditionality (in particular dependent on school attendance of children), however, is not the decisive point as research of comparable programmes has shown. It is simply basic income that matters for families' education decisions. What matters, too, is effective implementation and monitoring at the decentral level. Furthermore, because income differential are reflected sooner or later in educational differentials, the entitlement to basic education should be a human right for all, which (at the end of the day) has to be enforced through the mandatory schooling of children because financial incentives might not be sufficient. Public provision of the respective high-quality infrastructure is also necessary, and enforcement is also required related to the service delivery of teachers who are often absent in 'developing countries'.

49. Youth unemployment is the central problem of 'developing countries' as we noticed in our case studies of Uganda and Kenya. We also noticed that there are good intentions and many programmes trying to improve this situation, however, with little sustaining impact so far. One important reason was insufficient implementation and lack of monitoring and robust evaluation of these programmes, in particular related to youth programmes for entrepreneurship; another failure is channelling too many resources for self-employment or entrepreneurship into retail trade instead of agricultural production, craftsmanship or social service delivery. Uganda's Youth Opportunities Programme, based on an experimental design and unconditional cash transfers aimed at supporting high quality self-employment, seems to be an interesting exception. The estimated employment impact was quite large and sustainable compared to a control group, and supports the general idea of providing unconditional – yet somehow guided and informed – cash transfers to the poorest.

50. Korea is a case where NSFE, in particular casual or temporary work and self-employment, seem to be related – at least indirectly – to mismatches between the education system and the labour market in both directions: over-education as well as under-education. The vocational education and training system lacks quality and proper adjustment to the needs of the labour market, and the continuous vocational education and training system which could maintain people in standard jobs is not well developed. The problem has been described as a rationality trap or vicious cycle in which employers prefer university graduates, and students – being aware of this asymmetry – strive for the best university degrees. Korea started to rethink its vocational education and training system (VET) and to bring it closer both to the preferences of the workers and to the needs of the labour market. The common denominator of this strategy is to enhance the concept of dual learning systems, which means a combination of practical

training and formal schooling. Turning this vicious cycle virtuous requires a whole set of interlinked policy changes which are addressed in this report. As we know from theory, the most important strategies to overcome rationality traps are behavioural rules (norms) whose compliance is enforced, quality standard regulation and public provision of required infrastructure.

51. Minimum wages (MW) as a wage floor at the bottom are an important element in the portfolio of any social protection floor. All 'developing' or 'emerging' countries we looked at (maybe with the exception of Uganda) introduced MW or took over this institution at an early stage of their independence. The experiences are quite mixed: Some confirm the expected trade-off that improving wages especially for the low skilled might negatively affect the dynamic of formal ('standard') work, others find that the higher purchasing power and the productivity whip of MW more than compensate first-round negative employment effects. As the theory clearly demonstrates the indetermination of MWs impact, only a few general – yet important – policy strategies can be recommended. First, MW systems should be as simple as possible (Kenya, with 55 MW, probably needs to reconsider its system). MW policy has to be complemented by vigorous education and training policy especially in favour of the low skilled. MW setting should be based on some kind of bargaining model (giving employers as well as employees a voice), and the policy should be evidence-based, i.e. continuously monitored and evaluated on the basis of high-quality statistical information and rigorous methodologies.

52. We also briefly touched the issue of transition tax rates (TTR) which determine how much of the earnings will increase or decrease through higher taxes and lower benefits by moving from NSFE to SE or vice versa. We refer in particular to a recent OECD study providing comparative information. Yet even with this information, little is known as to what extent TTR actually guide transitions because individual employment decisions depend on many more factors than just on pecuniary incentives. In general, however, it seems to be plausible that for many countries great room to manoeuvre still exists to change tax and benefit structures in a way that encourage people to transit between various employment relationships over their life course and to prevent people from getting stuck in risky NSFE. As personal income taxes (in most cases taxes on wage earnings) are the main driver for potential disincentives of TTR, a general move from taxing wages towards consumer taxes would be part of the solution.

53. Finally, close attention has been given to the Indian National Rural Employment Guarantee (NREGA), which guarantees up to 100 days work each year to rural Indians. This employment guarantee is based on the revolutionary principle of self-selection and the right to work: anyone who joins the worksites is recognised as being in need of social support. The overall assessment is clearly positive, in particular for women, but our report also hints at some important negative aspects which should be addressed in an adaption of this programme. First, *capacity building* for better implementing, monitoring, controlling and evaluation of the programme to prevent (or at least to mitigate) various forms of corruption. Second, a *stronger demand orientation* that guides the content of public works programmes more towards an infrastructure that has immediate effects on skilled labour supply (e.g. better schools, hospitals, day care centres). Third sustainable job creation (e.g. risk capital for start-ups, intermediary wage-cost and training subsidies for small firms that increase employment, public transport systems, and public investment.

7. Overall Conclusions and Outlook

In light of the increasing complexity of the world of work in the global and digital economy, the overall conclusion has to be more general rather than specific. The main message is that we should embrace NSFE as an opportunity rather than as a danger. The consequence of this view, however, is a responsibility of policymakers to take care of new institutional capacities that provide social protection for people engaging in these risky employment relationships. We have to acknowledge that NSFE are to some extent a tribute to the 'external' challenges of the traditional welfare state through globalisation or digitalisation and to the 'internal' challenges stemming from the rising demands of social inclusion in terms of gender and human capability equality (especially related to ageing populations), to the increase in chronic health conditions, to the high and growing disability prevalence and the increasing streams of migrants and refugees.

So far, the *dangerous elements* of risks related to NSFE have been emphasised: precarious and dead-end jobs, rising inequality and segmentation. This view is certainly justified by the facts, but we hope to have added and justified a more optimistic view by pointing to the *opportunity elements* of risks related to NSFE: *enhancing productivity through increasing the variability of employment relationships and greater sovereignty of workers for choosing the most suitable form of employment relationship over the life course with changing needs and preferences*. The provocative news from the empirical part of this study is the observation that it is voluntary part-time (here, an indicator of working time flexibility over the life course) in particular which seems to be an important driver for a new 'marriage' of equity and efficiency in the digital economy. Furthermore, Europe should not dismiss the labour market complexity of the global world around its small continent which is, to a large extent, still strongly characterised by informal employment relationships with low social protection (see also ILO 2015).

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

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

2008, 2015). The legal core is the establishment of new social rights and new social obligations on both sides of the labour market.

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

The *scope of new social rights* would also be new since they would cover not only 'standard' wage-earners but also the 'non-standard' part-time workers, the self-employed or semi-self-employed, the temp agency workers, the marginal workers, and even zero-hours contract workers. One example would be including the risk of reduced earnings capacity in a way analogue to short-time work (of full-time workers) covered by unemployment insurance. The income loss induced by reduced working time (due to, for example, unpaid care obligations) could be compensated by part-time unemployment benefits or – as in the German case – a wage-related parental leave allowance. Such an insurance benefit would also be helpful when related to the increasing demand of care for frail elderly which, for example in Germany, in its majority (three-fourths) is still provided within the family and again predominantly by women.

The new social rights are *new in nature* because they often take the form of vouchers, social drawing rights or personnel accounts, which provide transition securities from one labour contract to another and allow workers to rely on solidarity within defined and perhaps collectively bargained limits when exercising their new freedom to act (Korver and Schmid 2012). A good practice example of such coordinated flexibility is the German collective agreement established in the chemical industry in April 2008, setting up so-called demography funds. This overall framework agreement requires all employers to contribute an annual sum of €338 for each employee into a fund, which can be utilised after corresponding negotiations and deliberations at the firm level for various aims, among others for training or retraining, for buying occupational disability insurance or for early retirement, however, under the condition of building a bridge for young workers entering employment.[99]

[99] The recent collective agreement in this sector (27 March 2015) provides a stepwise increase of the amount to €750 in April 2017, which corresponds to an (otherwise) 0.9% increase in wages.

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

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

The *scope of new social obligations* would also be new since they would cover not only certain categories of workers or employers but also the core workers in open-ended contracts and all firms regardless of size and function. The exemption of civil servants or the self-employed from contributing to social security (especially pensions and unemployment insurance) as, for instance, in Germany, would not be justified under the regulatory idea of an inclusive labour contract. A good practice example is the obligation to work-share in case of cyclical troughs of demand if workers' representatives (*Betriebsrat*) require this from the employer whereby, in turn, the law entitles them to ask employers to work-share as an instrument to maintain the employment relationship. The German scheme of short-time work (*Kurzarbeit*) demonstrates the usefulness of such a device for internal flexibility as well as the need to fine-tune the contractual arrangements (Möller 2010, Schmid 2015: 84–6, Storrie 2012).

The new social obligations 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, so-called negotiated flexicurity (Schmid 2008: 317–22). Voice as an adjustment mechanism to structural change involving high uncertainty is known in the literature on industrial relations as legally acknowledged *learning communities*. *Covenants* are a good practice case, which – for instance – are widely used as a governance instrument in the Netherlands. A covenant is an undersigned written agreement, or a system of agreements, between two or

more parties, at least one that is or represents a public authority, meant to effectuate governmental policy. There is no single format of a covenant, but they share common features: enough overlapping interests of participants, mechanisms bringing about both definition and the machinery of achievements. The parties cooperate and formal sanctions are absent, yet parties have the opportunity to go to court in the case of another party defaulting. Covenants could also be understood as a "pressure" or "incentive" mechanism for coordination to economise on the most scarce and strategic resource, that is, the ability to take adequate decisions and to avoid the decision traps of collective good production in uncertain environments (Frank 2012; Korver and Schmid 2012: 39–41).

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

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

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APPENDIX

Abbreviations for EU28 Member States

AT Austria
BE Belgium
BG Bulgaria
CZ Czech Republic
HU Croatia
DK Denmark
DE Germany
EE Estonia
GR Greece
ES Spain
FR France
IE Ireland
IT Italy
CY Cyprus
LT Lithuania
LV 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

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Figure A1: Non-standard employment rates in 2014 as percent of working-age population (15–64)[100]

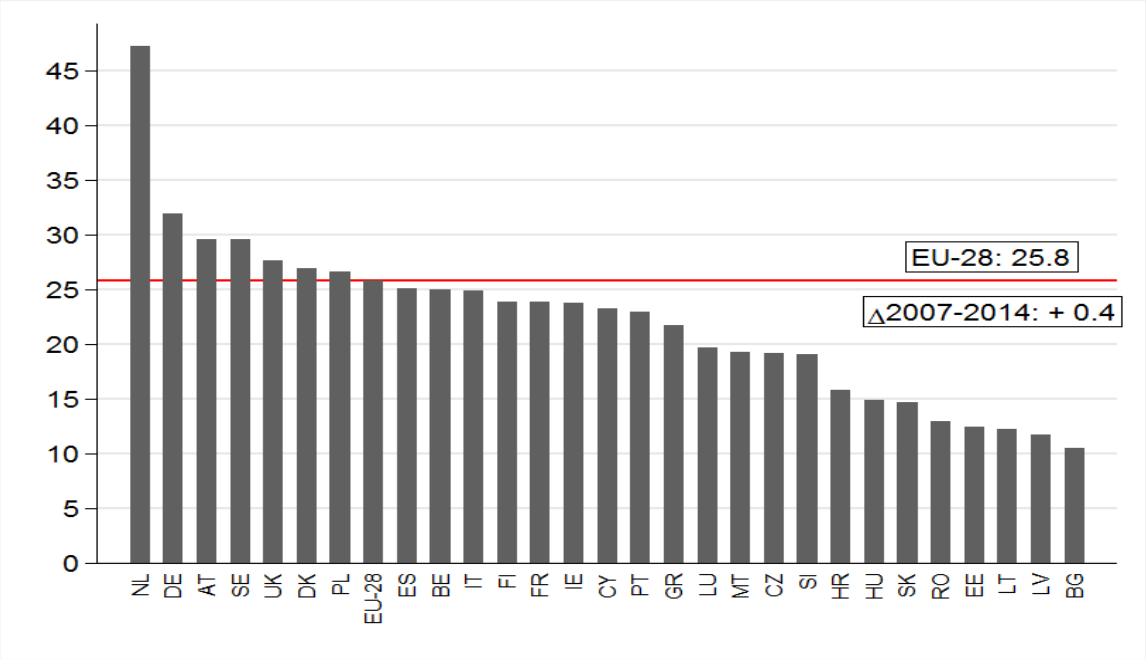
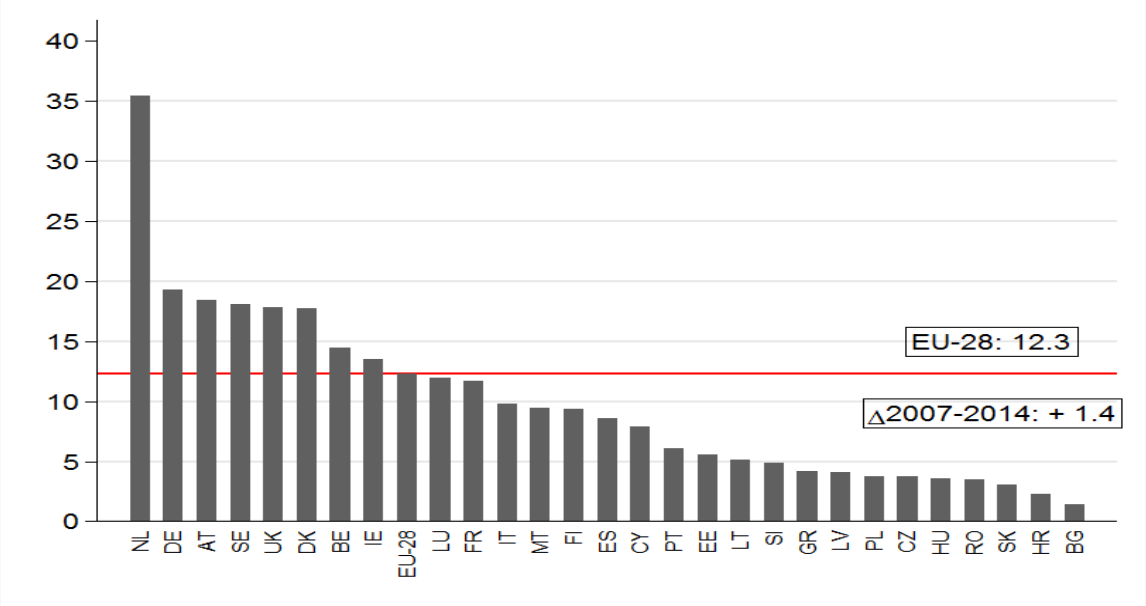


Figure A1a: Part-time employment rates in 2014 as percent of working-age population (15–64)



[100] *Non-standard employment* includes part-time, fixed-term and solo self-employed controlled for overlaps; *part-time employment rate* (unfiltered) includes open-ended part-time, fixed-term part-time and solo self-employed part-time; *temporary employment rate* (unfiltered) includes part-time as well as full-time temporary contracts; *self-employed rate* includes solo self-employed in full-time and in part time as well as self-employment with employees.

Figure A1b: Fixed-term employment rates in 2014 as percent of working-age population (15–64)

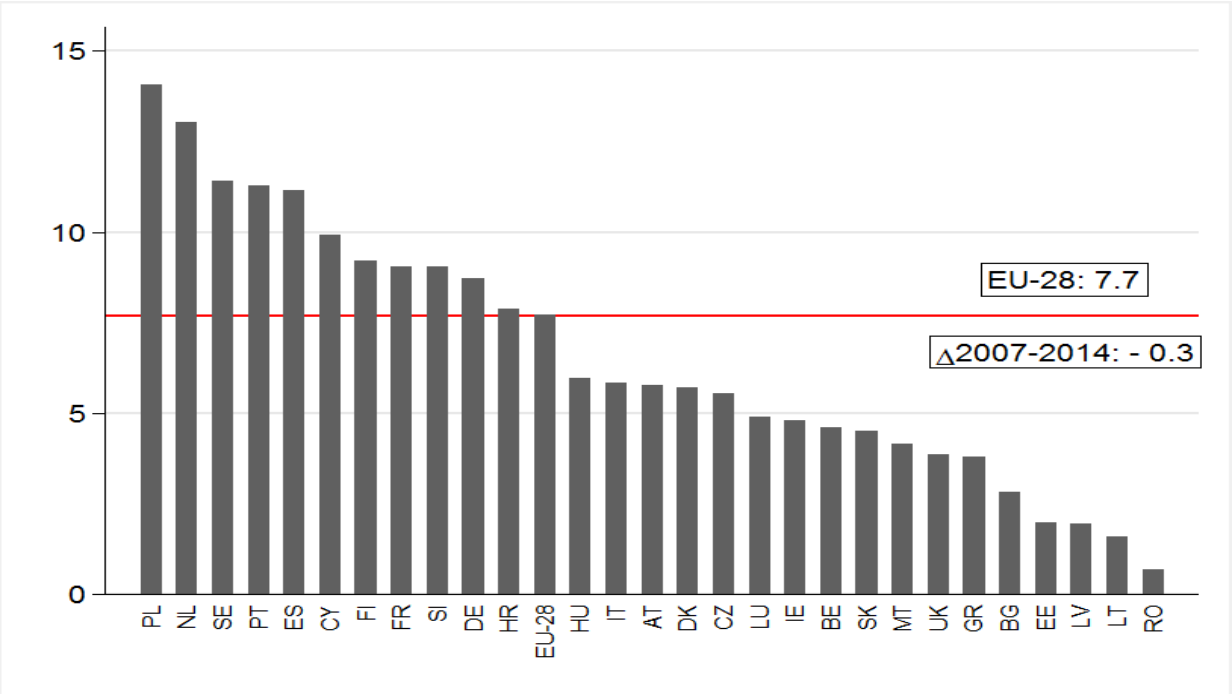


Figure A1c: Self-employment rates in 2014 as percent of working-age population (15–64)

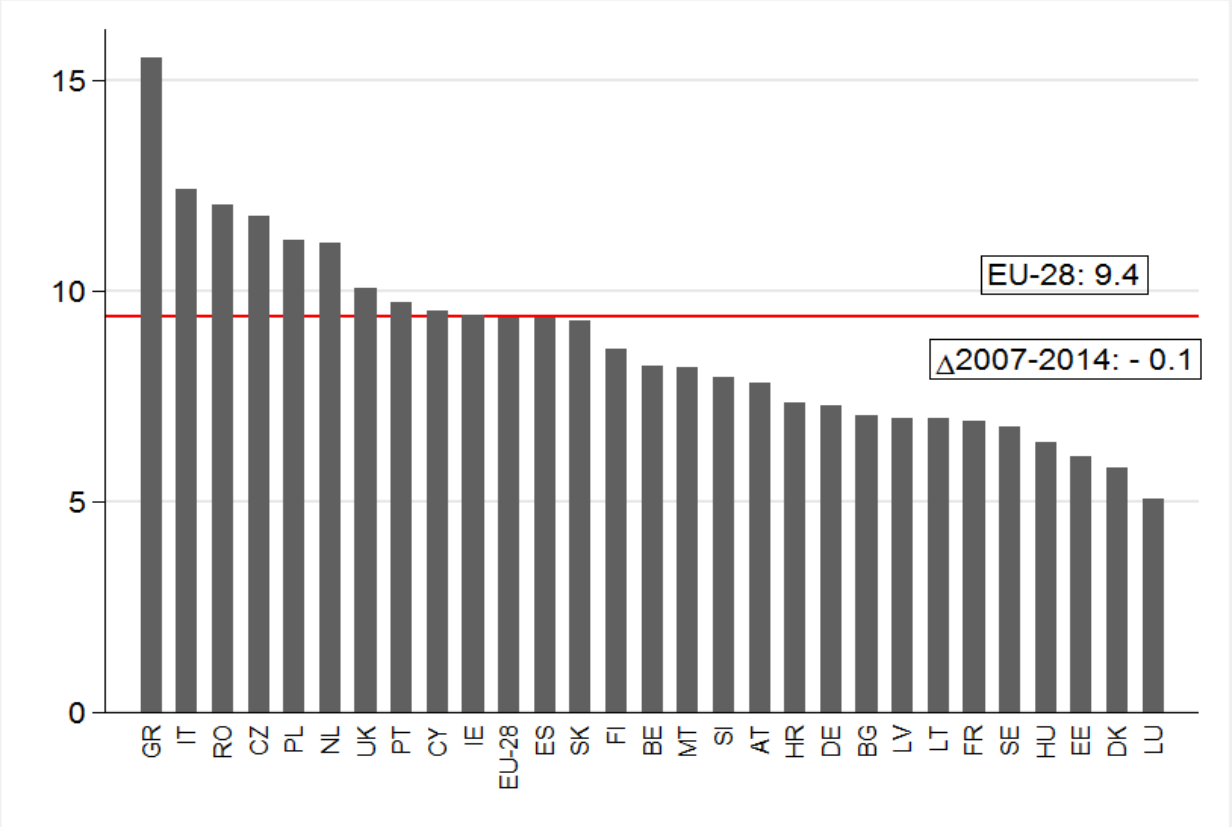
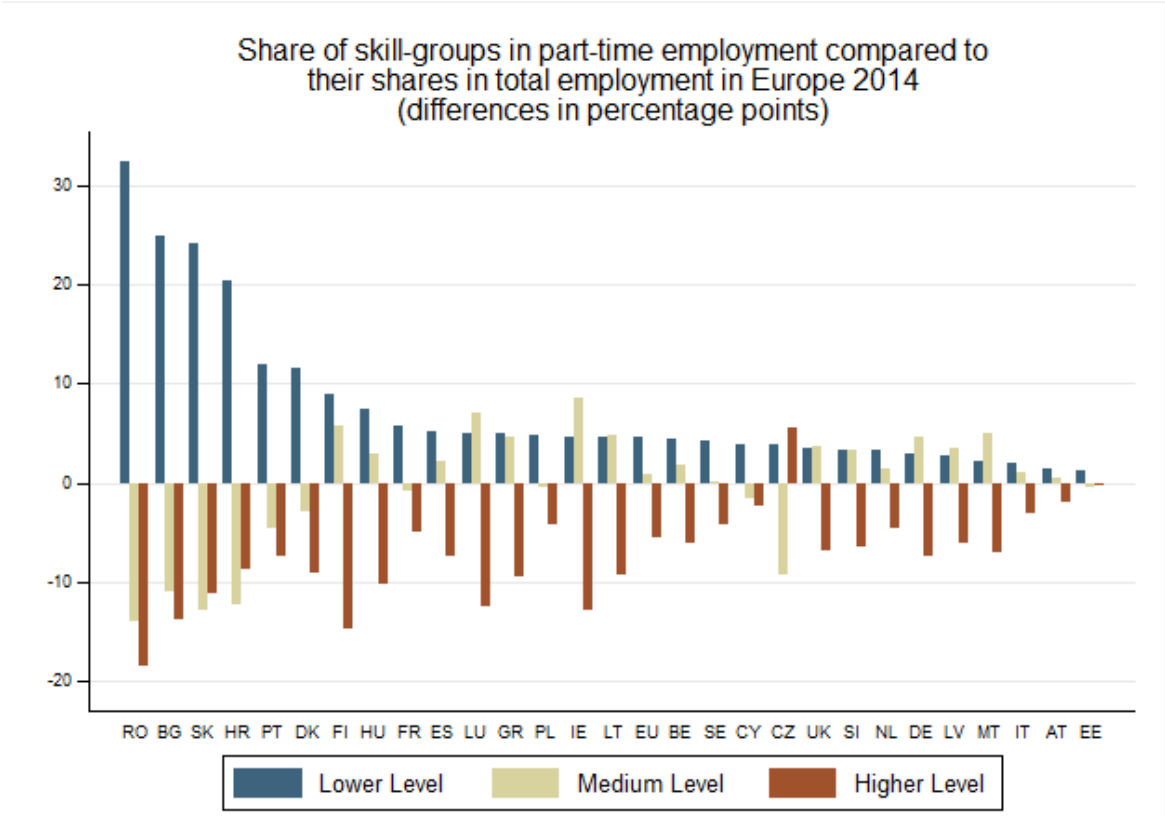


