

Eichhorst, Werner; Wozny, Florian; Mähönen, Erno

Working Paper

What Is a Good Job?

IZA Discussion Papers, No. 9461

Provided in Cooperation with:

IZA – Institute of Labor Economics

Suggested Citation: Eichhorst, Werner; Wozny, Florian; Mähönen, Erno (2015) : What Is a Good Job?, IZA Discussion Papers, No. 9461, Institute for the Study of Labor (IZA), Bonn

This Version is available at:

<http://hdl.handle.net/10419/124987>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

IZA DP No. 9461

What Is a Good Job?

Werner Eichhorst
Florian Wozny
Erno Mähönen

October 2015

What Is a Good Job?

Werner Eichhorst

IZA

Florian Wozny

IZA

Erno Mähönen

University of Jyväskylä

Discussion Paper No. 9461

October 2015

IZA

P.O. Box 7240
53072 Bonn
Germany

Phone: +49-228-3894-0

Fax: +49-228-3894-180

E-mail: iza@iza.org

Any opinions expressed here are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit organization supported by Deutsche Post Foundation. The center is associated with the University of Bonn and offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral program. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ABSTRACT

What Is a Good Job?

After the apparent rise of so-called atypical and ‘precarious’ jobs, the quality of employment has become of interest because such employment relationships are often related to objectively or subjectively worse working conditions. In this paper we look in detail into what is known about job quality, what kinds of effects it has on job satisfaction, and how the quality of jobs has changed in the past by assessing objective and subjective indicators for different educational groups. Results show that a general negative trend in the development of work quality cannot be observed, neither for ‘hard’ indicators such as the share of temporary employment or unusual working time nor for ‘soft’ indicators like job satisfaction or perceptions about job security. Developments are rather country-specific, and even within countries differences occur between educational groups.

JEL Classification: J21, J28

Keywords: quality of employment, good jobs, non-standard work, job satisfaction

Corresponding author:

Werner Eichhorst
IZA
P.O. Box 7240
53072 Bonn
Germany
E-mail: Eichhorst@iza.org

1. Introduction

The quality of employment or the quality of jobs was long neglected in both academic and political discourse about labour markets. More emphasis was put on the total number of jobs or on the level of unemployment. However, after the apparent rise of so-called 'atypical' and 'precarious' jobs, the quality of employment became of interest because such employment relationships are often related to objectively worse working conditions, such as lower wages and less job security.

Discussions about the quality of employment are inevitably connected to job satisfaction. However, there is some evidence that reported job satisfaction might not change even if objective working conditions get undeniably worse. This is why the relation between job quality and job satisfaction is one major issue of this paper.

The foundation for this discussion, however, is based on the connection between job satisfaction and life satisfaction. The importance of job satisfaction is demonstrated by a strong positive correlation between job and life satisfaction in observed countries (Figure 1a). From a static point of view, this correlation can be explained by at least two factors. 1) Life satisfaction is strongly driven by job satisfaction because work is a major part of someone's life. This can be the case, for example, if someone believes that work is meaningful or only because it accounts for a large part of lifetime. 2) Results refer to and stem from survey data, which is why static differences are possibly driven by cultural norms of stating levels of satisfaction in particular ways. Thus, Figure 1b plots the percentage changes in life and job satisfaction between 1990 and 2008 in every observed country. This controls for differences between cultural norms because only differences in marginal effects are observed. Figure 1b shows that changes in job satisfaction are still positively correlated with changes in life satisfaction, even though not as strong as in figure 1a.

However, discussing job quality as an exclusively social issue would miss the point. Good job quality is found to improve productivity and boost general economic performance. Furthermore, good contract quality ensures that labour resources are not wasted but utilised as much as they are available (European Commission 2015). This is an important fact if improvements in job quality are associated with increases in labour costs, at least in the short-term because improvements in productivity could then counteract these forces and thus increase the willingness of employers to invest in better job quality.