Figure A2: Share of skill-groups in NSFE compared to their shares in total employment in Europe 2014 (differences in percentage points)



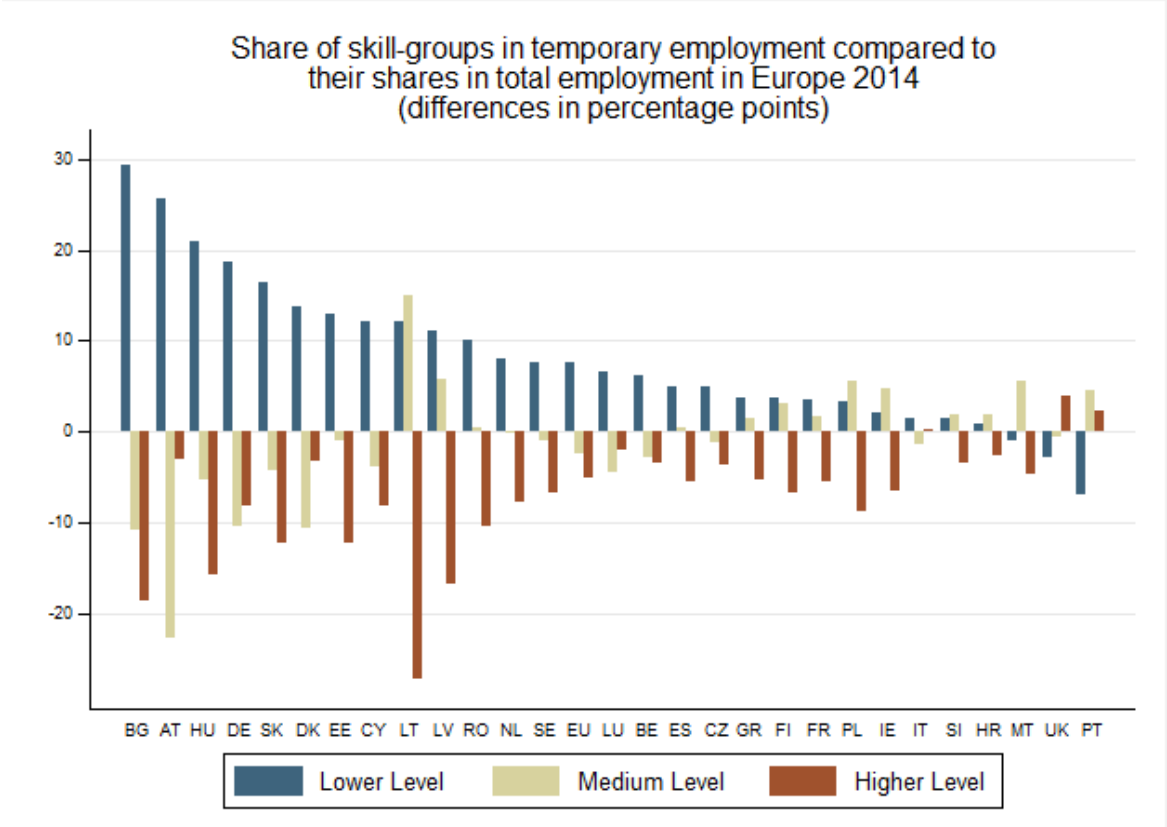
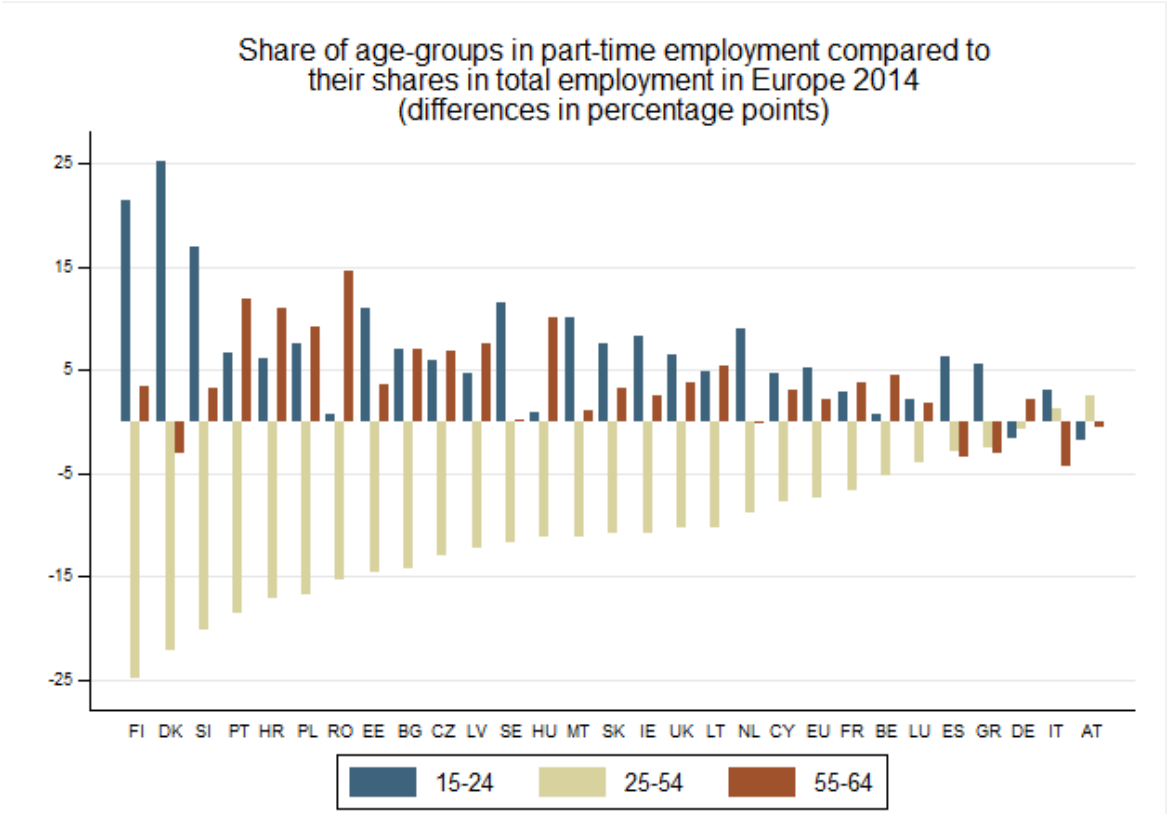


Figure A3: Share of age-groups in NSFE compared to their shares in total employment in Europe 2014 (differences in percentage points)



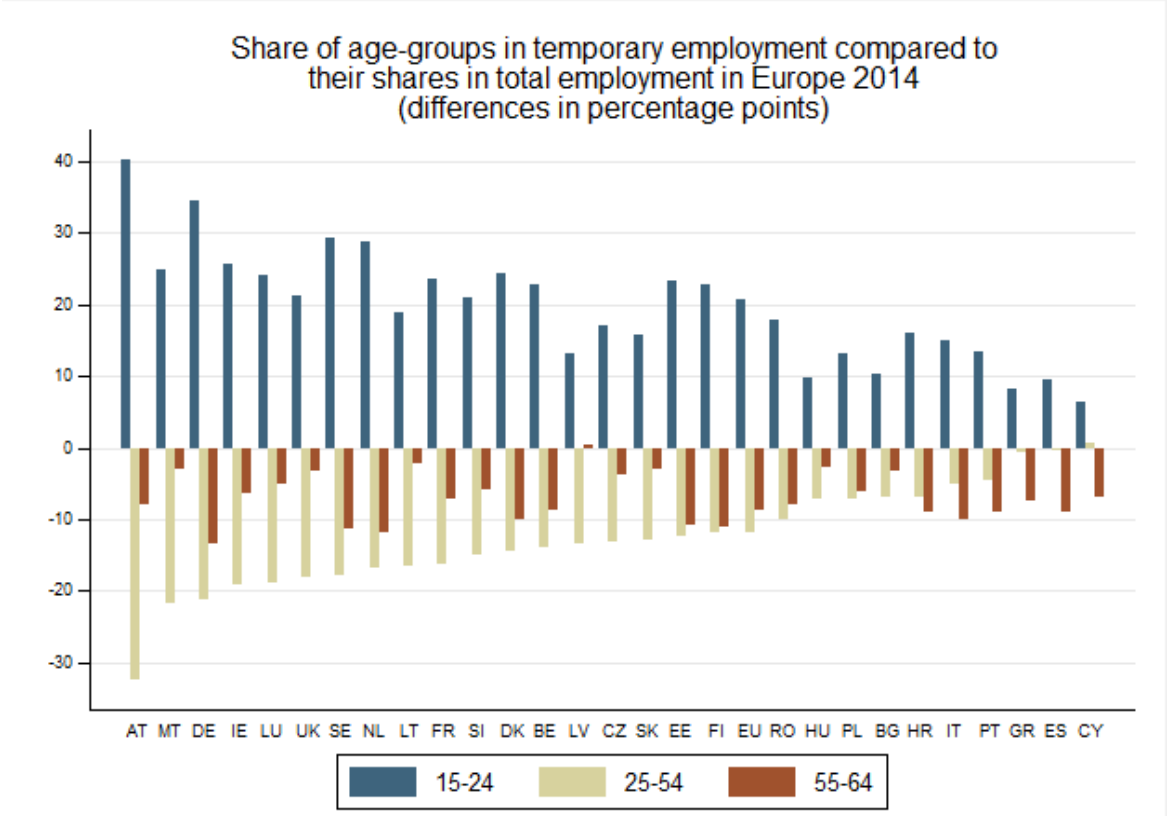


Figure A4a: Development of Reasons ('preferences') for Working in Part-time in EU-28: Total

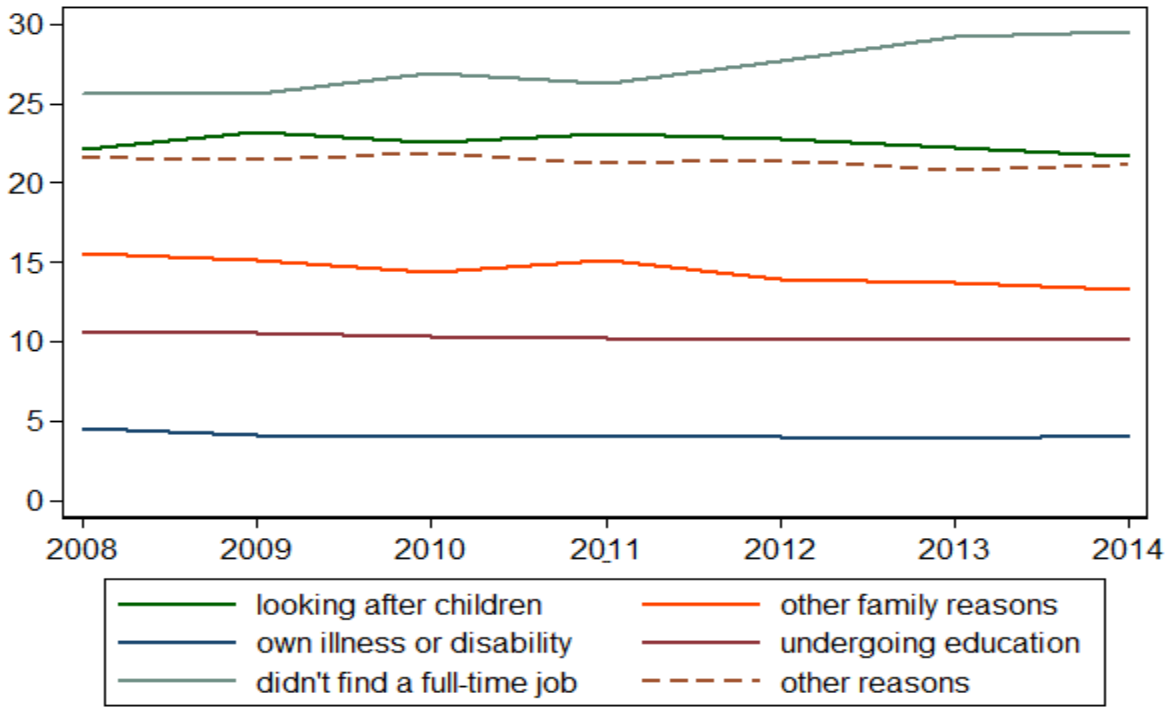


Figure A4b: Development of Reasons ('preferences') for Working in Part-time in EU-28: Women

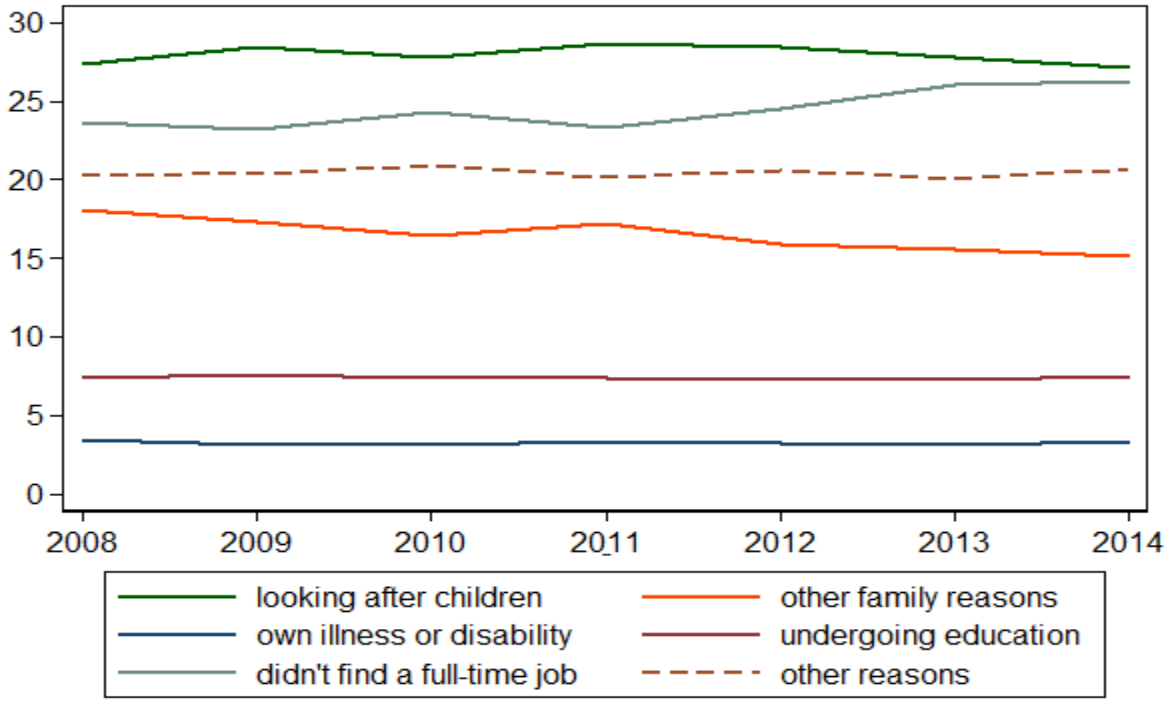


Figure A4c: Development of Reasons ('preferences') for Working in Part-time in EU-28: Men

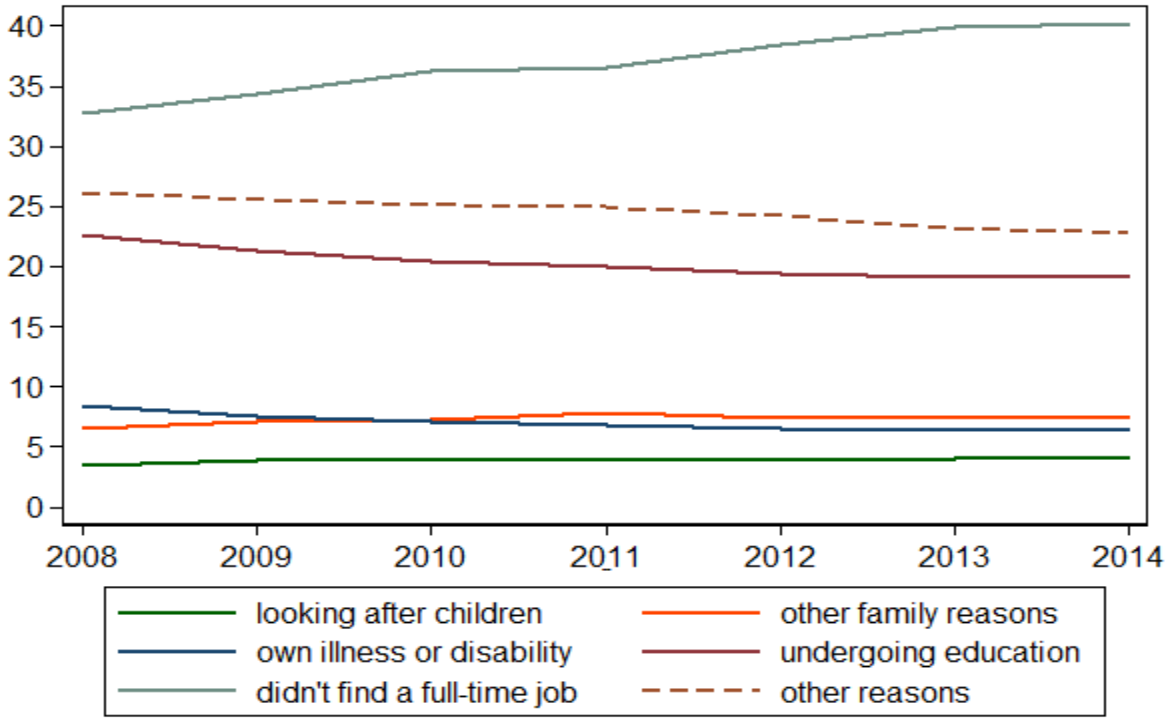


Figure A4d: Development of Reasons ('preferences') for Working in Part-time in Germany