Figure 1a: Life and job satisfaction of full-time employees in 2008

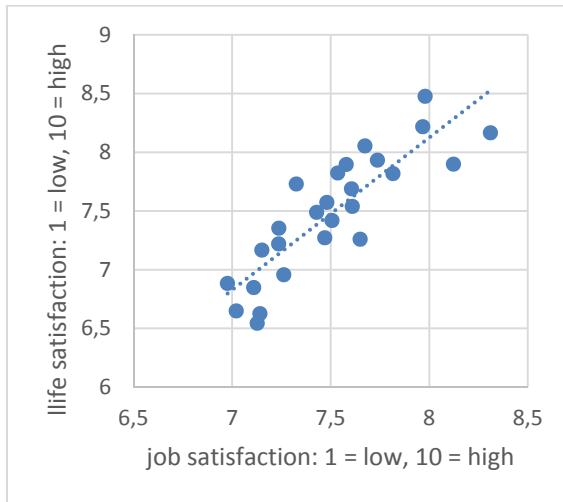
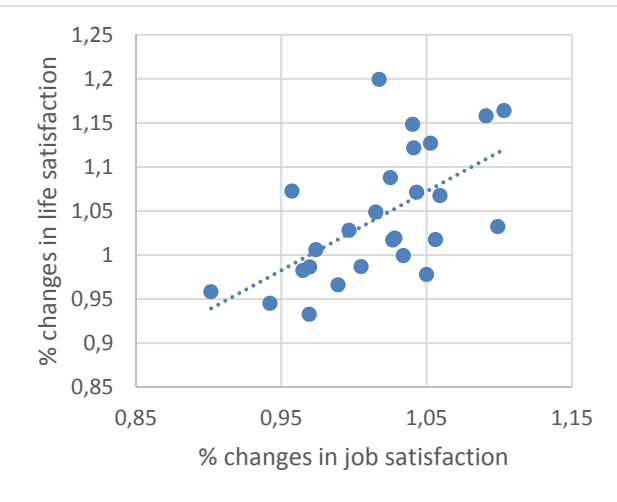


Figure 1b: Percentage changes in life and job satisfaction between 1990 and 2008



Source: EVS

In this paper we look in detail into what is known about job quality, what kinds of effects it has on job satisfaction, and how the quality of jobs has changed in the past by assessing objective and subjective indicators for different educational groups. The latter is especially important under the often stated assumption that globalisation and technical progress tend to deteriorate working conditions, especially for the less educated. Furthermore, connections between the quality trends and labour market liberalisation, carried out in several developed countries in the past decades, are assessed and are followed up with policy conclusions. But first we will clarify how job quality is defined and what kind of explanatory factors exist.

2. What is a good job? Objective and subjective indicators considered

In a nutshell there are two perspectives to assess the quality of employment: “hard” and easily measurable economic indicators on the one hand and softer, more subjective sociological indicators on the other hand. Quality can also be assessed at either the individual or at the aggregate level, where the indicators are inevitably different. We focus now on job quality at the individual level. The 2014 OECD Employment Outlook (OECD 2014) defines job quality as a measure of:

- i. earnings quality
- ii. labour market security
- iii. quality of working environment.

The first two aspects of employment quality are relatively straightforward to assess quantitatively with economic indicators. Earnings quality includes both wage dispersion and the total

level of earnings. The second aspect covers the unemployment risk as well as the system of protection in case of unemployment. The third aspect, in contrast, is highly subjective even though OECD has made attempts to quantify the quality of working environment. Additionally, an aspect left out from the OECD definition is the amount of working hours in the job. Prevalence of part-time employment, especially of the involuntary type, is a major labour-social phenomenon that ought not to be neglected. In a complementary fashion, according to Green (2013) and Osterman (2013), a good job consists of three main elements, but also smaller sub-groups:

- Good pay and perks (compensation)
- Quality of working life
 - Diversity in the substance of work (incl. skill development)
 - Work autonomy (control)
 - Stress/Intensification
 - Workplace security and working environment
- The employment contract and protection
 - Steadiness
 - Working hours
 - Job security

Again, compensation can usually be taken from quantitative indicators, while Quality of working life is an aspect measured mostly using soft indicators from working life surveys. It is important to note that “good” here means good for an employee, not necessarily always for an employer or customer. The quality of working life is usually measured in questionnaires using a set of questions regarding each specific sub-part of working life quality. Questions aggregated into instruments form an estimation of the subjective perception of quality. Using several types of questions to assess one dimension reinforces the validity, which is otherwise less obvious than with hard aggregate indicators. The weights and priorities between these instruments is nevertheless a matter of, at least to some extent, arbitrary consideration (Osterman 2013).

There are a few normative assumptions related to these measures. First, skill is often seen as an end itself, not just a means to achieve something. Additionally, the concepts of diversity in work substance and work autonomy infer the idea that a job in itself should be fulfilling and meaningful. From the perspective of Amartya Sen, choosing X out of Y and doing X is seen as better than simply doing X without a choice. This demonstrates the perceived freedom and control of work autonomy, which is believed and also empirically observed (Gallie 2012) to increase job satisfaction and psychological well-being. Many academics have stated that upskilling the workforce and the use of more complex technologies would result in higher work autonomy, but Gallie (2012) argues that empirical evidence does not support this view.