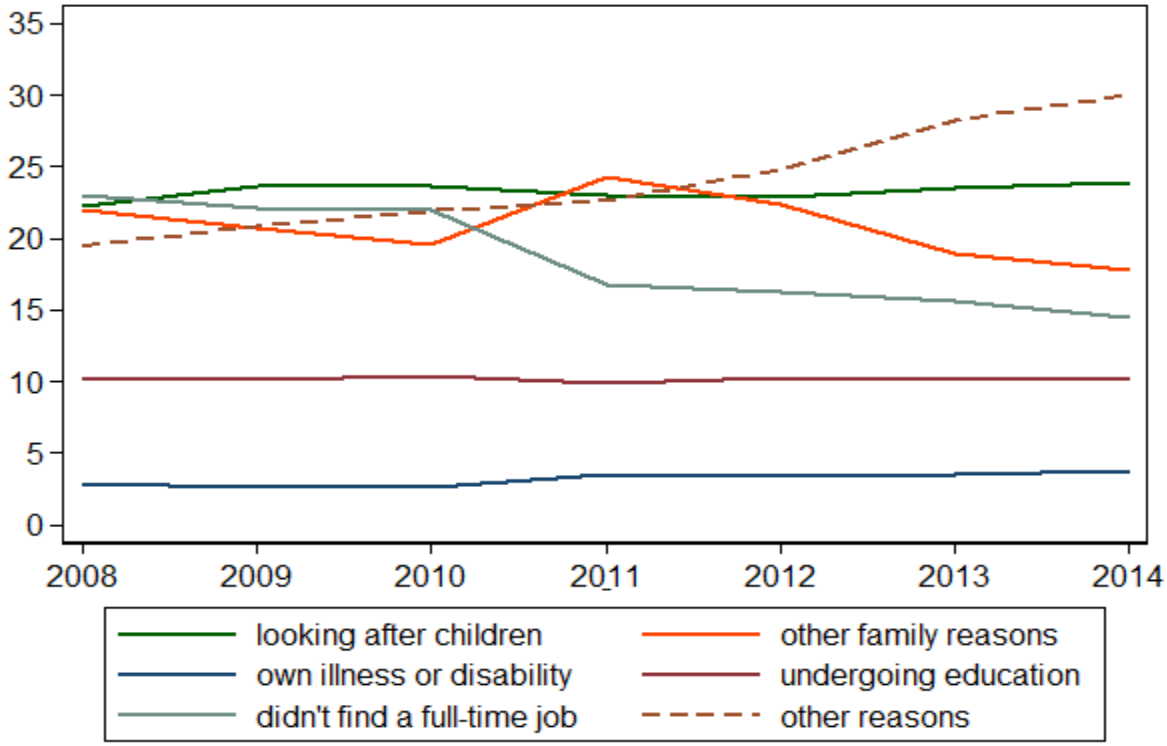


Figure A4e: Development of Reasons ('preferences') for Working in Part-time in Netherlands

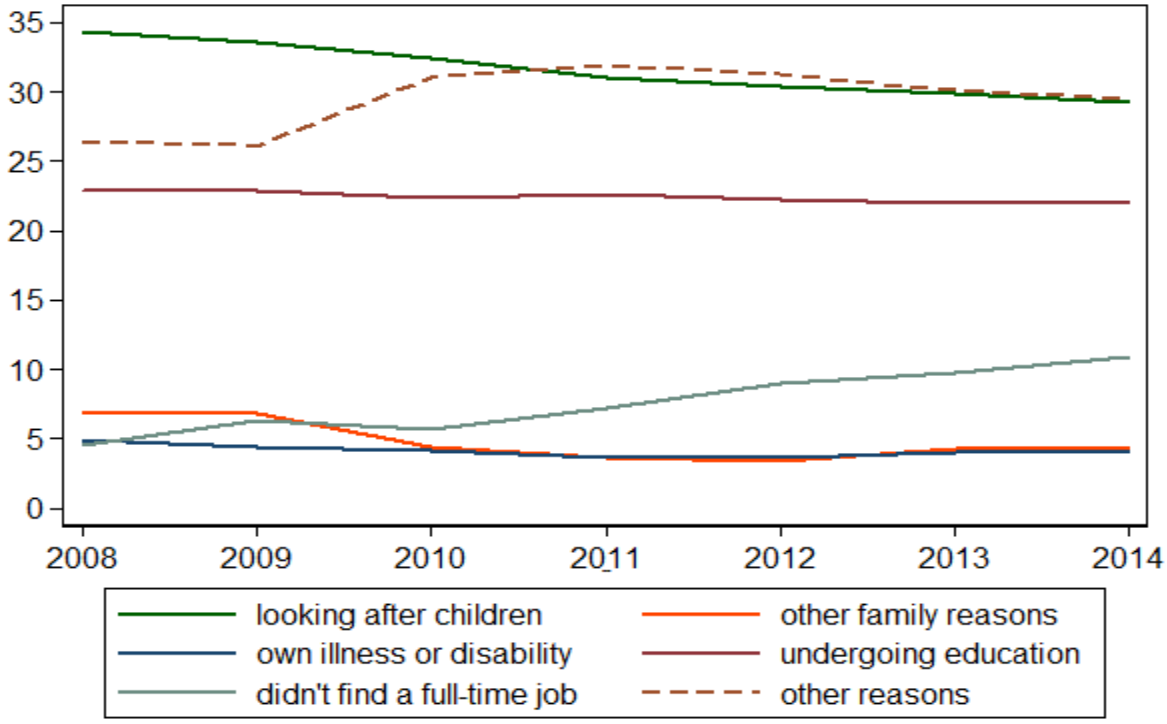


Figure A4f: Development of Reasons ('preferences') for Working in Part-time in Sweden

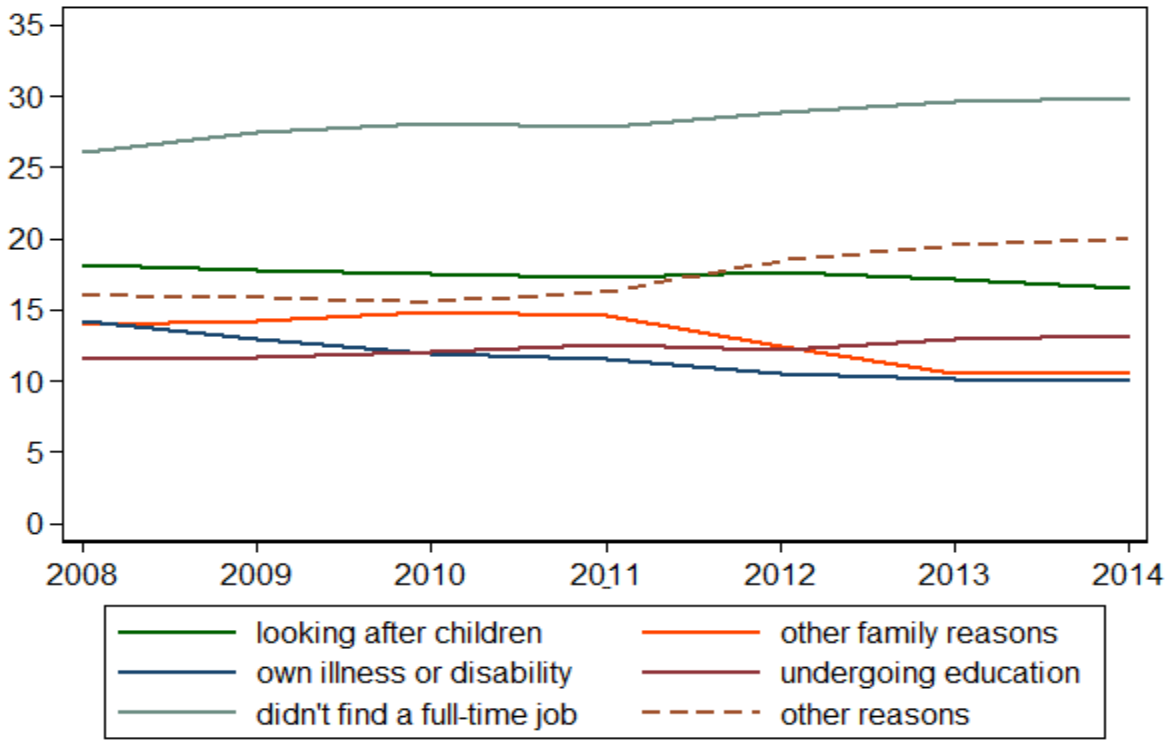


Figure A4g: Development of Reasons ('preferences') for Working in Part-time in United Kingdom

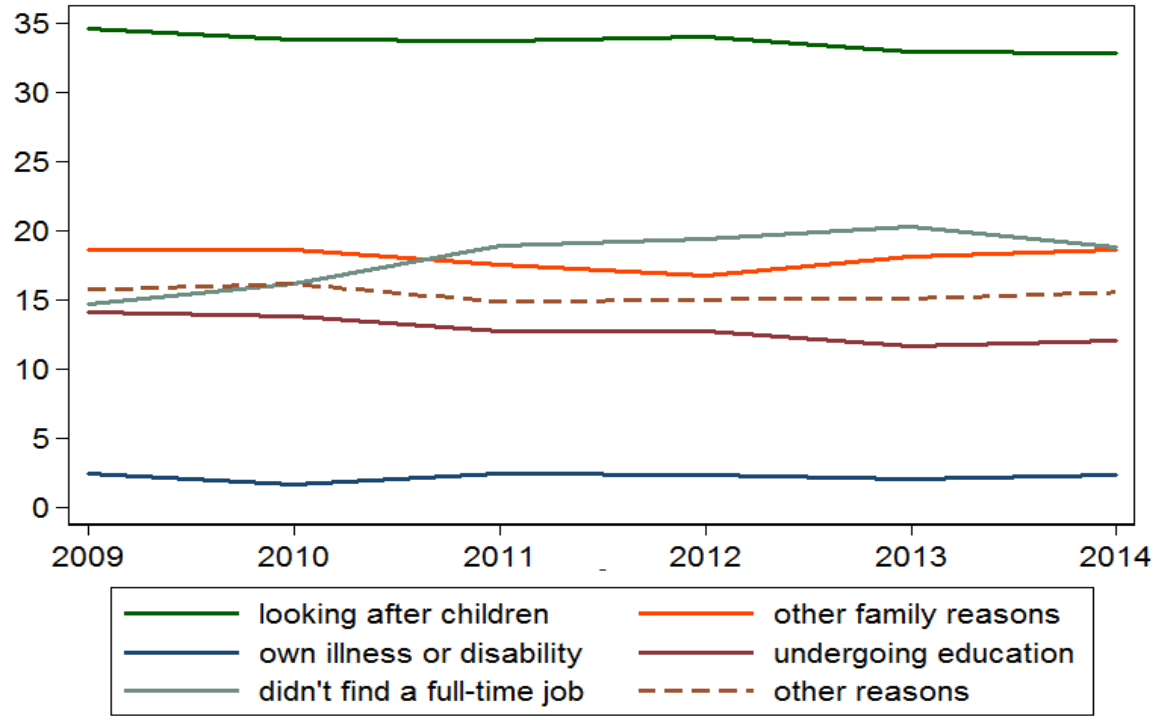


Figure A4h: Development of Reasons ('preferences') for Being in Temporary Work in EU-28: Total

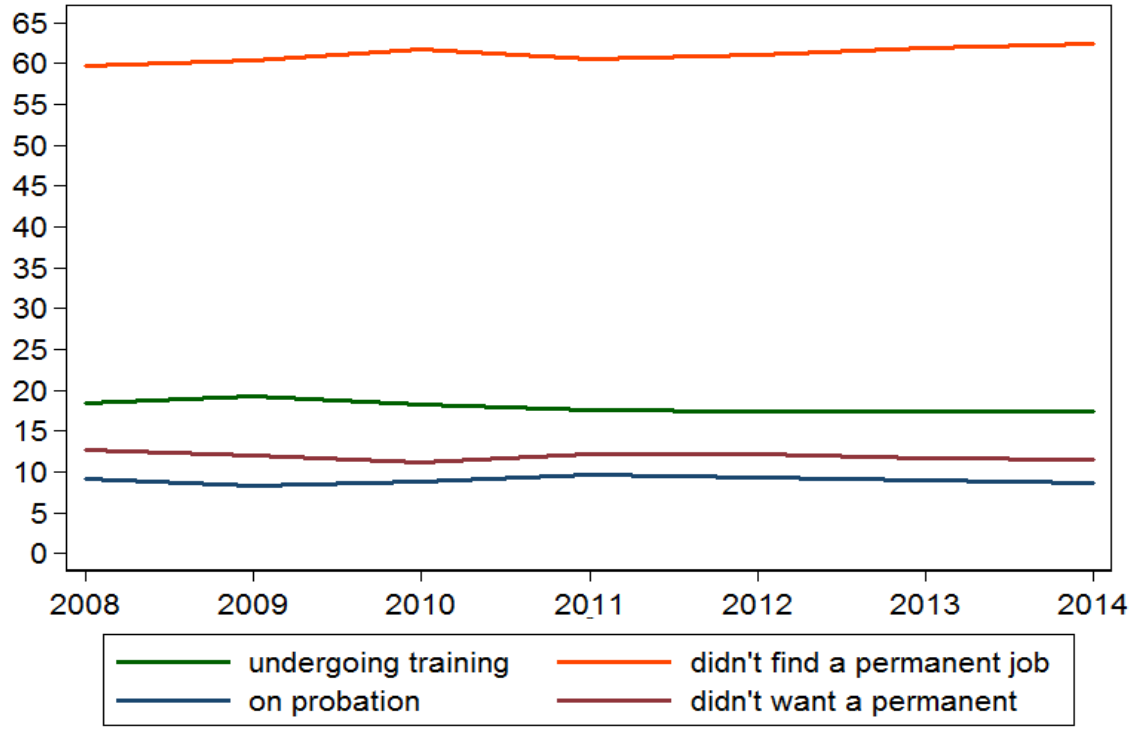


Figure A4i: Development of Reasons ('preferences') for Being in Temporary Work in Germany

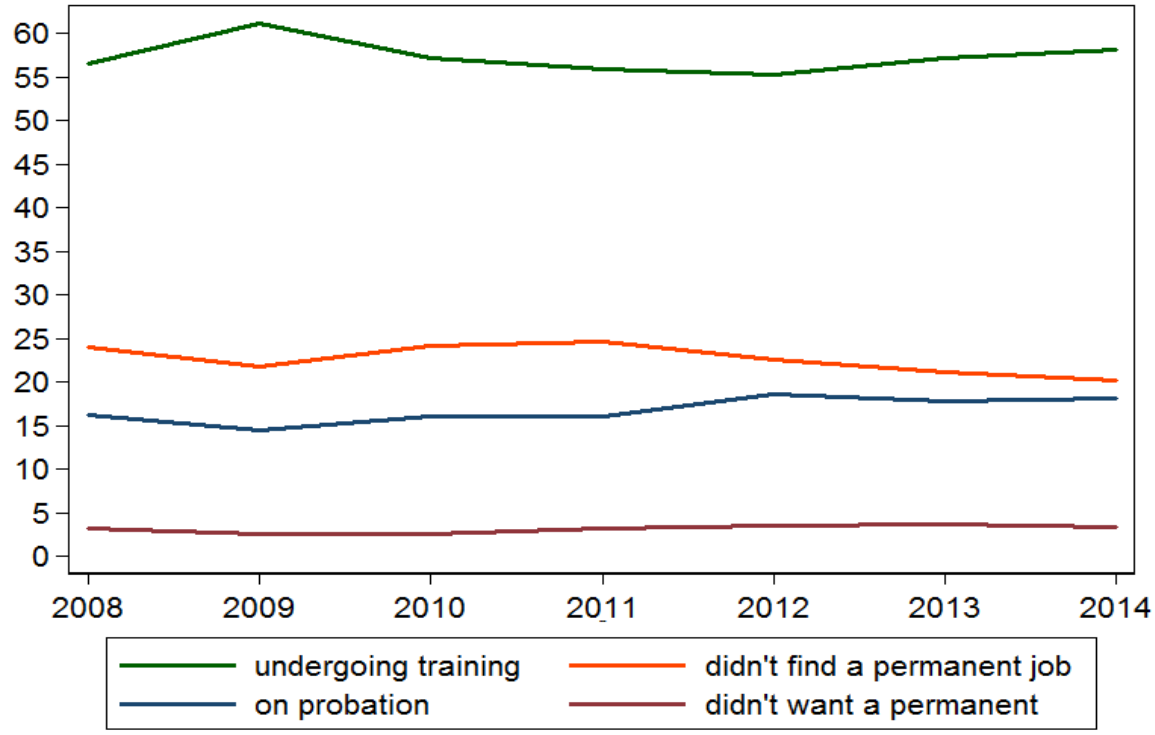


Figure A4j: Development of Reasons ('preferences') for Being in Temporary Work in the Netherlands

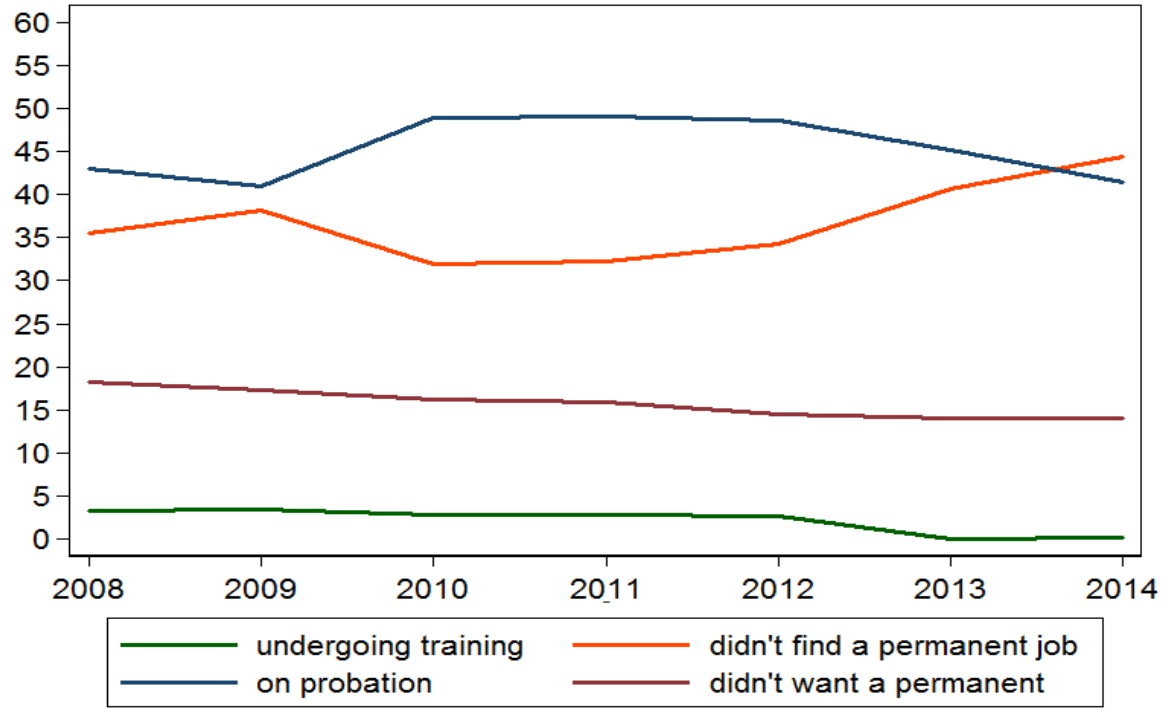


Figure A4k: Development of Reasons ('preferences') for being in Temporary Work in Sweden

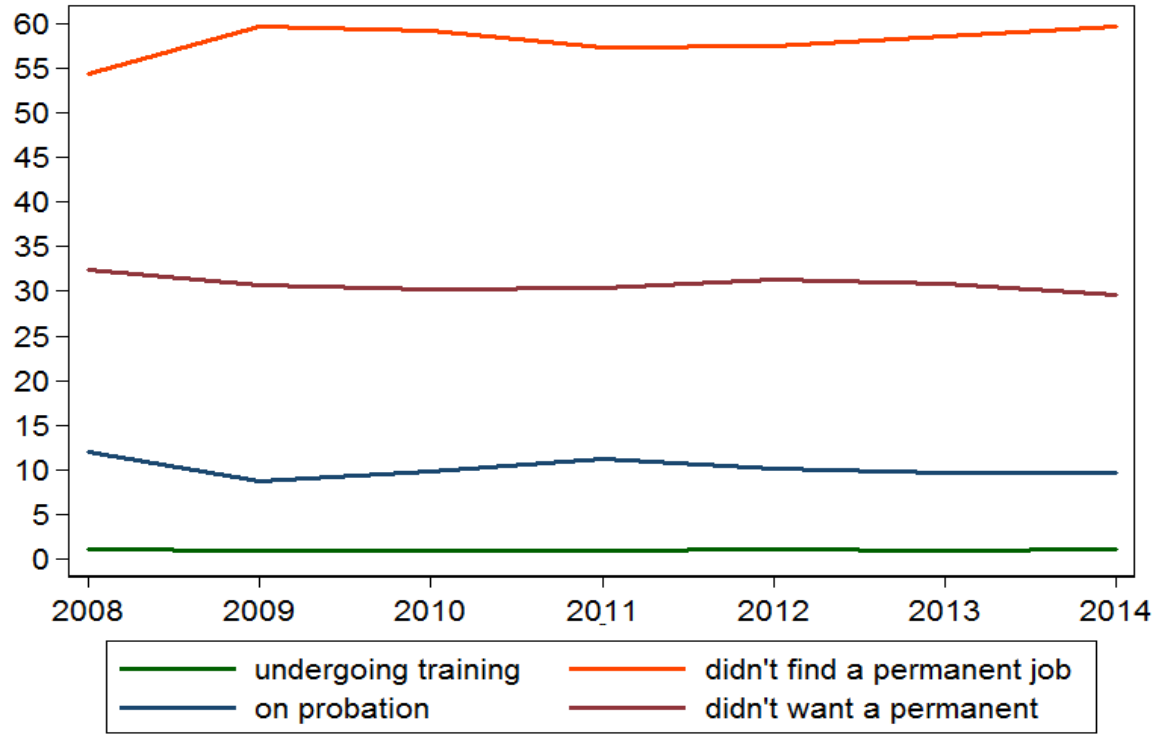


Figure A4l: Development of Reasons ('preferences') for being in Temporary Work in the United Kingdom

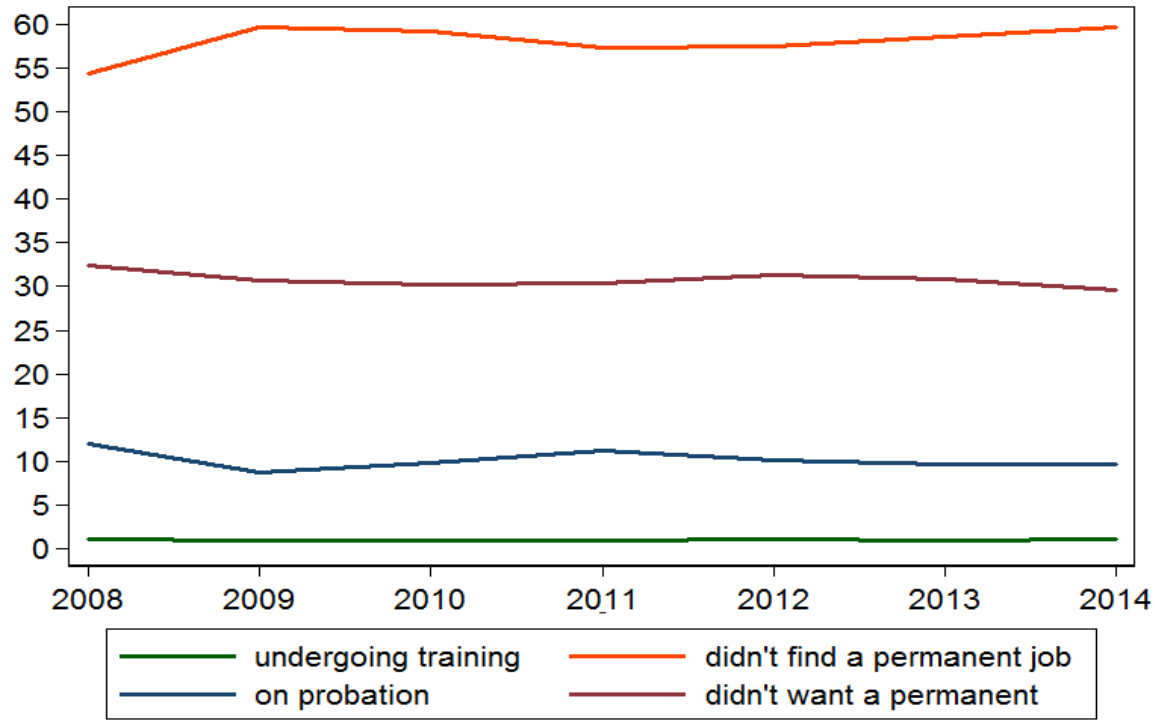


Table A1: Activity rates in Europe (EU-28) according to labour market status in percent of working-age population (15–64) – Total: 1998, 2007 and 2014

Country		Total Activity Rate*			Standard Employment Rate**			Non-standard Employment Rate***			Unemployment Rate****		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	70.84	73.19	75.15	46.15	43.40	41.23	20.72	26.13	29.58	3.98	3.66	4.34
Belgium	BE	62.77	66.82	67.56	36.98	37.74	36.74	19.80	24.01	24.96	5.99	5.07	5.85
Bulgaria	BG		64.97	68.87		51.03	50.36		9.15	10.53		4.79	7.98
Cyprus	CY		73.69	74.06		48.42	38.51		22.26	23.30		3.01	12.25
Czech Rep.	CZ	71.31	69.72	73.41	52.75	50.00	49.66	14.28	15.95	19.18	4.29	3.77	4.57
Germany	DE	70.41	75.41	77.65	40.72	38.74	41.77	22.64	29.99	31.91	7.05	6.68	3.96
Denmark	DK	79.12	80.01	78.05	47.71	49.59	45.86	27.36	27.34	26.91	4.06	3.08	5.28
Estonia	EE	71.99	73.19	75.18	55.54	58.29	57.08	9.44	11.42	12.43	7.01	3.48	5.68
Spain	ES	62.17	71.55	74.10	25.43	34.23	30.76	24.79	31.34	25.05	11.96	5.98	18.29
Finland	FI	72.95	75.47	75.31	41.22	46.55	44.77	21.98	23.67	23.86	9.75	5.26	6.68
France	FR	67.87	69.75	71.07	38.57	41.15	39.86	20.92	22.96	23.83	8.38	5.64	7.38
Greece	GR	60.61	65.26	66.69	29.22	35.83	26.54	23.96	23.54	21.73	7.43	5.89	18.41
Croatia	HR		65.24	65.86		41.65	38.43		16.87	15.80		6.72	11.62
Hungary	HU	55.93	61.53	66.84	39.70	45.01	46.72	10.74	11.92	14.90	5.48	4.60	5.22
Ireland	IE	64.48	72.20	69.44	37.94	44.68	37.56	21.43	24.02	23.74	5.12	3.50	8.14
Italy	IT	58.14	62.01	63.67	33.10	33.49	30.51	17.65	24.64	24.85	7.39	3.88	8.31
Lithuania	LT	71.46	67.55	73.50	45.42	51.44	53.14	15.76	13.13	12.26	10.28	2.98	8.10
Luxembourg	LU	61.75	66.85	70.49	48.64	45.36	46.58	11.40	18.77	19.70	1.71	2.73	4.21
Latvia	LV	69.11	72.33	74.40	45.30	56.83	54.32	13.19	10.96	11.75	10.61	4.54	8.32
Malta	MT		58.79	66.26		40.66	42.98		14.30	19.34		3.83	3.94
Netherland	NL	72.34	78.29	78.85	35.39	30.42	25.74	33.71	45.33	47.16	3.24	2.54	5.95
Poland	PL	64.33	62.30	67.26	39.84	31.15	34.37	17.49	24.87	26.59	7.01	6.28	6.29
Portugal	PT	69.98	73.69	73.16	40.37	40.74	39.54	26.08	26.65	22.97	3.53	6.30	10.65
Romania	RO	66.30	60.32	63.25	45.94	43.14	45.30	15.42	12.61	12.97	4.94	4.57	4.97
Sweden	SE	74.86	79.10	81.47	42.03	43.17	45.25	25.83	30.98	29.58	7.00	4.95	6.64
Slovenia	SI	67.01	70.56	70.01	46.39	47.57	43.65	15.12	19.38	19.12	5.51	3.62	7.24
Slovakia	SK		68.22	70.25		49.16	46.28		11.41	14.67		7.65	9.30
UK	UK	74.61	75.38	76.57	44.19	45.30	44.14	25.69	26.03	27.60	4.74	4.05	4.83
EU28*****		67.22	69.98	72.05	38.79	39.48	38.69	21.50	25.34	25.78	6.93	5.17	7.57
EU19******			70.56	72.15		38.07	36.63		27.12	26.98		5.37	8.55

*) The Sum of Standard Employment Rate, Non-Standard Employment Rate and (Working-Age Population) Unemployment Rate

**) Defined as dependent (wage-work) employment in full-time and open-ended contracts

***) Defined as the sum of other forms of employment for gainful work (part-time, temporary work [including temp-agency work], self-employment – see Tables 2)

****) Unemployed in percent of working age population (Different from the usual definition or the unemployment rate, which is related to the active working age population, i.e. employed plus unemployed)

*****) Values for 1998 are only available for 23 Member States (EU-28 without Bulgaria, Cyprus, Croatia, Malta and Slovakia)

******) Eurozone

Table A2: Activity rates in Europe (EU-28) according to labour market status in percent of working-age population (15-64) – Men: 1998, 2007 and 2014

Country		Total Activity Rate			Standard Employment Rate			Non-standard Employment Rate			Unemployment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	80.02	79.79	79.83	58.72	56.95	54.02	16.93	19.16	21.02	4.37	3.68	4.79
Belgium	BE	72.36	73.58	72.38	49.88	49.64	46.47	16.94	18.99	19.29	5.54	4.95	6.63
Bulgaria	BG		69.20	72.89		53.23	50.92		11.09	12.85		4.87	9.11
Cyprus	CY		82.86	79.86		55.46	42.83		24.47	22.97		2.93	14.06
Czech Rep.	CZ	79.64	78.07	81.19	59.66	55.49	54.66	16.30	19.24	22.32	3.68	3.34	4.21
Germany	DE	79.06	81.68	82.47	53.29	51.33	54.65	18.32	23.24	23.35	7.45	7.11	4.47
Denmark	DK	83.42	83.67	81.09	57.48	58.31	52.64	22.69	22.44	23.10	3.25	2.92	5.34
Estonia	EE	78.18	77.73	79.27	59.22	60.73	59.51	10.59	12.71	13.40	8.37	4.29	6.36
Spain	ES	76.73	81.25	79.47	34.22	41.58	35.15	31.82	34.39	25.40	10.69	5.28	18.92
Finland	FI	76.00	77.16	76.76	44.91	50.26	47.23	21.18	21.75	22.14	9.91	5.15	7.38
France	FR	74.93	74.65	75.23	48.18	49.43	46.76	18.89	19.61	20.48	7.86	5.62	7.99
Greece	GR	76.58	77.80	75.65	36.62	42.78	30.05	34.10	30.73	27.22	5.86	4.29	18.38
Croatia	HR		72.82	70.79		46.33	40.58		19.95	18.36		6.53	11.85
Hungary	HU	63.32	68.59	73.32	42.79	49.12	50.54	13.64	14.54	17.17	6.89	4.94	5.61
Ireland	IE	77.26	81.41	76.79	46.77	53.05	42.35	24.16	24.14	24.09	6.34	4.22	10.35
Italy	IT	73.20	74.04	73.43	42.75	43.48	38.34	23.27	26.83	26.11	7.19	3.72	8.98
Lithuania	LT	78.19	71.02	75.80	46.73	52.53	53.30	18.86	15.44	12.99	12.60	3.06	9.51
Luxembourg	LU	75.96	75.00	77.00	64.63	60.97	59.42	9.87	11.37	12.92	1.46	2.67	4.65
Latvia	LV	75.55	77.64	77.59	47.33	59.23	55.06	15.97	13.15	13.06	12.24	5.26	9.47
Malta	MT		78.03	79.88		56.74	54.86		16.75	19.99		4.54	5.03
Netherland	NL	82.30	84.55	84.07	54.39	47.80	40.74	25.10	34.34	37.25	2.81	2.41	6.08
Poland	PL	71.46	69.52	74.30	44.04	34.05	36.99	20.98	28.98	30.79	6.44	6.49	6.52
Portugal	PT	78.87	79.09	76.63	46.98	45.02	40.84	28.65	28.48	24.85	3.25	5.59	10.94
Romania	RO	74.76	68.81	73.13	50.58	45.81	49.13	18.95	17.45	18.12	5.23	5.54	5.89
Sweden	SE	78.34	81.39	83.59	51.29	51.99	52.48	19.08	24.51	24.04	7.96	4.89	7.07
Slovenia	SI	71.64	75.35	73.77	48.43	51.10	45.79	17.46	21.10	21.03	5.75	3.15	6.95
Slovakia	SK		75.90	77.61		53.41	49.10		14.94	18.53		7.55	9.98
UK	UK	82.59	82.12	82.06	57.20	56.55	53.83	19.57	20.94	22.82	5.82	4.63	5.40
EU28		76.82	77.37	77.97	48.59	48.17	46.16	21.31	23.98	23.72	6.91	5.23	8.10
EU19			78.27	77.94		47.82	44.86		25.18	23.96		5.28	9.13

Table A3: Activity rates in Europe (EU-28) according to labour market status in percent of working-age population (15–64) – Women: 1998, 2007 and 2014

Country		Total Activity Rate			Standard Employment Rate			Non-standard Employment Rate			Unemployment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	61.55	66.62	70.51	33.43	29.89	28.53	24.54	33.08	38.09	3.58	3.64	3.90
Belgium	BE	52.90	59.91	62.66	23.69	25.57	26.87	22.76	29.14	30.73	6.44	5.20	5.06
Bulgaria	BG		60.87	64.79		48.89	49.78		7.27	8.17		4.70	6.83
Cyprus	CY		64.93	68.77		41.69	34.57		20.16	23.60		3.08	10.60
Czech Rep.	CZ	62.95	61.23	65.38	45.80	44.42	44.50	12.25	12.61	15.94	4.90	4.21	4.95
Germany	DE	61.50	69.02	72.75	27.76	25.89	28.71	27.11	36.90	40.60	6.63	6.23	3.45
Denmark	DK	74.68	76.28	74.96	37.54	40.69	38.97	32.25	32.35	30.78	4.89	3.24	5.21
Estonia	EE	66.36	68.89	71.27	52.18	55.96	54.67	8.41	10.21	11.59	5.77	2.71	5.01
Spain	ES	47.61	61.57	68.68	16.63	26.67	26.33	17.75	28.20	24.71	13.23	6.70	17.64
Finland	FI	69.91	73.77	73.84	37.48	42.79	42.27	22.85	25.60	25.60	9.58	5.37	5.97
France	FR	60.95	64.98	67.05	29.15	33.11	33.19	22.92	26.21	27.07	8.88	5.66	6.79
Greece	GR	44.21	52.56	57.81	21.61	28.78	23.06	13.55	16.26	16.30	9.04	7.52	18.45
Croatia	HR		57.66	60.90		36.96	36.27		13.80	13.25		6.90	11.38
Hungary	HU	49.23	54.79	60.54	36.90	41.09	43.00	8.13	9.41	12.69	4.20	4.29	4.85
Ireland	IE	51.55	62.80	62.24	29.00	36.13	32.87	18.66	23.90	23.39	3.89	2.77	5.98
Italy	IT	43.19	50.05	54.00	23.52	23.55	22.75	12.07	22.46	23.61	7.60	4.05	7.65
Lithuania	LT	65.27	64.29	71.34	44.16	50.42	52.98	12.99	10.96	11.58	8.13	2.90	6.77
Luxembourg	LU	47.22	58.80	63.88	32.33	29.89	33.27	12.94	26.13	26.86	1.95	2.78	3.75
Latvia	LV	63.22	67.45	71.45	43.44	54.61	53.63	10.66	8.96	10.55	9.11	3.88	7.26
Malta	MT		39.08	52.14		24.16	30.65		11.83	18.68		3.09	2.82
Netherland	NL	62.00	71.92	73.58	15.66	12.72	10.56	42.66	56.53	57.19	3.69	2.67	5.83
Poland	PL	57.32	55.19	60.15	35.70	28.30	31.73	14.07	20.82	22.35	7.56	6.07	6.07
Portugal	PT	61.40	68.48	69.90	34.00	36.61	38.31	23.60	24.89	21.20	3.80	6.98	10.38
Romania	RO	57.30	51.39	52.71	41.00	40.32	41.22	11.68	7.53	7.49	4.63	3.54	4.00
Sweden	SE	71.22	76.74	79.28	32.29	34.08	37.78	32.95	37.65	35.31	5.99	5.01	6.19
Slovenia	SI	62.24	65.49	65.95	44.24	43.82	41.32	12.75	17.55	17.07	5.25	4.13	7.55
Slovakia	SK		60.59	62.82		44.93	43.43		7.90	10.78		7.76	8.61
UK	UK	66.56	68.78	71.16	31.05	34.26	34.59	31.86	31.03	32.30	3.65	3.48	4.27
EU28		57.59	62.59	66.13	28.94	30.78	31.24	21.69	26.70	27.85	6.95	5.11	7.04
EU19			62.82	66.39		28.29	28.43		29.06	29.98		5.47	7.98

Table A4: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–64) – Part-Time Work*, Total: 1998, 2007 and 2014

Country		Total Part-time Rate**			Temporary Part-time Rate			Open-ended Part-time Rate			Part-time Self-employment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	9.79	14.72	18.47	0.55	0.96	1.22	8.67	12.85	15.98	0.57	0.92	1.27
Belgium	BE	8.87	13.41	14.44	1.21	1.79	1.76	7.36	11.17	12.14	0.30	0.45	0.54
Bulgaria	BG		0.76	1.39		0.21	0.38		0.43	0.65		0.12	0.36
Cyprus	CY		3.99	7.85		0.57	1.04		2.03	3.83		1.39	2.99
Czech Rep.	CZ	3.50	2.77	3.71	1.08	0.99	1.23	2.14	1.40	1.84	0.28	0.38	0.64
Germany	DE	10.96	16.98	19.26	0.94	2.18	2.25	9.42	13.68	15.91	0.60	1.12	1.10
Denmark	DK	16.42	17.46	17.75	1.77	2.15	1.81	14.18	14.79	15.36	0.47	0.51	0.58
Estonia	EE	4.26	4.80	5.55	0.29	0.34	0.35	3.32	3.81	4.35	0.65	0.65	0.85
Spain	ES	3.66	7.08	8.58	1.76	3.19	3.42	1.43	3.28	4.51	0.47	0.61	0.65
Finland	FI	6.86	9.00	9.40	2.38	2.40	2.33	3.74	5.69	6.00	0.74	0.91	1.06
France	FR	9.89	10.79	11.66	2.46	2.66	2.91	7.10	7.74	7.85	0.34	0.39	0.91
Greece	GR	2.37	2.74	4.19	0.91	0.97	0.94	0.61	1.07	2.38	0.85	0.70	0.87
Croatia	HR		2.92	2.31		0.23	0.78		0.30	0.53		2.39	1.00
Hungary	HU	1.64	2.11	3.56	0.27	0.43	0.85	1.07	1.50	2.53	0.30	0.18	0.18
Ireland	IE	9.37	11.52	13.52	2.14	2.37	2.79	6.49	8.38	9.47	0.74	0.76	1.26
Italy	IT	3.30	7.55	9.79	1.09	1.29	1.72	1.81	4.95	6.58	0.41	1.32	1.49
Lithuania	LT	4.65	5.05	5.17	0.67	0.46	0.24	2.79	2.85	3.66	1.20	1.74	1.27
Luxembourg	LU	5.48	11.29	11.95	0.54	0.71	1.36	4.76	10.20	9.73	0.18	0.38	0.87
Latvia	LV	5.48	3.34	4.08	1.34	0.39	0.35	2.32	2.23	2.81	1.82	0.72	0.93
Malta	MT		5.71	9.48		0.97	1.54		4.18	6.99		0.57	0.95
Netherland	NL	26.07	34.38	35.49	5.46	7.44	8.74	18.67	24.23	22.97	1.94	2.71	3.78
Poland	PL	4.24	3.87	3.78	0.79	1.61	1.70	1.93	1.23	1.29	1.52	1.02	0.79
Portugal	PT	5.13	5.65	6.05	0.88	1.61	2.10	1.75	1.48	1.94	2.50	2.55	2.01
Romania	RO	5.11	3.21	3.49	0.27	0.04	0.08	0.51	0.21	0.24	4.34	2.96	3.17
Sweden	SE	15.56	17.15	18.10	3.83	3.87	5.75	10.99	12.33	11.38	0.73	0.95	0.97
Slovenia	SI	1.91	4.37	4.88	0.32	2.47	2.22	1.11	1.41	2.10	0.47	0.48	0.56
Slovakia	SK		1.44	3.06		0.37	2.01		1.01	0.85		0.06	0.21
UK	UK	16.46	16.88	17.86	1.92	1.67	1.82	13.08	13.47	13.65	1.45	1.74	2.39
EU28		8.83	10.94	12.33	1.52	2.02	2.30	6.34	7.78	8.69	0.97	1.14	1.33
EU19			11.79	13.44		2.35	2.64		8.44	9.60		1.00	1.20

*) This variable refers to the main job. The distinction between full-time and part-time work is generally based on a spontaneous response by the respondent. The main exceptions are the Netherlands and Iceland where a 35 hours threshold is applied, Sweden where a threshold is applied to the self-employed, and Norway where persons working between 32 and 36 hours are asked whether this is a full- or part-time position

**) The sum of temporary part-time, open-ended part-time, and self-employment in part-time

Table A5: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–64) – Part-Time Work, Men: 1998, 2007 and 2014

Country		Total Part-time Rate			Temporary Part-time Rate			Open-ended Part-time Rate			Part-time Self-employment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	2.68	4.16	6.48	0.28	0.48	0.69	2.06	3.19	4.96	0.34	0.48	0.83
Belgium	BE	2.29	4.80	5.40	0.60	0.87	0.99	1.55	3.67	4.08	0.14	0.27	0.34
Bulgaria	BG		0.61	1.27		0.19	0.33		0.24	0.45		0.17	0.49
Cyprus	CY		2.18	6.37		0.37	0.77		0.84	2.61		0.98	2.99
Czech Rep.	CZ	1.57	1.22	1.86	0.69	0.54	0.66	0.72	0.46	0.82	0.16	0.23	0.39
Germany	DE	2.82	6.06	6.96	0.58	1.50	1.49	1.88	3.83	4.74	0.36	0.72	0.72
Denmark	DK	8.20	9.70	11.32	1.30	1.39	1.33	6.52	7.79	9.40	0.38	0.52	0.59
Estonia	EE	2.77	2.70	3.83	0.38	0.37	0.26	1.84	1.70	2.44	0.55	0.63	1.13
Spain	ES	1.75	2.70	4.48	0.98	1.45	2.40	0.43	0.84	1.51	0.34	0.41	0.57
Finland	FI	3.98	5.52	6.05	1.19	1.41	1.43	1.74	3.23	3.49	1.05	0.87	1.13
France	FR	3.50	3.65	4.85	1.57	1.56	1.82	1.72	1.79	2.27	0.20	0.29	0.76
Greece	GR	1.80	1.56	3.50	0.73	0.67	0.80	0.33	0.50	1.82	0.74	0.39	0.88
Croatia	HR		2.70	2.03		0.18	0.62		0.10	0.29		2.42	1.12
Hungary	HU	1.02	1.51	2.69	0.18	0.38	0.84	0.57	0.96	1.70	0.28	0.17	0.15
Ireland	IE	5.01	4.66	8.09	1.46	1.63	2.52	2.85	2.34	4.25	0.70	0.68	1.32
Italy	IT	1.86	3.06	4.90	0.93	0.68	1.18	0.58	1.48	2.55	0.36	0.91	1.18
Lithuania	LT	4.23	4.36	3.81	0.79	0.64	0.29	2.08	1.59	2.48	1.36	2.13	1.05
Luxembourg	LU	1.12	1.81	3.13	0.37	0.33	0.69	0.76	1.42	1.89	0.00	0.06	0.54
Latvia	LV	5.74	2.61	2.76	1.68	0.40	0.41	1.86	1.35	1.53	2.20	0.86	0.82
Malta	MT		2.78	5.08		0.61	1.44		1.71	2.96		0.47	0.67
Netherland	NL	13.58	17.94	19.80	3.92	5.36	6.82	8.33	10.65	9.94	1.32	1.93	3.04
Poland	PL	3.64	2.88	2.51	0.82	1.18	1.17	1.43	0.76	0.67	1.39	0.94	0.67
Portugal	PT	2.44	3.19	4.78	0.54	0.95	1.61	0.44	0.34	0.68	1.46	1.91	2.49
Romania	RO	5.65	4.16	4.49	0.34	0.04	0.10	0.39	0.13	0.19	4.92	3.98	4.20
Sweden	SE	5.45	7.54	9.51	2.07	2.23	3.90	2.79	4.35	4.68	0.59	0.96	0.92
Slovenia	SI	1.67	3.65	3.34	0.28	2.09	1.57	0.69	0.91	1.16	0.70	0.65	0.61
Slovakia	SK		0.67	2.50		0.21	1.93		0.42	0.38		0.04	0.18
UK	UK	5.67	6.98	8.38	1.05	1.14	1.28	3.64	4.52	5.34	0.98	1.31	1.76
EU28		3.67	4.68	5.89	1.01	1.25	1.60	1.87	2.50	3.15	0.80	0.93	1.13
EU19			4.68	6.08		1.42	1.83		2.56	3.28		0.70	0.97