The first properly conducted large-scale surveys assessing the quality of working life started to emerge between the 1970s and the 1990s. Quality of working life measured by survey data can provide very useful information, but it might be a fluid concept. Perceptions reported by

individuals are often affected by their relative expectations and social norms. Expectations might vary geographically, between social sub-groups or between age cohorts. We will thus focus on percentage changes in perceptions about specific measures by country and not absolute levels. These measures can still be affected by time-dependent variation in social norms within a country; however, it is unaffected by differences in social norms between countries. Furthermore, there is some evidence that reported job satisfaction might not change even if objective working conditions get undeniably worse. Therefore, there is no clear consensus, at least in the field of economics, about the interpretation of surveyed job satisfaction.

In the economic literature about job quality, wages are often linked to inequality measures. Earnings disparity is a common macro-level indicator for job compensation quality even though it has no clear connection to individual wage decisions. There are good reasons to assume that relative wages matter, but there might be several types of wage distributions within one inequality measure. High wage disparity can either mean many people with low wages or few with very high, or both depending on interpretation. Furthermore, it is not always obvious which earnings are de facto labour income and which are true capital income. Various kinds of job-related perks might also go unnoticed when looking simply at aggregate wages.

The employment contract and protection is also a dimension here mostly assessed using “hard” economic indicators such as prevalence or risk of part-time or temporary employment. Part-time employment is a somewhat tricky factor to evaluate since many people might also prefer to work part-time but not all. Nevertheless, these two types of employment are usually considered to be “atypical” and non-regular, which is connected to lower employment security and lower steadiness. Moreover, people working part-time might not get as many working hours as they would want.

Furthermore, in the recent years, there have been some attempts by international agencies such as the OECD, ILO or Eurofound to build synthetic, aggregate indicators about job quality including various dimensions. There is, however, not yet much time series data available with these indicators due to their novelty. Nevertheless, despite the lack in data, especially for cross country comparisons, empirical approaches exist which try to assess the influence of the changing working environment on job satisfaction, a thread we will discuss and extend with our data. But first, the following section will give an overview of whether and, if so, how objective indicators changed.

3. Objective indicators: Developments and their influences

This section addresses objective or “hard” indicators of labour market quality like job security, income and working time. If contract types are accepted as “hard” indicators of job quality, we should first be able to justify the claim that some contracts are better than the others. The first normative question to ask here is whether atypical jobs are seen subjectively as bad jobs?

The second question is, whether atypical jobs usually considered “bad” actually lead to better jobs? The latter is important because it might have an effect on job satisfaction if atypical employed individuals believe that their current status acts as a stepping stone.

An often used rationale of atypical or non-regular employment is that it gives firms the necessary flexibility in highly regulated labour markets. A commonly argued problematic aspect, on the other hand, is that this kind of employment may block the career advancement possibilities of the employees. For example, traditionally “secondary part-time jobs”, i.e. low-skill, low-wage, temporary part-time jobs in the secondary labour markets, are seen to be ridden with insecurity, exploitation and lack of opportunities, whereas “retention part-time jobs” are seen as positive possibilities for high-skilled workers (de Grip et al. 1997). An additional problem is the possibility of avoiding labour market regulation and employment protection by extensively using workers with atypical contracts (Hevenstone 2010). Retention part-time jobs, on the other hand, are possibilities for those people who might not otherwise work at all or just prefer to work more or less permanently part-time. De Grip et al. (1997) consider temporary part-time jobs to mostly fall into the “secondary” category but also recognise the possibility that some firms might use temporary contracts to screen workers before final commitment, in which case they might be socially beneficial (Kalleberg 2000).