Table A6: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–64) – Part-Time Work, Women: 1998, 2007 and 2014

Country		Total Part-time Rate			Temporary Part-time Rate			Open-ended Part-time Rate			Part-time Self-employment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	16.99	25.26	30.36	0.82	1.43	1.75	15.36	22.48	26.91	0.81	1.35	1.71
Belgium	BE	15.64	22.22	23.62	1.83	2.74	2.55	13.34	18.84	20.33	0.47	0.63	0.74
Bulgaria	BG		0.92	1.51		0.23	0.43		0.61	0.86		0.08	0.22
Cyprus	CY		5.71	9.21		0.77	1.29		3.16	4.93		1.77	2.99
Czech Rep.	CZ	5.45	4.35	5.61	1.48	1.46	1.81	3.57	2.36	2.89	0.40	0.53	0.90
Germany	DE	19.37	28.15	31.75	1.32	2.87	3.02	17.21	23.73	27.24	0.84	1.54	1.49
Denmark	DK	24.95	25.39	24.28	2.26	2.93	2.29	22.12	21.95	21.42	0.56	0.51	0.56
Estonia	EE	5.64	6.80	7.24	0.24	0.30	0.43	4.67	5.81	6.19	0.74	0.69	0.62
Spain	ES	5.57	11.59	12.72	2.53	4.98	4.44	2.43	5.80	7.54	0.61	0.81	0.74
Finland	FI	9.83	12.52	12.79	3.58	3.41	3.25	5.74	8.17	8.55	0.50	0.94	0.98
France	FR	16.15	17.74	18.25	3.32	3.74	3.97	12.36	13.53	13.24	0.47	0.48	1.05
Greece	GR	2.95	3.94	4.87	1.10	1.28	1.07	0.89	1.65	2.94	0.96	1.01	0.86
Croatia	HR		3.15	2.60		0.28	0.94		0.51	0.78		2.37	0.89
Hungary	HU	2.19	2.69	4.42	0.35	0.48	0.87	1.51	2.01	3.35	0.33	0.19	0.20
Ireland	IE	13.78	18.52	18.83	2.84	3.13	3.05	10.17	14.55	14.59	0.77	0.84	1.19
Italy	IT	4.74	12.02	14.62	1.25	1.89	2.26	3.04	8.40	10.57	0.45	1.73	1.80
Lithuania	LT	5.04	5.70	6.44	0.55	0.29	0.20	3.44	4.04	4.76	1.05	1.37	1.48
Luxembourg	LU	9.91	20.68	21.06	0.75	1.09	2.03	8.85	18.89	17.76	0.31	0.71	1.27
Latvia	LV	5.23	4.01	5.31	1.03	0.38	0.30	2.74	3.05	3.99	1.46	0.58	1.02
Malta	MT		8.71	14.04		1.33	1.64		6.71	11.16		0.67	1.23
Netherland	NL	39.04	51.12	51.37	7.05	9.56	10.69	29.39	38.06	36.16	2.59	3.50	4.52
Poland	PL	4.83	4.85	5.06	0.76	2.05	2.23	2.41	1.69	1.93	1.65	1.11	0.91
Portugal	PT	7.72	8.02	7.25	1.22	2.26	2.57	3.01	2.58	3.11	3.50	3.18	1.56
Romania	RO	4.55	2.21	2.44	0.20	0.04	0.07	0.63	0.29	0.29	3.71	1.88	2.08
Sweden	SE	26.17	27.06	27.00	5.67	5.56	7.66	19.60	20.57	18.32	0.89	0.93	1.02
Slovenia	SI	2.19	5.12	6.57	0.38	2.88	2.92	1.55	1.94	3.13	0.27	0.31	0.52
Slovakia	SK		2.21	3.64		0.53	2.08		1.59	1.32		0.09	0.23
UK	UK	27.34	26.60	27.19	2.80	2.19	2.35	22.61	22.25	21.83	1.93	2.16	3.01
EU28		14.01	17.19	18.76	2.04	2.78	3.00	10.83	13.06	14.22	1.14	1.35	1.54
EU19			18.92	20.75		3.28	3.45		14.34	15.88		1.31	1.42

Table A7: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–64) – Temporary Work*, Total: 1998, 2007 and 2014

Country		Total Temporary Work Rate**			Temporary Part-time Rate			Temporary Full-time Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	4.66	5.45	5.78	0.55	0.96	1.22	4.11	4.49	4.56
Belgium	BE	3.74	4.62	4.60	1.21	1.79	1.76	2.53	2.83	2.84
Bulgaria	BG		2.80	2.83		0.21	0.38		2.47	2.45
Cyprus	CY		7.72	9.92		0.57	1.04		7.14	8.89
Czech Rep.	CZ	3.37	4.35	5.54	1.08	0.99	1.23	2.25	3.36	4.32
Germany	DE	7.03	9.03	8.72	0.94	2.18	2.25	6.09	6.85	6.47
Denmark	DK	6.98	6.34	5.73	1.77	2.15	1.81	5.17	4.18	3.92
Estonia	EE	0.96	1.39	1.98	0.29	0.34	0.35	0.66	1.06	1.63
Spain	ES	13.19	17.33	11.16	1.76	3.19	3.42	11.43	14.15	7.75
Finland	FI	9.64	9.85	9.21	2.38	2.40	2.33	7.26	7.44	6.87
France	FR	7.34	8.66	9.06	2.46	2.66	2.91	4.89	5.99	6.15
Greece	GR	4.62	4.56	3.81	0.91	0.97	0.94	3.71	3.59	2.87
Croatia	HR		6.40	7.90		0.23	0.78		6.17	7.12
Hungary	HU	3.03	3.65	5.96	0.27	0.43	0.85	2.50	3.22	5.10
Ireland	IE	4.29	4.92	4.81	2.14	2.37	2.79	2.15	2.54	2.02
Italy	IT	3.24	5.83	5.84	1.09	1.29	1.72	2.15	4.54	4.12
Lithuania	LT	3.35	2.12	1.61	0.67	0.46	0.24	2.68	1.66	1.37
Luxembourg	LU	1.56	4.07	4.89	0.54	0.71	1.36	1.02	3.36	3.54
Latvia	LV	4.13	2.57	1.95	1.34	0.39	0.35	2.78	2.18	1.60
Malta	MT		2.42	4.15		0.97	1.54		1.46	2.61
Netherland	NL	7.81	11.91	13.02	5.46	7.44	8.74	2.33	4.47	4.28
Poland	PL	2.38	12.71	14.07	0.79	1.61	1.70	1.49	11.10	12.37
Portugal	PT	8.74	12.11	11.28	0.88	1.61	2.10	7.86	10.49	9.17
Romania	RO	1.43	0.70	0.69	0.27	0.04	0.08	1.16	0.66	0.61
Sweden	SE	7.91	11.54	11.41	3.83	3.87	5.75	3.95	5.60	5.64
Slovenia	SI	6.15	11.01	9.04	0.32	2.47	2.22	5.83	8.53	6.81
Slovakia	SK		2.62	4.53		0.37	2.01		2.25	2.52
UK	UK	4.27	3.56	3.87	1.92	1.67	1.82	2.35	1.89	2.04
EU28		5.85	8.05	7.72	1.52	2.02	2.30	4.31	6.00	5.41
EU19			9.14	8.28		2.35	2.64		6.79	5.63

*) Definition of Temporary Work according to ELFS: Employees with a limited duration job/contract are employees whose the main job will terminate either after a period fixed in advance, or after a period not known in advance, but nevertheless defined by objective criteria, such as the completion of an assignment or the period of absence of an employee temporarily replaced

**) The sum of Temporary Part-time and Temporary Full-time

Table A8: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–64) – Temporary Work, Men: 1998, 2007 and 2014

Country		Total Temporary Work Rate			Temporary Part-time Rate			Temporary Full-time Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	5.26	5.73	5.96	0.28	0.48	0.69	4.98	5.25	5.27
Belgium	BE	3.21	3.90	4.14	0.60	0.87	0.99	2.60	3.03	3.16
Bulgaria	BG		2.74	3.07		0.19	0.33		2.39	2.74
Cyprus	CY		4.63	6.83		0.37	0.77		4.26	6.06
Czech Rep.	CZ	2.90	3.87	5.09	0.69	0.54	0.66	2.17	3.33	4.43
Germany	DE	7.62	9.52	8.92	0.58	1.50	1.49	7.04	8.01	7.43
Denmark	DK	6.58	5.52	5.51	1.30	1.39	1.33	5.26	4.13	4.18
Estonia	EE	1.25	1.80	2.11	0.38	0.37	0.26	0.87	1.43	1.84
Spain	ES	16.37	18.68	11.30	0.98	1.45	2.40	15.39	17.22	8.90
Finland	FI	7.14	7.48	7.13	1.19	1.41	1.43	5.95	6.06	5.70
France	FR	7.41	8.33	8.65	1.57	1.56	1.82	5.84	6.77	6.83
Greece	GR	5.24	4.44	3.95	0.73	0.67	0.80	4.52	3.77	3.14
Croatia	HR		6.68	8.16		0.18	0.62		6.50	7.54
Hungary	HU	3.73	4.18	6.60	0.18	0.38	0.84	3.17	3.79	5.76
Ireland	IE	3.61	4.22	4.71	1.46	1.63	2.52	2.16	2.58	2.19
Italy	IT	3.45	5.63	6.18	0.93	0.68	1.18	2.53	4.95	5.00
Lithuania	LT	4.56	2.93	2.08	0.79	0.64	0.29	3.77	2.29	1.79
Luxembourg	LU	1.58	4.10	4.69	0.37	0.33	0.69	1.21	3.76	4.00
Latvia	LV	5.38	3.60	2.51	1.68	0.40	0.41	3.70	3.20	2.10
Malta	MT		2.27	4.09		0.61	1.44		1.66	2.65
Netherland	NL	6.94	11.50	12.87	3.92	5.36	6.82	2.99	6.14	6.05
Poland	PL	2.84	13.82	15.03	0.82	1.18	1.17	1.90	12.65	13.86
Portugal	PT	9.26	12.53	11.46	0.54	0.95	1.61	8.72	11.58	9.85
Romania	RO	1.52	0.78	0.88	0.34	0.04	0.10	1.18	0.73	0.78
Sweden	SE	6.35	9.75	9.85	2.07	2.23	3.90	4.17	5.97	5.93
Slovenia	SI	5.57	10.15	8.92	0.28	2.09	1.57	5.29	8.06	7.36
Slovakia	SK		2.75	4.88		0.21	1.93		2.54	2.95
UK	UK	3.77	3.26	3.65	1.05	1.14	1.28	2.72	2.12	2.35
EU28		6.19	8.18	7.76	1.01	1.25	1.60	5.17	6.90	6.15
EU19			9.31	8.30		1.42	1.83		7.89	6.47

Table A9: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–64) – Temporary Work, Women: 1998, 2007 and 2014

Country		Total Temporary Work Rate			Temporary Part-time Rate			Temporary Full-time Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	4.05	5.17	5.59	0.82	1.43	1.75	3.23	3.74	3.85
Belgium	BE	4.30	5.36	5.06	1.83	2.74	2.55	2.45	2.61	2.51
Bulgaria	BG		2.85	2.59		0.23	0.43		2.53	2.16
Cyprus	CY		10.67	12.74		0.77	1.29		9.90	11.45
Czech Rep.	CZ	3.84	4.85	6.01	1.48	1.46	1.81	2.34	3.40	4.20
Germany	DE	6.43	8.54	8.50	1.32	2.87	3.02	5.11	5.67	5.48
Denmark	DK	7.41	7.17	5.95	2.26	2.93	2.29	5.07	4.23	3.66
Estonia	EE	0.71	1.00	1.85	0.24	0.30	0.43	0.48	0.70	1.42
Spain	ES	10.00	15.95	11.03	2.53	4.98	4.44	7.47	10.98	6.58
Finland	FI	12.15	12.23	11.32	3.58	3.41	3.25	8.57	8.82	8.06
France	FR	7.28	8.98	9.45	3.32	3.74	3.97	3.96	5.24	5.49
Greece	GR	3.99	4.68	3.68	1.10	1.28	1.07	2.88	3.40	2.60
Croatia	HR		6.12	7.64		0.28	0.94		5.84	6.70
Hungary	HU	2.39	3.15	5.33	0.35	0.48	0.87	1.90	2.68	4.46
Ireland	IE	4.98	5.63	4.91	2.84	3.13	3.05	2.14	2.50	1.86
Italy	IT	3.02	6.03	5.50	1.25	1.89	2.26	1.78	4.13	3.24
Lithuania	LT	2.22	1.36	1.17	0.55	0.29	0.20	1.67	1.07	0.97
Luxembourg	LU	1.59	4.04	5.18	0.75	1.09	2.03	0.83	2.95	3.05
Latvia	LV	2.97	1.62	1.43	1.03	0.38	0.30	1.95	1.23	1.13
Malta	MT		2.58	4.21		1.33	1.64		1.25	2.57
Netherland	NL	8.70	12.33	13.18	7.05	9.56	10.69	1.64	2.77	2.49
Poland	PL	1.94	11.61	13.10	0.76	2.05	2.23	1.09	9.56	10.87
Portugal	PT	8.24	11.70	11.11	1.22	2.26	2.57	7.02	9.44	8.54
Romania	RO	1.32	0.62	0.49	0.20	0.04	0.07	1.13	0.58	0.42
Sweden	SE	9.59	13.39	13.03	5.67	5.56	7.66	3.72	5.22	5.34
Slovenia	SI	6.79	11.92	9.15	0.38	2.88	2.92	6.41	9.04	6.23
Slovakia	SK		2.50	4.18		0.53	2.08		1.98	2.09
UK	UK	4.78	3.85	4.09	2.80	2.19	2.35	1.98	1.66	1.74
EU28		5.50	7.93	7.68	2.04	2.78	3.00	3.45	5.10	4.67
EU19			8.97	8.26		3.28	3.45		5.69	4.81

Table A10: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–64) – Self-employment*, Total: 1998, 2007 and 2014

Country		Total Self-employment Rate**			Part-time Self-employment Rate			Full-time Self-employment Rate			Self-employed with employees		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	7.38	7.84	7.83	0.57	0.92	1.27	3.36	3.52	3.27	3.45	3.40	3.29
Belgium	BE	8.70	8.22	8.22	0.30	0.45	0.54	7.37	4.99	5.17	1.03	2.78	2.52
Bulgaria	BG		5.93	7.05		0.12	0.36		3.22	4.42		2.59	2.27
Cyprus	CY		12.52	9.55		1.39	2.99		6.93	4.34		4.20	2.21
Czech Rep.	CZ	8.77	10.20	11.80	0.28	0.38	0.64	5.67	7.36	8.81	2.82	2.46	2.35
Germany	DE	6.19	7.28	7.28	0.60	1.12	1.10	2.43	2.94	2.93	3.16	3.22	3.25
Denmark	DK	6.19	6.21	5.82	0.47	0.51	0.58	2.56	2.79	2.82	3.16	2.90	2.43
Estonia	EE	5.16	6.22	6.10	0.65	0.65	0.85	2.78	3.21	2.89	1.73	2.35	2.36
Spain	ES	10.17	10.72	9.38	0.47	0.61	0.65	7.04	6.59	5.96	2.65	3.52	2.76
Finland	FI	8.60	8.13	8.64	0.74	0.91	1.06	5.56	4.46	4.77	2.30	2.76	2.82
France	FR	6.48	6.56	6.93	0.34	0.39	0.91	3.34	3.35	3.37	2.80	2.82	2.65
Greece	GR	18.73	17.91	15.54	0.85	0.70	0.87	13.55	12.22	11.51	4.32	5.00	3.16
Croatia	HR		10.17	7.37		2.39	1.00		4.55	3.49		3.23	2.88
Hungary	HU	6.65	6.76	6.41	0.30	0.18	0.18	4.83	3.62	3.12	1.52	2.96	3.11
Ireland	IE	10.65	10.72	9.45	0.74	0.76	1.26	6.32	6.05	5.44	3.59	3.91	2.76
Italy	IT	12.60	13.86	12.44	0.41	1.32	1.49	5.77	8.55	7.47	6.42	3.99	3.48
Lithuania	LT	9.63	8.16	6.99	1.20	1.74	1.27	6.23	5.04	4.21	2.20	1.37	1.51
Luxembourg	LU	5.09	4.49	5.08	0.18	0.38	0.87	1.84	2.24	2.71	3.07	1.88	1.51
Latvia	LV	6.75	6.16	7.00	1.82	0.72	0.93	3.00	3.19	3.47	1.93	2.25	2.60
Malta	MT		7.70	8.20		0.57	0.95		4.46	4.68		2.68	2.57
Netherland	NL	7.24	9.19	11.17	1.94	2.71	3.78	2.54	3.52	4.50	2.76	2.96	2.89
Poland	PL	13.18	10.93	11.23	1.52	1.02	0.79	9.13	7.56	7.90	2.53	2.35	2.54
Portugal	PT	15.59	13.06	9.75	2.50	2.55	2.01	8.83	6.74	4.61	4.27	3.77	3.13
Romania	RO	13.49	11.70	12.04	4.34	2.96	3.17	8.17	7.78	8.10	0.99	0.97	0.77
Sweden	SE	6.92	7.10	6.78	0.73	0.95	0.97	3.43	3.34	3.18	2.75	2.82	2.63
Slovenia	SI	7.86	6.96	7.98	0.47	0.48	0.56	4.97	4.16	5.14	2.42	2.31	2.28
Slovakia	SK		7.78	9.29		0.06	0.21		5.82	7.17		1.89	1.91
UK	UK	8.33	9.00	10.08	1.45	1.74	2.39	4.70	5.25	5.97	2.18	2.01	1.72
EU28		9.31	9.50	9.38	0.97	1.14	1.33	5.21	5.43	5.37	3.13	2.94	2.67
EU19			9.54	9.10		1.00	1.20		1.00	4.91		3.32	2.99

*) Definition of Self-employment according to ELFS: Self-employed persons are defined as persons who work in their own business, professional practice or farm for the purpose of earning a profit

**) The sum of Part-time and Full-time Self-employment

Table A11: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–64) – Self-employment Men: 1998, 2007 and 2014

Country		Total Self-employment Rate			Part-time Self-employment Rate			Full-time Self-employment Rate			Self-employed with employees		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	9.61	10.24	10.10	0.34	0.48	0.83	4.18	4.63	4.26	5.09	5.13	5.00
Belgium	BE	12.19	11.42	11.07	0.14	0.27	0.34	10.39	6.89	7.09	1.65	4.27	3.64
Bulgaria	BG		8.11	9.34		0.17	0.49		4.11	5.58		3.82	3.27
Cyprus	CY		19.01	13.53		0.98	2.99		10.59	6.53		7.43	4.01
Czech Rep.	CZ	12.69	14.92	16.41	0.16	0.23	0.39	8.23	10.87	12.36	4.30	3.82	3.67
Germany	DE	8.82	9.89	9.68	0.36	0.72	0.72	3.63	4.31	4.16	4.84	4.85	4.80
Denmark	DK	9.59	9.13	8.19	0.38	0.52	0.59	4.13	4.03	3.89	5.08	4.58	3.71
Estonia	EE	7.50	9.21	8.85	0.55	0.63	1.13	4.27	4.86	3.80	2.68	3.72	3.92
Spain	ES	15.02	14.88	12.58	0.34	0.41	0.57	10.42	9.23	8.23	4.26	5.24	3.79
Finland	FI	12.30	11.03	11.52	1.05	0.87	1.13	7.86	6.11	6.07	3.38	4.05	4.32
France	FR	9.75	9.49	9.57	0.20	0.29	0.76	5.07	4.86	4.67	4.48	4.34	4.14
Greece	GR	28.52	25.79	21.45	0.74	0.39	0.88	20.50	17.49	15.89	7.28	7.91	4.69
Croatia	HR		13.17	9.91		2.42	1.12		5.86	4.61		4.89	4.18
Hungary	HU	9.33	9.40	8.87	0.28	0.17	0.15	6.79	4.84	4.11	2.27	4.40	4.61
Ireland	IE	17.70	17.58	15.14	0.70	0.68	1.32	11.22	10.58	9.51	5.77	6.32	4.31
Italy	IT	19.24	19.73	17.38	0.36	0.91	1.18	8.87	12.60	10.92	10.01	6.22	5.28
Lithuania	LT	12.22	10.92	8.43	1.36	2.13	1.05	7.71	6.71	5.17	3.15	2.08	2.21
Luxembourg	LU	7.53	5.85	6.34	0.00	0.06	0.54	2.65	2.98	3.47	4.87	2.81	2.32
Latvia	LV	8.73	8.20	9.02	2.20	0.86	0.82	3.65	4.01	4.40	2.88	3.33	3.79
Malta	MT		12.77	12.94		0.47	0.67		7.54	7.95		4.76	4.32
Netherland	NL	9.82	12.19	14.44	1.32	1.93	3.04	4.18	5.70	7.05	4.32	4.56	4.36
Poland	PL	16.71	14.40	15.10	1.39	0.94	0.67	11.74	10.17	10.90	3.58	3.29	3.53
Portugal	PT	18.94	15.61	12.70	1.46	1.91	2.49	10.96	8.28	5.64	6.53	5.42	4.58
Romania	RO	17.04	16.54	17.05	4.92	3.98	4.20	10.68	11.07	11.76	1.44	1.49	1.09
Sweden	SE	9.93	10.42	9.51	0.59	0.96	0.92	5.13	4.92	4.56	4.21	4.53	4.02
Slovenia	SI	11.21	10.05	10.95	0.70	0.65	0.61	6.87	5.89	7.07	3.64	3.50	3.27
Slovakia	SK		11.77	13.26		0.04	0.18		8.98	10.23		2.76	2.85
UK	UK	12.16	13.15	13.84	0.98	1.31	1.76	7.88	8.79	9.55	3.30	3.05	2.54
EU28		13.25	13.29	12.80	0.80	0.93	1.13	7.62	7.91	7.71	4.83	4.45	3.96
EU19			13.31	12.38		0.70	0.97		7.54	6.95		5.07	4.47

Table A12: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–64) – Self-employment Women: 1998, 2007 and 2014

Country		Total Self-employment Rate			Part-time Self-employment Rate			Full-time Self-employment Rate			Self-employed with employees		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	5.13	5.43	5.58	5.13	1.35	1.71	2.52	2.41	2.28	1.80	1.68	1.59
Belgium	BE	5.12	4.94	5.34	5.12	0.63	0.74	4.26	3.05	3.23	0.39	1.25	1.37
Bulgaria	BG		3.81	4.73		0.08	0.22		2.35	3.25		1.39	1.26
Cyprus	CY		6.32	5.93		1.77	2.99		3.43	2.35		1.12	0.59
Czech Rep.	CZ	4.83	5.40	7.03	4.83	0.53	0.90	3.10	3.80	5.14	1.33	1.07	0.99
Germany	DE	3.47	4.62	4.85	3.47	1.54	1.49	1.19	1.53	1.70	1.44	1.56	1.67
Denmark	DK	2.72	3.24	3.41	2.72	0.51	0.56	0.93	1.53	1.73	1.22	1.20	1.12
Estonia	EE	3.03	3.40	3.55	3.03	0.69	0.62	1.42	1.65	2.04	0.87	1.06	0.89
Spain	ES	5.31	6.45	6.14	5.31	0.81	0.74	3.66	3.88	3.68	1.04	1.75	1.73
Finland	FI	4.96	5.20	5.73	4.96	0.94	0.98	3.24	2.80	3.44	1.21	1.46	1.30
France	FR	3.28	3.70	4.38	3.28	0.48	1.05	1.65	1.88	2.12	1.17	1.35	1.21
Greece	GR	8.67	9.94	9.68	8.67	1.01	0.86	6.42	6.88	7.18	1.29	2.05	1.64
Croatia	HR		7.18	4.83		2.37	0.89		3.23	2.36		1.59	1.58
Hungary	HU	4.22	4.24	4.01	4.22	0.19	0.20	3.05	2.45	2.15	0.84	1.59	1.66
Ireland	IE	3.51	3.72	3.89	3.51	0.84	1.19	1.36	1.43	1.47	1.38	1.45	1.23
Italy	IT	6.01	8.03	7.54	6.01	1.73	1.80	2.70	4.52	4.06	2.86	1.78	1.69
Lithuania	LT	7.32	5.57	5.64	7.32	1.37	1.48	4.85	3.48	3.31	1.42	0.71	0.85
Luxembourg	LU	2.51	3.20	3.92	2.51	0.71	1.27	1.01	1.51	1.92	1.19	0.99	0.73
Latvia	LV	4.94	4.30	5.13	4.94	0.58	1.02	2.41	2.44	2.61	1.07	1.28	1.50
Malta	MT		2.54	3.31		0.67	1.23		1.30	1.29		0.57	0.79
Netherland	NL	4.56	6.14	7.85	4.56	3.50	4.52	0.83	1.31	1.92	1.14	1.33	1.41
Poland	PL	9.72	7.51	7.33	9.72	1.11	0.91	6.56	4.97	4.88	1.50	1.43	1.55
Portugal	PT	12.36	10.60	6.98	12.36	3.18	1.56	6.77	5.26	3.65	2.09	2.17	1.78
Romania	RO	9.72	6.62	6.72	9.72	1.88	2.08	5.50	4.31	4.21	0.51	0.42	0.43
Sweden	SE	3.76	3.69	3.96	3.76	0.93	1.02	1.65	1.70	1.76	1.22	1.05	1.18
Slovenia	SI	4.42	3.69	4.79	4.42	0.31	0.52	3.00	2.33	3.05	1.15	1.05	1.23
Slovakia	SK		3.81	5.29		0.09	0.23		2.68	4.09		1.04	0.97
UK	UK	4.47	4.93	6.37	4.47	2.16	3.01	1.49	1.79	2.45	1.05	0.99	0.91
EU28		5.35	5.71	5.96	1.14	1.35	1.54	2.79	2.94	3.03	1.42	1.42	1.39
EU19			5.76	5.84		1.30	1.42		2.88	2.89		1.57	1.53

Table A13: Activity rates in Europe (EU-28) according to labour market status in per-cent of working-age population (15–64) – ISCED-Level Low: 1998, 2007 and 2014

Country		Total Activity Rate			Standard Employment Rate			Non-standard Employment Rate			Unemployment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	51.68	54.68	53.03	25.57	23.72	19.52	21.10	25.55	27.08	5.01	5.41	6.43
Belgium	BE	46.47	46.09	44.35	25.92	22.81	20.43	13.55	17.21	16.58	7.00	6.07	7.34
Bulgaria	BG		34.10	41.19		19.81	18.49		7.22	10.74		7.07	11.96
Cyprus	CY		54.90	50.15		29.56	17.60		22.48	22.15		2.87	10.40
Czech Rep.	CZ	37.76	30.22	29.35	24.74	17.97	15.64	7.12	6.04	7.07	5.90	6.21	6.64
Germany	DE		53.78	52.05		16.53	17.14		27.83	28.62		9.42	6.29
Denmark	DK	65.27	68.28	60.64	27.81	35.20	25.02	32.42	29.14	29.16	5.04	3.94	6.46
Estonia	EE	41.18	37.82	42.89	29.03	26.79	30.70	5.21	6.68	6.25	6.93	4.35	5.94
Spain	ES	59.07	63.94	66.50	20.47	25.92	20.60	26.39	31.20	23.15	12.21	6.82	22.75
Finland	FI	55.79	53.11	47.60	26.81	25.74	19.50	18.13	20.39	19.45	10.85	6.98	8.65
France	FR	54.01	53.74	49.64	28.08	28.79	23.54	16.76	18.57	17.48	9.17	6.38	8.62
Greece	GR	50.63	53.95	53.22	18.19	23.08	13.64	26.94	26.25	23.42	5.51	4.63	16.16
Croatia	HR		39.50	35.64		18.66	13.84		15.08	11.97		5.75	9.83
Hungary	HU	30.94	32.62	38.16	20.37	20.46	19.05	5.33	6.34	11.86	5.24	5.83	7.25
Ireland	IE		52.95	41.94		26.17	15.41		22.55	17.72		4.23	8.81
Italy	IT	49.89	49.48	49.94	26.75	25.21	21.45	16.28	20.50	19.90	6.86	3.77	8.60
Lithuania	LT	38.52	27.59	27.43	17.16	15.34	12.40	12.73	10.03	6.35	8.64	2.22	8.68
Luxembourg	LU		52.74	46.08		33.31	27.15		16.36	14.11		3.07	4.82
Latvia	LV	39.32	42.74	42.64	18.61	29.06	24.85	11.40	8.74	7.10	9.30	4.94	10.69
Malta	MT		51.14	55.46		33.36	32.14		13.50	18.18		4.27	5.14
Netherland	NL	58.99	64.06	63.04	24.54	21.00	16.39	29.95	39.59	38.77	4.49	3.46	7.88
Poland	PL	35.37	27.51	26.84	13.47	7.52	7.33	15.91	14.89	13.84	5.99	5.10	5.67
Portugal	PT	69.05	71.50	65.92	38.45	37.93	33.10	27.03	27.25	22.11	3.57	6.32	10.71
Romania	RO	46.61	35.22	40.21	16.43	12.17	15.64	27.22	18.66	20.33	2.96	4.40	4.24
Sweden	SE	61.10	57.55	57.24	30.56	24.88	22.50	22.68	25.62	23.27	7.85	7.06	11.48
Slovenia	SI	43.54	43.42	39.41	27.17	26.33	19.50	11.08	13.46	12.35	5.29	3.63	7.56
Slovakia	SK			30.17			9.79			7.89			12.49
UK	UK		66.15	62.08		34.35	30.15		25.44	24.54		6.36	7.39
EU28		52.05	54.05	52.81	24.38	24.49	20.84	20.09	23.61	21.67	7.57	5.96	10.30
EU19				54.61			20.87			22.36			11.38

Table A14: Activity rates in Europe (EU-28) according to labour market status in per-cent of working-age population (15–64) – ISCED-Level Medium: 1998, 2007 and 2014

Country		Total Activity Rate			Standard Employment Rate			Non-standard Employment Rate			Unemployment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	77.65	77.34	77.54	54.43	49.68	45.54	19.53	24.43	28.01	3.69	3.22	3.99
Belgium	BE	68.87	71.03	69.83	40.72	40.25	37.71	21.77	25.30	25.89	6.38	5.48	6.23
Bulgaria	BG		73.84	72.88		59.86	55.00		9.46	10.02		4.51	7.86
Cyprus	CY		76.39	76.32		51.96	40.13		21.36	22.00		3.06	14.19
Czech Rep.	CZ	79.15	76.07	78.24	59.67	55.44	53.29	15.31	17.03	20.16	4.16	3.60	4.79
Germany	DE		79.63	81.45		43.37	45.49		29.56	32.10		6.70	3.86
Denmark	DK	82.13	84.00	82.07	52.19	54.26	50.18	26.02	27.21	26.90	3.92	2.52	4.98
Estonia	EE	78.85	78.40	76.85	60.22	61.89	58.11	10.26	12.69	12.28	8.37	3.81	6.45
Spain	ES	57.41	74.25	73.75	25.87	35.67	30.38	20.15	32.47	25.43	11.38	6.11	17.93
Finland	FI	78.52	79.49	78.02	42.09	46.88	43.60	25.16	26.95	26.96	11.27	5.66	7.46
France	FR	75.84	74.27	73.48	44.06	44.49	40.94	23.19	24.63	24.67	8.59	5.14	7.88
Greece	GR	64.62	65.47	66.63	35.14	38.24	25.79	18.91	20.34	19.95	10.57	6.89	20.90
Croatia	HR		71.43	69.97		46.55	40.55		17.52	16.16		7.36	13.25
Hungary	HU	68.15	69.14	71.93	48.35	50.95	50.57	13.46	13.53	16.01	6.35	4.66	5.36
Ireland	IE		77.36	72.35		47.41	34.63		26.39	27.62		3.56	10.10
Italy	IT	69.15	71.62	70.86	41.85	40.63	35.50	18.54	26.89	26.73	8.76	4.10	8.63
Lithuania	LT	74.82	72.20	74.62	43.93	53.52	50.29	17.57	14.98	13.99	13.32	3.70	10.35
Luxembourg	LU		69.61	70.06		48.22	44.87		19.04	20.71		2.34	4.48
Latvia	LV	75.85	78.64	76.69	50.03	61.93	55.22	13.74	11.99	12.25	12.08	4.72	9.23
Malta	MT		67.49	72.30		48.18	47.99		15.89	21.62		3.42	2.70
Netherland	NL	78.43	82.11	81.99	39.39	31.83	25.92	36.31	47.86	49.84	2.73	2.42	6.24
Poland	PL	74.27	67.24	69.39	47.85	32.08	32.70	18.27	27.96	29.40	8.16	7.20	7.29
Portugal	PT	64.34	70.47	77.73	40.86	41.99	43.03	19.67	22.71	22.73	3.81	5.78	11.97
Romania	RO	73.95	67.28	68.63	57.49	51.37	52.15	10.13	10.93	11.17	6.33	4.98	5.30
Sweden	SE	82.23	85.78	86.38	45.18	47.77	47.86	28.73	33.36	32.36	8.32	4.65	6.15
Slovenia	SI	75.72	74.05	71.75	52.53	48.71	43.30	16.93	21.53	20.57	6.26	3.81	7.87
Slovakia	SK		76.09	76.54		55.78	50.92		13.13	15.95		7.18	9.68
UK	UK		80.84	77.98		47.74	42.57		28.89	29.90		4.20	5.52
EU28		73.15	75.01	75.33	45.85	43.90	41.39	19.69	25.77	26.70	7.62	5.34	7.24
EU19			75.88	76.03		42.88	40.10		27.58	28.09		5.43	7.83

Table A15: Activity rates in Europe (EU-28) according to labour market status in per-cent of working-age population (15–64) – ISCED-Level High: 1998, 2007 and 2014

Country		Total Activity Rate			Standard Employment Rate			Non-standard Employment Rate			Unemployment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	90.73	88.05	86.77	58.81	51.49	48.87	29.78	34.11	34.41	2.14	2.45	3.49
Belgium	BE	86.08	86.86	85.93	53.39	52.86	50.38	29.31	30.69	31.48	3.38	3.30	4.07
Bulgaria	BG		86.48	86.15		73.18	70.20		11.17	11.49		2.13	4.46
Cyprus	CY		89.54	88.77		63.27	51.74		23.20	25.45		3.07	11.58
Czech Rep.	CZ	89.89	85.40	84.57	64.39	60.90	58.63	23.61	23.05	23.48	1.89	1.45	2.46
Germany	DE		88.73	89.96		51.58	53.46		33.69	34.23		3.46	2.27
Denmark	DK	90.15	89.77	89.85	63.10	61.22	60.62	23.98	25.81	24.92	3.08	2.74	4.31
Estonia	EE	86.90	88.92	87.51	70.68	74.32	67.56	11.75	12.39	15.64	4.47	2.20	4.31
Spain	ES	84.28	87.35	88.41	44.06	50.35	46.69	27.15	32.36	28.59	13.06	4.64	13.13
Finland	FI	87.47	88.33	87.78	59.75	63.56	60.89	22.12	21.55	22.36	5.60	3.22	4.53
France	FR	82.70	83.62	86.62	50.92	52.94	52.92	25.67	26.30	28.20	6.11	4.39	5.50
Greece	GR	85.49	88.03	84.50	53.15	57.06	44.80	25.85	24.53	22.52	6.48	6.43	17.18
Croatia	HR		87.91	86.70		64.65	59.25		17.54	19.08		5.73	8.37
Hungary	HU	80.60	82.16	83.39	63.03	64.48	65.71	15.72	15.35	15.03	1.85	2.33	2.65
Ireland	IE		87.96	85.66		62.04	55.95		23.45	24.05		2.47	5.66
Italy	IT	86.58	81.28	81.95	52.26	43.65	41.87	27.88	33.99	33.49	6.43	3.64	6.59
Lithuania	LT	87.82	89.70	92.35	64.96	76.49	76.43	15.34	11.31	11.94	7.52	1.90	3.98
Luxembourg	LU		86.19	86.31		61.04	60.59		22.36	22.28		2.79	3.44
Latvia	LV	87.21	90.61	88.41	67.17	76.64	70.00	13.68	10.63	13.36	6.36	3.34	5.05
Malta	MT		87.16	88.98		69.12	67.37		16.06	19.27		1.98	2.34
Netherland	NL	88.57	89.07	90.39	49.87	39.11	34.71	36.80	48.34	52.00	1.90	1.63	3.68
Poland	PL	89.06	86.72	87.98	69.96	57.50	56.03	17.10	25.15	27.74	2.00	4.07	4.21
Portugal	PT	90.83	91.11	88.28	61.69	55.71	53.69	26.55	28.54	25.70	2.60	6.86	8.89
Romania	RO	89.61	88.38	87.59	80.21	79.82	76.94	6.90	5.94	5.51	2.50	2.62	5.15
Sweden	SE	84.79	90.50	91.39	54.10	54.49	57.22	26.74	32.73	30.12	3.95	3.28	4.06
Slovenia	SI	85.53	90.49	87.41	65.98	68.14	61.16	17.08	19.32	20.64	2.47	3.02	5.62
Slovakia	SK		86.59	80.76		68.94	59.88		14.09	15.68		3.56	5.21
UK	UK		89.49	87.08		60.00	56.01		27.18	28.25		2.31	2.81
EU28		85.75	87.15	87.37	54.83	54.90	53.14	24.93	28.76	28.83	6.00	3.49	5.40
EU19			86.57	87.38		51.71	50.10		31.01	30.85		3.85	6.42

Table A16: Activity rates in Europe (EU-28) according to labour market status in percent of working-age population (15–24) – Age 15–24: 1998, 2007 and 2014

Country		Total Activity Rate			Standard Employment Rate			Non-standard Employment Rate			Unemployment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	58.22	58.93	57.60	33.87	26.95	23.37	19.93	26.31	28.21	4.43	5.67	6.03
Belgium	BE	32.35	33.74	30.05	14.99	15.32	11.48	10.68	12.03	11.54	6.68	6.39	7.03
Bulgaria	BG			26.99			16.08			4.43			6.49
Cyprus	CY		41.26	39.65		24.73	13.31		12.27	11.68		4.26	14.66
Czech Rep.	CZ	45.69	31.76	32.04	33.84	21.43	16.46	6.79	6.89	10.46	5.06	3.44	5.12
Germany	DE	49.68	51.27	49.76	17.92	13.09	14.28	26.84	32.01	31.61	4.93	6.17	3.88
Denmark	DK		70.47	61.45		19.74	10.53		45.39	43.15		5.34	7.77
Estonia	EE	40.86	37.88	38.90	28.57	27.38	23.84	6.18	6.67	9.16	6.11	3.83	5.90
Spain	ES	39.99	47.33	35.38	5.78	11.77	3.27	19.39	26.80	13.02	14.82	8.75	19.10
Finland	FI	49.30	53.09	51.80	10.66	14.74	12.68	21.25	29.47	28.37	17.39	8.88	10.75
France	FR	33.78	38.34	36.81	8.35	11.55	8.99	16.53	19.45	18.89	8.91	7.34	8.93
Greece	GR	35.76	28.31	26.38	14.52	13.19	5.51	8.51	7.82	5.84	12.73	7.30	15.02
Croatia	HR		35.99	33.06		14.82	7.28		11.86	10.35		9.31	15.44
Hungary	HU	37.47	25.60	29.27	25.27	15.85	16.21	5.97	5.10	7.02	6.23	4.65	6.04
Ireland	IE	48.07	55.41	36.70	29.38	32.60	12.02	13.10	17.65	15.66	5.59	5.16	9.02
Italy	IT	36.87	30.25	26.81	15.61	10.36	4.05	7.98	13.56	11.13	13.29	6.33	11.64
Lithuania	LT	41.64	26.67	33.86	21.70	18.89	20.93	8.31	5.49	6.31	11.64	2.28	6.62
Luxembourg	LU			25.12			8.62			10.44			6.06
Latvia	LV	43.56	42.10	40.05	24.15	30.17	25.59	6.90	7.39	6.48	12.51	4.54	7.98
Malta	MT		54.04	52.30		35.22	27.80		11.49	18.34		7.33	6.16
Netherland	NL	65.96	72.28	66.83	18.35	13.28	6.52	41.80	54.61	51.60	5.81	4.39	8.71
Poland	PL	33.06	31.42	32.73	18.38	7.27	6.25	6.88	16.84	18.26	7.80	7.31	8.22
Portugal	PT	45.69	40.91	33.98	23.88	14.53	6.73	17.28	19.42	15.27	4.53	6.96	11.99
Romania	RO	35.53	25.47	23.65	20.06	15.05	12.29	6.63	3.83	3.67	8.83	6.59	7.70
Sweden	SE	39.45	52.05	55.38	12.81	12.41	12.01	19.39	29.53	30.67	7.25	10.11	12.70
Slovenia	SI	39.50	39.81	29.86	17.33	10.78	5.85	13.83	24.66	16.82	8.34	4.37	7.19
Slovakia	SK		34.35	30.94		21.94	14.23		5.34	7.51		7.07	9.20
UK	UK	63.02	60.97	57.50	32.42	29.61	24.91	22.46	22.50	22.70	8.14	8.86	9.90
EU28		43.73	44.01	41.11	18.27	15.74	11.85	16.51	21.21	19.93	8.95	7.06	9.33
EU19			43.75	39.75		13.60	9.39		23.45	20.80		6.70	9.56