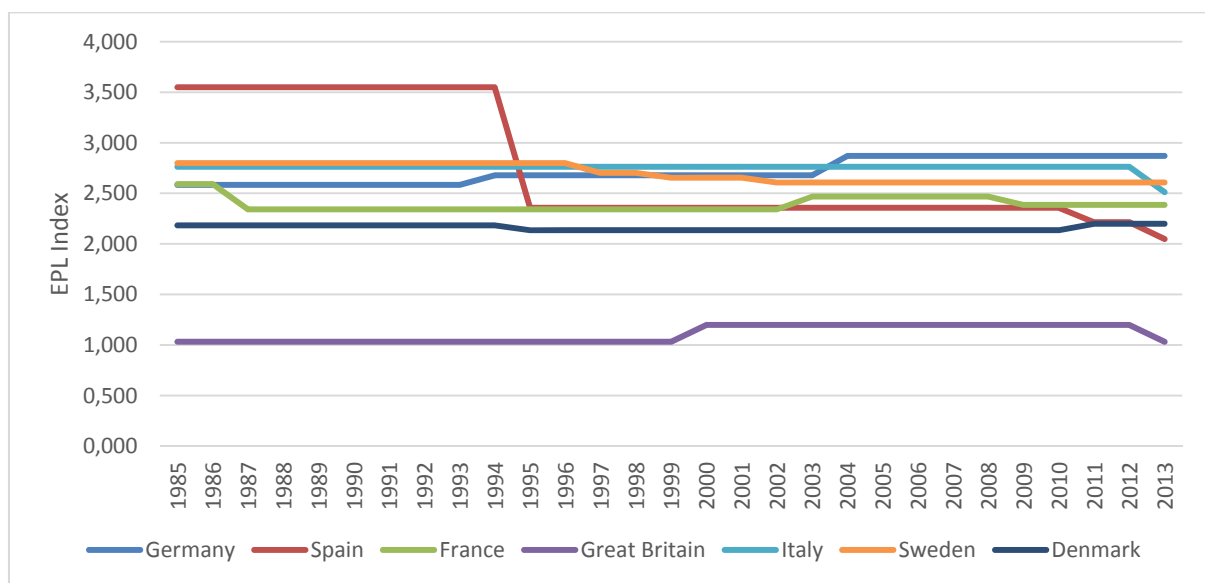
Månsson & Ottosson (2011) find out with Swedish data that the part-time trap is a problem especially for women. Another key finding is that a part-time job is significantly less likely to lead to full-time employment if it is a temporary part-time job. Even though they find out that part-time jobs can be a stepping stone for some, it is definitely not for all. Part-time jobs can also be a negative signal of weaker skills, in which case only working part-time tends to be a dead end. Nonetheless, in some cases, part-time jobs can be the only possibility for some who are not able to work full-time or do not have the necessary working life requirements to be employed full-time.

Whether atypical employment is a stepping stone or rather a dead end is determined by country specific aspects like the employment protection legislation. An overview of how fixed-term contracts affect future career prospects in different countries is given by Eichhorst (2014). There are also studies suggesting that in most countries temporary jobs are better for career development than no job at all. Booth et al. (2002) discovered with British data that in the United Kingdom non-seasonal temporary fixed-term jobs have been a stepping stone for permanent employment for many people. They find out that in the UK women starting with fixed-term jobs fully catch up with those starting with permanent ones in terms of earnings. British men on the other hand suffer a long-term 5% loss in wages from starting with a fixed-term contract. These findings suggest temporary jobs not being as bad for an employee as part-time jobs, but this might also heavily depend on labour market institutions of the country. In highly regulated labour markets like France or Italy, empirical results rather confirm the entrapment hypothesis (Blanchard & Landier 2002; Gagliarducci 2005).

Job security is another important issue for job quality due to its influences on important factors such as work related stress (Wasmer 2006), health (Ferry at al. 2002), fertility behaviour (Del la Rica 2005) and skill formation (Janiak & Wasmer 2014).

According to figure 2, there was almost no change in employment protection legislation (EPL) in developed countries between 1985 and 2013. The only exception is Spain, where EPL decreased heavily in the mid-nineties and again in the recent recession. However, Spanish EPL was the highest before and is now located close to the middle of observed countries. In general, there is no great variation in EPL between European countries, with the exception of Great Britain, where EPL is much lower.

Figure 2: Strictness of employment protection against individual dismissal for regular contracts



EPL Index: Six represents the highest level, and zero the lowest level of protection

Source: OECD

According to “free-market seeking hypothesis”, firms are more prone to employ workers with atypical contracts when the regulation of permanent contracts is strict and the regulation of temporary contracts is loose. Therefore, the gap between regular contract EPL and temporary contract EPL might greatly affect the amount of atypical employment (OECD Employment Outlook 2014). Using atypical workers extends firms’ possibilities of using external flexibility when needed. A negative aspect is the possibility of using an atypical labour force, often utilising legal loopholes, to avoid various legal requirements for labour protection (Hevenstone 2010).