Table A17: Activity rates in Europe (EU-28) according to labour market status in percent of working-age population (25–54) – Age 25–54: 1998, 2007 and 2014

Country		Total Activity Rate			Standard Employment Rate			Non-standard Employment Rate			Unemployment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	84.41	86.43	87.94	56.51	53.64	50.36	23.54	29.09	32.99	4.35	3.70	4.59
Belgium	BE	80.94	85.18	85.57	49.25	49.79	48.82	24.79	29.72	30.19	6.90	5.67	6.56
Bulgaria	BG		83.74	83.21		66.94	62.35		11.43	12.06		5.37	8.80
Cyprus	CY		86.62	88.35		58.41	48.48		25.27	27.54		2.94	12.34
Czech Rep.	CZ	88.36	87.73	88.72	66.50	64.25	61.64	17.22	19.13	22.09	4.64	4.35	4.99
Germany	DE	84.29	87.14	87.52	52.18	48.33	50.10	24.49	31.80	33.31	7.62	7.01	4.12
Denmark	DK	87.31	88.83	87.06	59.42	61.38	58.13	23.85	24.66	23.80	4.05	2.78	5.12
Estonia	EE	88.27	88.47	87.07	69.04	71.66	67.37	10.68	13.12	13.45	8.55	3.69	6.24
Spain	ES	75.65	82.98	87.27	34.24	41.82	37.76	28.61	35.13	29.54	12.81	6.02	19.97
Finland	FI	86.90	88.02	86.60	53.89	59.81	56.59	24.39	23.52	23.84	8.62	4.70	6.17
France	FR	86.16	88.09	87.86	52.42	55.57	52.83	24.24	26.36	26.95	9.49	6.16	8.08
Greece	GR	75.60	81.12	83.95	39.42	46.72	35.75	28.83	27.74	25.72	7.36	6.66	22.48
Croatia	HR		81.37	83.98		54.59	51.90		19.59	19.16		7.18	12.92
Hungary	HU	73.78	80.09	84.94	53.44	59.86	61.53	14.00	14.71	17.60	6.34	5.51	5.81
Ireland	IE	75.80	81.72	80.80	45.32	52.60	47.17	24.98	25.71	25.08	5.50	3.41	8.55
Italy	IT	72.76	77.27	76.79	43.66	43.05	37.50	21.75	30.05	30.09	7.35	4.17	9.20
Lithuania	LT	89.35	85.36	89.65	58.16	66.11	66.54	19.33	15.80	14.13	11.87	3.45	8.98
Luxembourg	LU	76.56	84.72	87.91	60.83	58.96	60.57	13.80	22.90	23.02	1.93	2.86	4.32
Latvia	LV	86.92	86.91	87.10	58.59	69.26	64.79	16.51	12.63	13.24	11.82	5.03	9.08
Malta	MT		69.77	79.52		49.25	54.10		16.96	21.72		3.56	3.70
Netherland	NL	82.13	87.55	86.99	44.24	38.47	32.45	34.81	46.88	49.12	3.07	2.21	5.42
Poland	PL	81.90	81.30	84.79	53.03	43.96	45.94	21.07	30.34	31.98	7.80	7.00	6.87
Portugal	PT	83.64	87.64	88.60	51.59	52.21	51.48	28.45	28.59	25.82	3.60	6.84	11.29
Romania	RO	82.88	77.53	80.87	63.72	58.41	60.84	14.57	14.39	14.66	4.59	4.73	5.38
Sweden	SE	87.07	90.03	90.78	51.95	54.07	55.66	27.59	31.98	29.69	7.53	3.97	5.43
Slovenia	SI	87.18	89.13	90.14	64.24	64.97	59.30	17.26	20.10	22.25	5.68	4.05	8.58
Slovakia	SK		86.86	87.31		63.62	59.00		14.34	17.78		8.90	10.52
UK	UK	83.24	84.42	85.93	51.69	54.15	53.14	27.27	27.07	28.84	4.29	3.20	3.96
EU28		81.61	84.09	85.34	50.12	50.37	48.51	24.20	28.37	28.69	7.28	5.36	8.14
EU19			84.59	85.34		48.49	45.73		30.42	30.17		5.68	9.43

Table A18: Activity rates in Europe (EU-28) according to labour market status in percent of working-age population (55–64) – Age 55–64: 1998, 2007 and 2014

Country		Total Activity Rate			Standard Employment Rate			Non-standard Employment Rate			Unemployment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	28.65	35.61	45.54	16.78	20.21	25.20	9.93	14.09	18.50	1.94	1.32	1.83
Belgium	BE	22.99	35.26	44.64	11.91	17.77	21.47	9.80	15.95	20.73	1.28	1.54	2.44
Bulgaria	BG		43.88	56.46		32.78	39.42		7.88	10.40		3.22	6.63
Cyprus	CY		56.84	55.38		33.88	26.82		21.14	19.32		1.83	9.23
Czech Rep.	CZ	38.54	48.01	56.65	23.46	31.43	37.18	13.60	14.34	16.66	1.48	2.25	2.81
Germany	DE	43.89	56.84	68.94	23.19	29.43	37.57	13.79	21.45	27.82	6.92	5.96	3.55
Denmark	DK	52.36	60.88	66.39	30.51	38.33	43.13	19.11	20.45	20.07	2.74	2.10	3.20
Estonia	EE	52.88	62.06	67.65	41.03	48.57	52.04	8.99	11.27	11.92	2.86	2.22	3.68
Spain	ES	38.72	47.05	55.26	17.85	24.73	26.46	16.79	19.47	17.70	4.08	2.84	11.10
Finland	FI	40.70	58.58	63.58	22.75	35.74	38.83	12.42	19.09	20.10	5.53	3.75	4.66
France	FR	30.05	39.76	50.51	15.76	22.71	27.99	11.69	15.00	18.72	2.60	2.05	3.80
Greece	GR	37.02	42.40	40.13	10.52	17.34	12.00	25.15	23.53	20.94	1.34	1.53	7.18
Croatia	HR		38.22	40.51		23.44	25.13		12.39	10.60		2.39	4.78
Hungary	HU	15.89	33.61	44.46	9.25	23.05	28.21	5.53	9.09	13.40	1.12	1.48	2.85
Ireland	IE	43.28	54.72	57.94	19.56	27.17	25.50	21.48	26.20	26.96	2.23	1.35	5.48
Italy	IT	27.98	34.02	48.59	13.55	18.63	27.84	13.05	14.55	18.05	1.37	0.84	2.70
Lithuania	LT	41.50	54.59	62.70	27.17	39.18	43.50	11.68	13.31	12.41	2.66	2.10	6.80
Luxembourg	LU	24.26	32.65	43.86	18.31	20.55	26.68	5.95	11.43	15.25	0.00	0.67	1.92
Latvia	LV	39.39	60.24	62.32	25.46	47.77	44.72	9.35	9.73	11.38	4.57	2.75	6.21
Malta	MT		30.56	40.26		20.33	24.37		9.16	13.29		1.07	2.61
Netherland	NL	33.30	52.45	64.70	14.34	19.27	22.75	18.18	31.26	36.90	0.78	1.91	5.05
Poland	PL	32.34	30.55	44.82	12.53	13.76	23.77	17.83	14.58	17.91	1.99	2.21	3.15
Portugal	PT	51.09	54.21	55.13	20.07	24.00	27.64	29.19	26.62	20.01	1.83	3.59	7.48
Romania	RO	45.99	37.15	41.19	13.25	18.61	24.35	32.39	17.47	15.28	0.35	1.06	1.56
Sweden	SE	66.29	72.79	78.18	35.58	40.51	45.90	26.12	29.39	28.04	4.60	2.89	4.24
Slovenia	SI	19.19	31.71	35.73	10.82	19.56	21.61	7.69	10.97	11.00	0.69	1.18	3.12
Slovakia	SK		38.73	50.07		27.65	33.76		7.89	11.00		3.19	5.31
UK	UK	50.60	59.11	63.36	25.28	31.06	32.41	22.56	26.15	28.37	2.76	1.91	2.57
EU28		38.53	46.43	55.52	18.84	24.86	29.97	16.39	18.93	21.38	3.30	2.63	4.17
EU19			45.72	56.14		24.15	29.70		18.63	21.68		2.94	4.77

Table A19: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–24) – Part-time Work, Age 15–24: 1998, 2007 and 2014

Country		Total Part-time Rate			Temporary Part-time Rate			Open-ended Part-time Rate			Part-time Self-employment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	4.67	8.71	11.47	0.84	1.19	1.60	3.74	7.21	9.45	0.09	0.31	0.43
Belgium	BE	4.63	5.58	6.03	2.04	2.87	2.97	2.53	2.64	2.87	0.06	0.07	0.19
Bulgaria	BG			1.10			0.34			0.63			0.14
Cyprus	CY		3.49	5.19		1.27	1.38		1.59	3.18		0.63	0.63
Czech Rep.	CZ	1.61	1.43	2.88	0.75	0.85	2.03	0.75	0.41	0.63	0.12	0.17	0.21
Germany	DE	4.36	8.83	10.12	1.00	2.74	3.01	3.22	5.80	6.77	0.15	0.28	0.34
Denmark	DK		35.35	35.80		4.87	4.47		30.28	31.11		0.20	0.23
Estonia	EE	3.75	4.71	6.30	0.59	0.76	1.00	2.72	3.96	5.30	0.44	0.00	0.00
Spain	ES	3.32	7.74	6.22	2.58	5.58	4.60	0.60	1.92	1.42	0.14	0.24	0.20
Finland	FI	11.14	16.15	16.66	5.07	5.87	6.08	6.08	10.09	10.27	0.00	0.18	0.31
France	FR	6.71	7.10	6.92	3.79	4.41	4.07	2.88	2.63	2.65	0.04	0.06	0.21
Greece	GR	1.90	2.29	2.49	1.20	1.34	0.82	0.48	0.87	1.46	0.23	0.08	0.22
Croatia	HR		1.29	1.56		0.50	1.36		0.06	0.07		0.73	0.13
Hungary	HU	0.82	1.12	1.55	0.13	0.40	0.80	0.61	0.67	0.74	0.08	0.04	0.02
Ireland	IE	8.62	12.14	12.46	4.13	5.84	6.37	4.41	6.23	5.98	0.07	0.06	0.12
Italy	IT	2.16	4.42	4.62	1.14	1.83	2.20	0.90	1.84	1.70	0.13	0.76	0.72
Lithuania	LT	2.68	2.31	3.41	0.69	0.53	0.39	1.51	1.46	2.76	0.48	0.32	0.26
Luxembourg	LU			4.99			3.17			1.82			0.00
Latvia	LV	3.27	4.20	3.14	1.25	1.10	0.51	1.43	2.73	2.18	0.58	0.37	0.45
Malta	MT		6.80	12.05		2.15	3.43		4.46	8.47		0.19	0.15
Netherland	NL	37.02	47.02	45.69	15.69	22.90	25.64	19.82	22.68	18.06	1.50	1.44	1.99
Poland	PL	2.42	3.01	3.20	0.79	2.27	2.63	1.15	0.51	0.46	0.48	0.23	0.11
Portugal	PT	2.30	2.94	4.62	1.32	1.97	3.30	0.71	0.66	1.07	0.26	0.31	0.25
Romania	RO	2.54	1.22	1.10	0.43	0.06	0.11	0.24	0.14	0.10	1.88	1.02	0.89
Sweden	SE	12.82	14.32	20.95	7.52	8.88	14.37	5.11	5.23	6.25	0.19	0.22	0.32
Slovenia	SI	0.86	8.63	7.44	0.63	8.22	7.20	0.23	0.20	0.24	0.00	0.21	0.00
Slovakia	SK		0.81	2.39		0.42	2.20		0.36	0.12		0.03	0.07
UK	UK	17.70	17.70	18.00	3.10	3.58	3.83	14.15	13.72	13.49	0.45	0.40	0.68
EU28		6.93	9.30	9.93	2.43	3.76	4.12	4.16	5.18	5.37	0.34	0.36	0.43
EU19				9.38			4.53			4.42			0.43

Table A20: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (25–54) – Part-time Work, Age 25–54: 1998, 2007 and 2014

Country		Total Part-time Rate			Temporary Part-time Rate			Open-ended Part-time Rate			Part-time Self-employment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	12.64	18.14	22.44	0.58	1.03	1.35	11.38	16.04	19.61	0.69	1.07	1.48
Belgium	BE	11.51	17.01	17.28	1.22	1.79	1.73	9.95	14.73	14.98	0.34	0.48	0.57
Bulgaria	BG		0.74	1.39		0.22	0.41		0.41	0.59		0.12	0.39
Cyprus	CY		3.81	8.72		0.44	1.12		2.08	4.26		1.28	3.35
Czech Rep.	CZ	3.67	2.82	3.76	0.41	0.61	0.99	2.96	1.86	2.14	0.30	0.35	0.64
Germany	DE	13.82	20.09	21.60	1.14	2.37	2.44	11.95	16.38	17.95	0.73	1.34	1.21
Denmark	DK	13.40	14.13	13.54	1.54	1.77	1.35	11.46	11.85	11.59	0.40	0.52	0.61
Estonia	EE	4.04	4.62	5.19	0.28	0.24	0.26	3.09	3.48	3.99	0.67	0.90	0.94
Spain	ES	4.11	7.57	9.98	1.77	3.11	3.81	1.79	3.81	5.47	0.55	0.65	0.70
Finland	FI	6.23	6.81	7.15	2.12	1.85	1.67	3.32	4.06	4.53	0.79	0.90	0.95
France	FR	11.76	12.84	13.36	2.47	2.59	2.84	8.89	9.81	9.47	0.40	0.45	1.05
Greece	GR	2.59	3.09	5.17	1.00	1.08	1.18	0.75	1.25	3.03	0.84	0.76	0.96
Croatia	HR		3.03	2.38		0.17	0.73		0.39	0.76		2.47	0.89
Hungary	HU	1.80	2.20	3.93	0.21	0.43	0.89	1.26	1.62	2.89	0.33	0.15	0.15
Ireland	IE	10.21	11.27	13.75	1.53	1.40	2.12	7.77	9.06	10.28	0.90	0.81	1.35
Italy	IT	4.19	9.47	12.13	1.26	1.44	1.95	2.44	6.55	8.49	0.49	1.48	1.70
Lithuania	LT	5.47	5.64	5.51	0.69	0.47	0.19	3.28	3.11	3.90	1.50	2.05	1.43
Luxembourg	LU	6.96	14.55	14.38	0.48	0.79	1.12	6.28	13.30	12.24	0.20	0.46	1.02
Latvia	LV	6.62	2.88	4.03	1.58	0.16	0.35	2.93	1.99	2.71	2.11	0.73	0.97
Malta	MT		6.21	9.78		0.82	1.16		4.73	7.34		0.66	1.28
Netherland	NL	26.09	33.78	34.66	3.59	4.65	5.84	20.55	26.38	24.88	1.95	2.74	3.94
Poland	PL	4.07	3.89	3.80	0.68	1.43	1.53	1.86	1.37	1.43	1.53	1.09	0.85
Portugal	PT	5.02	5.18	5.73	0.77	1.66	2.09	2.00	1.53	2.05	2.25	1.99	1.59
Romania	RO	4.68	3.49	3.68	0.25	0.05	0.08	0.68	0.25	0.29	3.75	3.19	3.31
Sweden	SE	15.99	17.40	17.22	3.34	2.99	4.04	11.96	13.58	12.26	0.69	0.82	0.92
Slovenia	SI	2.35	3.29	4.82	0.29	1.20	1.53	1.56	1.76	2.71	0.50	0.33	0.58
Slovakia	SK		1.53	3.34		0.27	2.11		1.18	0.98		0.08	0.26
UK	UK	16.59	16.43	17.52	1.66	1.14	1.29	13.36	13.54	13.82	1.57	1.75	2.41
EU28		9.94	11.97	13.33	1.46	1.84	2.17	7.47	8.92	9.75	1.01	1.22	1.41
EU19			13.41	15.01		2.23	2.61		10.08	11.10		1.10	1.30

Table A21: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (55–64) – Part-time Work, Age 55–64: 1998, 2007 and 2014

Country		Total Part-time Rate			Temporary Part-time Rate			Open-ended Part-time Rate			Part-time Self-employment Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	3.59	7.57	10.75	0.11	0.43	0.39	2.85	6.19	9.03	0.62	0.94	1.32
Belgium	BE	2.84	8.63	13.19	0.14	0.69	0.72	2.25	7.24	11.71	0.44	0.71	0.76
Bulgaria	BG		1.08	1.60		0.22	0.33		0.59	0.85		0.28	0.42
Cyprus	CY		5.29	7.36		0.32	0.35		2.30	2.81		2.68	4.20
Czech Rep.	CZ	5.83	3.86	4.18	4.54	2.34	1.35	0.84	0.85	1.82	0.45	0.68	1.00
Germany	DE	7.31	13.80	19.19	0.30	0.95	1.06	6.47	11.67	16.75	0.54	1.18	1.37
Denmark	DK	10.69	12.71	12.54	0.64	1.06	0.55	8.68	10.89	11.15	1.37	0.76	0.84
Estonia	EE	5.61	5.56	6.10	0.00	0.16	0.11	4.80	4.86	4.72	0.81	0.54	1.27
Spain	ES	2.27	4.19	5.14	0.45	0.99	0.91	1.17	2.38	3.38	0.64	0.81	0.85
Finland	FI	4.46	9.16	9.56	0.32	1.02	1.03	2.74	6.60	6.52	1.39	1.54	2.01
France	FR	5.61	7.65	10.75	0.63	1.11	2.05	4.55	6.02	7.59	0.43	0.52	1.11
Greece	GR	2.14	1.87	2.20	0.25	0.22	0.21	0.28	0.57	0.91	1.61	1.08	1.08
Croatia	HR		4.23	2.72		0.16	0.43		0.24	0.27		3.83	2.03
Hungary	HU	2.23	2.79	4.11	0.70	0.47	0.79	0.99	1.89	2.94	0.55	0.43	0.38
Ireland	IE	6.79	11.67	13.69	0.95	1.39	1.64	4.53	8.64	9.93	1.31	1.64	2.11
Italy	IT	1.33	3.31	5.95	0.41	0.29	0.58	0.53	1.82	3.99	0.39	1.20	1.38
Lithuania	LT	4.04	6.57	5.90	0.57	0.31	0.27	2.52	3.77	3.81	0.95	2.49	1.81
Luxembourg	LU	2.09	7.32	8.87	0.00	0.22	0.52	1.80	6.66	7.22	0.29	0.43	1.13
Latvia	LV	4.21	3.87	5.02	0.67	0.26	0.22	1.31	2.46	3.64	2.23	1.16	1.16
Malta	MT		3.09	6.23		0.20	0.94		2.22	4.59		0.67	0.70
Netherland	NL	12.11	24.44	28.56	1.52	2.24	2.01	8.14	18.39	21.62	2.45	3.81	4.93
Poland	PL	7.98	4.93	4.17	1.30	1.47	1.44	3.48	1.65	1.58	3.20	1.81	1.16
Portugal	PT	9.51	10.12	8.29	0.71	1.09	1.16	2.24	2.13	2.28	6.56	6.90	4.84
Romania	RO	10.83	4.83	4.85	0.13	0.01	0.06	0.19	0.12	0.20	10.51	4.69	4.59
Sweden	SE	16.95	19.13	18.03	1.56	1.64	2.29	13.85	15.47	13.91	1.54	2.02	1.83
Slovenia	SI	1.47	3.98	3.30	0.00	1.27	0.86	0.43	1.36	1.54	1.03	1.36	0.90
Slovakia	SK		2.01	2.78		0.70	1.50		1.25	1.09		0.06	0.18
UK	UK	14.44	17.58	18.92	1.64	1.49	1.55	10.67	12.96	13.23	2.12	3.13	4.14
EU28		6.81	9.24	11.14	0.74	1.00	1.16	4.51	6.57	8.12	1.56	1.68	1.86
EU19			8.70	11.68		0.88	1.14		6.50	9.02		1.32	1.52

Table A22: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–24) – Temporary Work, Age 15–24: 1998, 2007 and 2014

Country		Total Temporary Work Rate			Temporary Part-time Rate			Temporary Full-time Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	15.42	18.23	17.73	0.84	1.19	1.60	14.58	17.04	16.13
Belgium	BE	6.71	8.30	7.45	2.04	2.87	2.97	4.67	5.43	4.48
Bulgaria	BG			2.82			0.34			2.49
Cyprus	CY		8.00	7.43		1.27	1.38		6.73	6.05
Czech Rep.	CZ	3.23	4.59	8.16	0.75	0.85	2.03	2.43	3.74	6.13
Germany	DE	23.07	25.48	24.14	1.00	2.74	3.01	22.07	22.74	21.12
Denmark	DK		14.50	11.30		4.87	4.47		9.63	6.83
Estonia	EE	1.60	2.23	3.69	0.59	0.76	1.00	1.01	1.47	2.69
Spain	ES	17.39	23.01	10.51	2.58	5.58	4.60	14.81	17.44	5.91
Finland	FI	14.27	18.28	16.98	5.07	5.87	6.08	9.20	12.40	10.90
France	FR	13.15	16.32	15.61	3.79	4.41	4.07	9.36	11.91	11.54
Greece	GR	5.43	5.06	2.90	1.20	1.34	0.82	4.23	3.72	2.09
Croatia	HR		9.88	9.82		0.50	1.36		9.39	8.46
Hungary	HU	3.42	3.85	5.68	0.13	0.40	0.80	3.02	3.45	4.88
Ireland	IE	7.81	10.45	9.22	4.13	5.84	6.37	3.67	4.61	2.85
Italy	IT	5.03	8.89	7.33	1.14	1.83	2.20	3.89	7.06	5.13
Lithuania	LT	3.77	2.39	2.21	0.69	0.53	0.39	3.07	1.86	1.82
Luxembourg	LU			8.62			3.17			5.45
Latvia	LV	3.74	3.27	2.49	1.25	1.10	0.51	2.49	2.16	1.98
Malta	MT		4.96	8.49		2.15	3.43		2.81	5.06
Netherland	NL	19.87	29.58	30.67	15.69	22.90	25.64	4.14	6.68	5.03
Poland	PL	2.82	14.90	16.56	0.79	2.27	2.63	1.93	12.63	13.93
Portugal	PT	14.20	17.20	13.27	1.32	1.97	3.30	12.88	15.23	9.97
Romania	RO	2.20	0.74	0.94	0.43	0.06	0.11	1.77	0.68	0.83
Sweden	SE	13.52	23.58	23.46	7.52	8.88	14.37	5.82	9.13	9.00
Slovenia	SI	12.42	23.65	16.21	0.63	8.22	7.20	11.79	15.43	9.01
Slovakia	SK		3.53	5.63		0.42	2.20		3.11	3.43
UK	UK	6.66	6.68	6.90	3.10	3.58	3.83	3.55	3.10	3.07
EU28		11.24	14.67	13.19	2.44	3.68	4.12	8.78	10.88	9.06
EU19				17.77			4.25			13.51

Table A23: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (25–54) – Temporary Work, Age 25–54: 1998, 2007 and 2014

Country		Total Temporary Work Rate			Temporary Part-time Rate			Temporary Full-time Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	2.82	3.12	3.93	0.58	1.03	1.35	2.24	2.10	2.58
Belgium	BE	3.70	4.57	4.86	1.22	1.79	1.73	2.46	2.78	3.13
Bulgaria	BG		3.16	3.15		0.22	0.41		2.81	2.74
Cyprus	CY		9.03	12.31		0.44	1.12		8.58	11.20
Czech Rep.	CZ	2.19	3.91	5.60	0.41	0.61	0.99	1.76	3.30	4.61
Germany	DE	4.90	6.50	6.97	1.14	2.37	2.44	3.77	4.13	4.53
Denmark	DK	5.18	5.43	5.10	1.54	1.77	1.35	3.57	3.65	3.76
Estonia	EE	0.92	1.24	1.92	0.28	0.24	0.26	0.64	1.01	1.66
Spain	ES	14.12	18.93	13.39	1.77	3.11	3.81	12.35	15.82	9.57
Finland	FI	10.36	9.68	9.00	2.12	1.85	1.67	8.24	7.83	7.32
France	FR	7.01	8.22	8.94	2.47	2.59	2.84	4.55	5.63	6.10
Greece	GR	5.28	5.31	4.82	1.00	1.08	1.18	4.27	4.24	3.64
Croatia	HR		6.91	9.46		0.17	0.73		6.75	8.72
Hungary	HU	3.27	4.27	6.96	0.21	0.43	0.89	2.76	3.84	6.07
Ireland	IE	3.37	3.65	4.28	1.53	1.40	2.12	1.83	2.25	2.16
Italy	IT	3.37	6.36	6.68	1.26	1.44	1.95	2.11	4.93	4.74
Lithuania	LT	3.66	2.24	1.55	0.69	0.47	0.19	2.97	1.77	1.37
Luxembourg	LU	1.22	4.02	4.81	0.48	0.79	1.12	0.75	3.23	3.68
Latvia	LV	4.96	2.54	1.89	1.58	0.16	0.35	3.38	2.38	1.54
Malta	MT		2.14	3.56		0.82	1.16		1.31	2.40
Netherland	NL	5.87	9.63	11.01	3.59	4.65	5.84	2.27	4.98	5.17
Poland	PL	2.38	14.30	16.35	0.68	1.43	1.53	1.57	12.87	14.83
Portugal	PT	8.42	13.15	13.17	0.77	1.66	2.09	7.65	11.49	11.08
Romania	RO	1.39	0.82	0.78	0.25	0.05	0.08	1.14	0.77	0.70
Sweden	SE	7.53	10.09	9.72	3.34	2.99	4.04	4.05	5.71	5.66
Slovenia	SI	5.50	9.87	9.63	0.29	1.20	1.53	5.20	8.66	8.10
Slovakia	SK		2.50	4.79		0.27	2.11		2.23	2.69
UK	UK	4.03	2.96	3.32	1.66	1.14	1.29	2.37	1.82	2.02
EU28		5.35	7.80	7.81	1.46	1.84	2.17	3.87	5.94	5.64
EU19			8.69	8.29		2.23	2.61		6.46	5.67

Table A24: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (55–64) – Temporary Work, Age 55–64: 1998, 2007 and 2014

Country		Total Temporary Work Rate			Temporary Part-time Rate			Temporary Full-time Rate		
		1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	0.64	0.89	1.01	0.11	0.43	0.39	0.53	0.46	0.61
Belgium	BE	0.32	1.00	1.05	0.14	0.69	0.72	0.17	0.31	0.33
Bulgaria	BG		2.15	1.90		0.22	0.33		1.84	1.57
Cyprus	CY		1.91	3.18		0.32	0.35		1.60	2.83
Czech Rep.	CZ	8.72	5.56	3.32	4.54	2.34	1.35	4.10	3.22	1.97
Germany	DE	1.27	1.94	2.01	0.30	0.95	1.06	0.97	0.99	0.95
Denmark	DK	1.54	2.30	1.98	0.64	1.06	0.55	0.91	1.24	1.43
Estonia	EE	0.32	0.85	0.74	0.00	0.16	0.11	0.32	0.69	0.62
Spain	ES	2.93	4.26	3.13	0.45	0.99	0.91	2.48	3.27	2.22
Finland	FI	1.03	3.05	3.25	0.32	1.02	1.03	0.70	2.04	2.22
France	FR	1.13	2.19	3.39	0.63	1.11	2.05	0.50	1.08	1.34
Greece	GR	1.32	1.19	1.10	0.25	0.22	0.21	1.07	0.96	0.89
Croatia	HR		0.99	1.86		0.16	0.43		0.83	1.43
Hungary	HU	1.56	1.38	3.26	0.70	0.47	0.79	0.79	0.91	2.48
Ireland	IE	1.43	2.06	2.21	0.95	1.39	1.64	0.48	0.67	0.57
Italy	IT	0.88	1.36	1.81	0.41	0.29	0.58	0.47	1.07	1.24
Lithuania	LT	1.65	1.26	1.19	0.57	0.31	0.27	1.09	0.95	0.91
Luxembourg	LU	0.00	0.41	1.54	0.00	0.22	0.52	0.00	0.18	1.02
Latvia	LV	1.84	1.68	1.68	0.67	0.26	0.22	1.18	1.42	1.47
Malta	MT		0.70	1.89		0.20	0.94		0.50	0.95
Netherland	NL	1.86	2.88	2.81	1.52	2.24	2.01	0.34	0.64	0.80
Poland	PL	1.71	3.82	5.64	1.30	1.47	1.44	0.41	2.35	4.20
Portugal	PT	2.36	3.14	3.50	0.71	1.09	1.16	1.65	2.04	2.33
Romania	RO	0.41	0.15	0.20	0.13	0.01	0.06	0.28	0.14	0.15
Sweden	SE	2.99	4.28	4.30	1.56	1.64	2.29	1.43	1.89	2.01
Slovenia	SI	0.00	1.98	2.16	0.00	1.27	0.86	0.00	0.71	1.30
Slovakia	SK		1.80	2.64		0.70	1.50		1.10	1.14
UK	UK	2.55	2.32	2.59	1.64	1.49	1.55	0.90	0.81	1.03
EU28		1.70	2.35	2.67	0.75	1.00	1.16	0.94	1.33	1.51
EU19			2.19	2.41		0.88	1.14		1.30	1.27

Table A25: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (15–24) – Self-employment, Age 15–24: 1998, 2007 and 2014

Country		Total Self-employment Rate			Part-time Self-employment Rate			Full-time Self-employment Rate			Self-employed with employees		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	0.77	0.87	1.03	0.09	0.31	0.43	0.36	0.38	0.37	0.32	0.18	0.23
Belgium	BE	1.44	1.09	1.22	0.06	0.07	0.19	1.34	0.81	0.80	0.04	0.21	0.23
Bulgaria	BG			0.98			0.14			0.67			0.17
Cyprus	CY		2.68	1.06		0.63	0.63		1.65	0.43		0.41	0.00
Czech Rep.	CZ	2.82	1.88	1.66	0.12	0.17	0.21	2.36	1.54	1.38	0.34	0.18	0.07
Germany	DE	0.56	0.73	0.70	0.15	0.28	0.34	0.26	0.31	0.24	0.15	0.14	0.12
Denmark	DK		0.62	0.75		0.20	0.23		0.22	0.29		0.20	0.23
Estonia	EE	1.86	0.48	0.18	0.44	0.00	0.00	1.18	0.40	0.00	0.23	0.08	0.18
Spain	ES	1.40	1.86	1.09	0.14	0.24	0.20	1.13	1.30	0.79	0.14	0.32	0.10
Finland	FI	0.90	1.09	1.12	0.00	0.18	0.31	0.70	0.73	0.67	0.20	0.18	0.14
France	FR	0.49	0.51	0.63	0.04	0.06	0.21	0.28	0.34	0.31	0.18	0.10	0.11
Greece	GR	2.60	1.89	1.48	0.23	0.08	0.22	1.87	1.45	1.11	0.50	0.36	0.15
Croatia	HR		1.91	0.45		0.73	0.13		1.18	0.18		0.00	0.14
Hungary	HU	1.94	0.58	0.60	0.08	0.04	0.02	1.46	0.35	0.35	0.40	0.19	0.23
Ireland	IE	0.88	0.97	0.46	0.07	0.06	0.12	0.67	0.69	0.31	0.14	0.22	0.04
Italy	IT	2.05	2.83	2.10	0.13	0.76	0.72	0.97	1.65	1.11	0.96	0.43	0.27
Lithuania	LT	3.03	1.64	1.34	0.48	0.32	0.26	2.04	1.19	0.93	0.51	0.13	0.15
Luxembourg	LU			0.00			0.00			0.00			0.00
Latvia	LV	1.73	1.40	1.81	0.58	0.37	0.45	0.77	0.85	1.06	0.38	0.17	0.30
Malta	MT		2.07	1.38		0.19	0.15		1.46	0.67		0.42	0.56
Netherland	NL	2.11	2.36	2.87	1.50	1.44	1.99	0.53	0.70	0.73	0.07	0.21	0.15
Poland	PL	2.91	1.43	1.24	0.48	0.23	0.11	2.11	1.05	0.94	0.32	0.15	0.19
Portugal	PT	2.37	1.57	0.93	0.26	0.31	0.25	1.63	0.96	0.48	0.48	0.29	0.20
Romania	RO	4.20	2.96	2.64	1.88	1.02	0.89	2.23	1.89	1.73	0.09	0.05	0.01
Sweden	SE	0.77	0.73	0.95	0.19	0.22	0.32	0.38	0.39	0.40	0.19	0.12	0.24
Slovenia	SI	1.18	0.81	0.37	0.00	0.21	0.00	0.77	0.34	0.37	0.42	0.25	0.00
Slovakia	SK		1.44	1.75		0.03	0.07		1.29	1.62		0.12	0.07
UK	UK	1.65	2.09	2.30	0.45	0.40	0.68	1.03	1.57	1.48	0.17	0.12	0.15
EU28		1.68	1.54	1.38	0.34	0.36	0.43	1.04	0.99	0.79	0.30	0.19	0.15
EU19				1.18			0.43			0.60			0.15

Table A26: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (25–54) – Self-employment, Age 25–54: 1998, 2007 and 2014

Country		Total Self-employment Rate			Part-time Self-employment Rate			Full-time Self-employment Rate			Self-employed with employees		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	9.35	9.93	9.46	0.69	1.07	1.48	4.29	4.56	4.11	4.37	4.29	3.87
Belgium	BE	11.14	10.42	10.35	0.34	0.48	0.57	9.48	6.34	6.54	1.32	3.59	3.23
Bulgaria	BG		7.87	8.32		0.12	0.39		4.18	5.16		3.57	2.77
Cyprus	CY		14.16	10.97		1.28	3.35		7.77	5.11		5.11	2.51
Czech Rep.	CZ	12.07	13.35	14.35	0.30	0.35	0.64	7.68	9.89	10.98	4.08	3.12	2.73
Germany	DE	7.64	8.92	8.38	0.73	1.34	1.21	3.10	3.69	3.44	3.81	3.90	3.73
Denmark	DK	7.20	7.39	7.11	0.40	0.52	0.61	3.01	3.38	3.48	3.80	3.49	3.02
Estonia	EE	6.67	8.39	7.54	0.67	0.90	0.94	3.45	4.17	3.74	2.54	3.32	2.86
Spain	ES	12.70	12.39	10.68	0.55	0.65	0.70	8.65	7.61	6.88	3.49	4.13	3.10
Finland	FI	10.71	9.78	10.31	0.79	0.90	0.95	6.93	5.49	5.82	2.99	3.38	3.55
France	FR	8.34	8.33	8.54	0.40	0.45	1.05	4.30	4.24	4.18	3.64	3.65	3.31
Greece	GR	22.80	21.18	17.88	0.84	0.76	0.96	16.22	14.33	13.12	5.74	6.08	3.80
Croatia	HR		12.29	8.95		2.47	0.89		5.51	4.18		4.31	3.88
Hungary	HU	9.47	8.82	7.74	0.33	0.15	0.15	6.95	4.75	3.69	2.19	3.93	3.91
Ireland	IE	13.84	13.01	10.52	0.90	0.81	1.35	8.12	7.22	6.01	4.81	4.97	3.16
Italy	IT	15.95	17.14	14.92	0.49	1.48	1.70	7.37	10.74	9.15	8.08	4.91	4.07
Lithuania	LT	12.39	10.44	8.68	1.50	2.05	1.43	7.77	6.48	5.31	3.11	1.91	1.95
Luxembourg	LU	6.29	5.58	5.97	0.20	0.46	1.02	2.26	2.76	3.24	3.83	2.36	1.71
Latvia	LV	8.63	8.10	8.64	2.11	0.73	0.97	3.82	4.06	4.29	2.70	3.31	3.37
Malta	MT		10.09	10.81		0.66	1.28		5.86	6.24		3.58	3.29
Netherland	NL	8.40	10.87	13.23	1.95	2.74	3.94	2.98	4.37	5.69	3.46	3.75	3.60
Poland	PL	16.84	14.68	14.20	1.53	1.09	0.85	11.77	10.37	10.18	3.54	3.21	3.17
Portugal	PT	18.03	13.91	10.61	2.25	1.99	1.59	10.34	7.52	5.30	5.44	4.40	3.72
Romania	RO	12.50	13.32	13.59	3.75	3.19	3.31	7.30	8.79	9.23	1.45	1.34	1.05
Sweden	SE	8.09	8.32	7.72	0.69	0.82	0.92	4.13	4.03	3.66	3.27	3.46	3.14
Slovenia	SI	10.21	8.48	9.91	0.50	0.33	0.58	6.29	5.23	6.36	3.42	2.92	2.98
Slovakia	SK		10.66	12.01		0.08	0.26		8.04	9.32		2.54	2.44
UK	UK	9.88	10.57	11.70	1.57	1.75	2.41	5.67	6.33	7.22	2.64	2.49	2.07
EU28		11.41	11.65	11.13	1.01	1.22	1.41	6.39	6.76	6.52	4.01	3.68	3.20
EU19			11.65	10.79		1.10	1.30		6.45	5.95		4.10	3.54

Table A27: Non-standard employment rates in Europe (EU-28) according to types of non-standard employment in percent of working-age population (55–64) – Self-employment, Age 55–64: 1998, 2007 and 2014

Country		Total Self-employment Rate			Part-time Self-employment Rate			Full-time Self-employment Rate			Self-employed with employees		
		1998	2007	2014	1998	2007	2014	1998	2007	2014	1998	2007	2014
Austria	AT	6.44	7.01	8.47	0.62	0.94	1.32	2.76	2.76	3.01	3.06	3.31	4.13
Belgium	BE	7.23	7.71	7.96	0.44	0.71	0.76	5.80	4.49	4.84	0.99	2.51	2.36
Bulgaria	BG		5.15	7.66		0.28	0.42		2.89	4.94		1.98	2.30
Cyprus	CY		16.93	13.33		2.68	4.20		9.48	5.66		4.77	3.47
Czech Rep.	CZ	4.04	7.93	11.51	0.45	0.68	1.00	2.25	4.78	7.63	1.34	2.47	2.89
Germany	DE	6.05	7.84	9.06	0.54	1.18	1.37	2.02	2.82	3.47	3.49	3.83	4.21
Denmark	DK	8.89	7.26	6.93	1.37	0.76	0.84	3.34	3.14	3.30	4.17	3.36	2.80
Estonia	EE	3.87	5.56	6.47	0.81	0.54	1.27	2.36	3.31	2.62	0.70	1.71	2.58
Spain	ES	12.69	12.83	11.20	0.64	0.81	0.85	9.16	7.76	6.70	2.88	4.26	3.64
Finland	FI	8.65	9.44	10.33	1.39	1.54	2.01	5.43	4.69	5.27	1.82	3.20	3.04
France	FR	6.01	6.79	7.73	0.43	0.52	1.11	3.06	3.45	3.69	2.52	2.83	2.93
Greece	GR	23.55	21.77	18.94	1.61	1.08	1.08	18.06	15.11	14.44	3.88	5.58	3.41
Croatia	HR		11.15	8.47		3.83	2.03		4.59	4.22		2.73	2.22
Hungary	HU	2.98	5.82	7.20	0.55	0.43	0.38	1.80	2.98	3.69	0.63	2.40	3.12
Ireland	IE	15.52	15.50	14.82	1.31	1.64	2.11	9.39	9.06	8.66	4.82	4.80	4.05
Italy	IT	11.65	11.37	12.25	0.39	1.20	1.38	5.08	6.49	6.84	6.17	3.69	4.02
Lithuania	LT	7.50	8.28	7.41	0.95	2.49	1.81	5.70	4.78	4.10	0.85	1.01	1.50
Luxembourg	LU	4.15	4.36	6.49	0.29	0.43	1.13	1.28	2.09	3.20	2.58	1.84	2.15
Latvia	LV	6.20	5.59	6.06	2.23	1.16	1.16	2.83	3.22	2.85	1.13	1.22	2.04
Malta	MT		6.24	6.81		0.67	0.70		3.31	3.79		2.26	2.32
Netherland	NL	8.18	9.98	12.47	2.45	3.81	4.93	2.94	3.32	4.28	2.78	2.85	3.25
Poland	PL	12.64	9.11	10.69	3.20	1.81	1.16	8.08	5.36	6.92	1.36	1.95	2.62
Portugal	PT	24.59	21.35	14.23	6.56	6.90	4.84	13.02	9.61	5.76	5.01	4.84	3.62
Romania	RO	31.79	17.19	14.88	10.51	4.69	4.59	20.79	11.80	9.76	0.49	0.71	0.52
Sweden	SE	9.28	9.65	9.83	1.54	2.02	1.83	4.13	4.12	4.56	3.60	3.50	3.45
Slovenia	SI	7.25	7.62	7.31	1.03	1.36	0.90	5.27	4.08	4.69	0.95	2.18	1.72
Slovakia	SK		4.84	7.27		0.06	0.18		3.03	5.20		1.76	1.89
UK	UK	9.34	10.87	12.55	2.12	3.13	4.14	4.73	5.41	6.27	2.49	2.33	2.14
EU28		10.21	10.02	10.59	1.56	1.68	1.86	5.22	5.25	5.59	3.13	3.09	3.14
EU19			9.95	10.24		1.32	1.52		5.07	5.15		3.55	3.57

Table A28: Change of sectoral shares of non-standard forms of employment between 2008 and 2014 in percentage points

A: Part-time	EU-27	GE	UK	GR
Manufacturing	0.77	0.64	0.14	4.16
Retail and Repair	1.57	-0.02	-0.02	3.95
Hotel, Restaurants	4.94	3.96	0.20	8.09
Public Administration	2.24	3.04	3.76	1.94
Education	1.46	0.06	-2.55	0.57
Health, Social Services	1.48	2.15	-0.54	2.30
Household Activities	1.78	0.80	14.02	21.92
Agriculture	-0.87	0.48	0.11	-2.61
Construction	1.76	0.19	0.18	14.76
Transport	1.05	-0.54	2.02	4.02
Total	**2.16**	**1.62**	**1.14**	**3.97**

B: Temporary Work	EU-27	GE	UK	GR
Manufacturing	0.29	-1.33	1.51	0.54
Retail and Repair	0.31	-0.76	0.41	0.04
Hotel, Restaurants	0.97	-2.24	0.74	3.32
Public Administration	-0.38	-1.78	0.11	-1.22
Education	-0.15	-0.55	-0.63	0.57
Health, Social Services	-0.61	-2.26	0.69	-2.87
Household Activities	-4.86	-3.13	3.05	-1.50
Agriculture	1.63	-2.70	-0.71	0.17
Construction	-2.72	-2.00	0.56	1.92
Transport	1.17	-0.22	1.85	-0.20
Total	**-0.10**	**-1.42**	**0.77**	**-0.22**