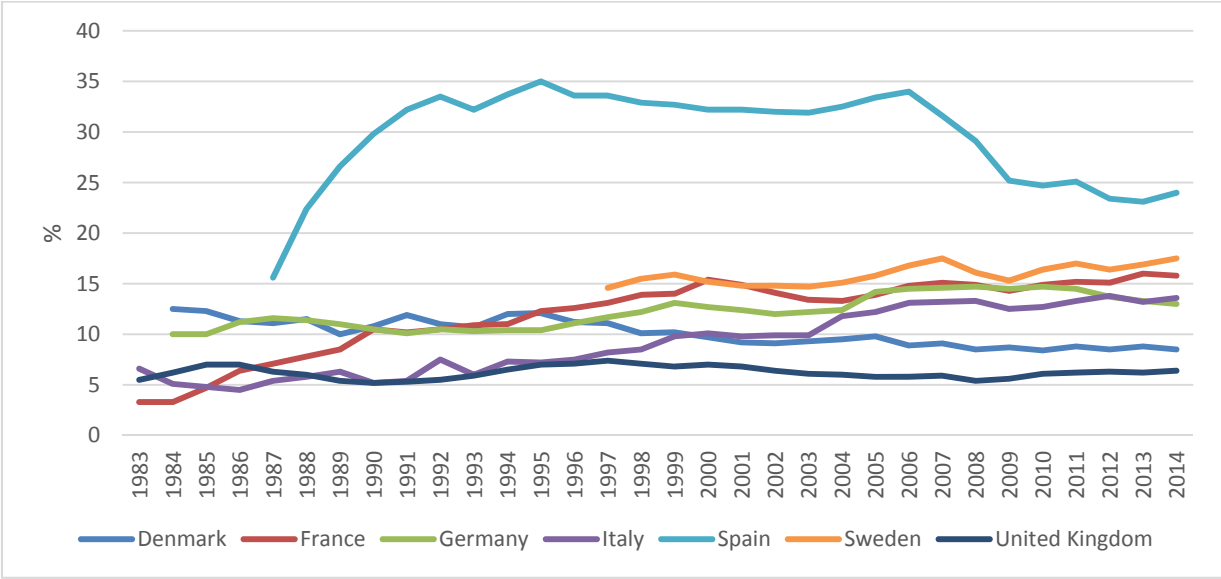
However, atypical employment can be a negative signal for skill development, and employers might not be very keen on investing in the human capital of their part-time or temporary employees because the relative gain of training for the firm is smaller than when investing in full-time permanent employees (e.g. OECD Employment Outlook 2014; Eichhorst & Marx 2009). Booth et al. (2002) also confirm that temporary jobs provide less work-related training. The

OECD warns that asymmetric liberalisation of non-regular contracts may only lead to increased labour market segmentation and lowered economic performance. The OECD Going for Growth 2015 report and the OECD Employment Outlook 2014 express fear that an increased amount of non-regular employment might result in employers investing less on human capital, therefore slowing down total productivity growth. They point out that while the regulation of non-regular contracts has been liberalised all around the world in the past decades, the regulation of normal regular contracts has remained mostly untouched, which might be the reason behind the expansion of atypical jobs. In addition, not all deregulation is visible from temporary and part-time employment statistics: some include juridical shifts to commercial law.

Developments in the strictness of EPL against individual dismissal for regular contracts do not seem to legitimise a general discussion about deteriorated working conditions. However, based on economic indicators, it can be said without a doubt that atypical work has become more common. After examining 10 European countries in their study, Konle-Seidl & Trübswetter (2011) found out that the probability of switching to permanent employment from non-employment has deteriorated, on average, by 7.7 per cent between 1997/1998 and 2007/2008. Meanwhile, transition to temporary and marginal employment has risen. The process was, however, not uniform in all countries: in United Kingdom and Denmark the odds of permanent employment had, on the contrary, increased. It has to be noted though that both regular and temporary EPL levels are very low in the United Kingdom, and Denmark, on the other hand, is famous for its flexicurity-model.

Europe is strongly divided in terms of temporary labour usage (Figure 3). In the United Kingdom fixed-term contracts are hardly used at all, whereas they have been prevalent in Spain. Spain traditionally had the largest share, mostly due to rigid and dualised labour markets. However, due to the recent economic crisis, many Spanish employees with fixed-term contracts were unable to renew their contracts, leaving many people unemployed. As a result, the share of fixed-term employees in Spain has been decreasing since the offset of the crisis. On the contrary, the use of fixed-term contracts increased in France, Germany, Italy and Sweden, while it remained nearly constant in the UK and decreased in Denmark. The lowest numbers of fixed-terms employees are observed in countries with liberal labour market regulation. In these countries, employers have less incentives to use fixed-term contracts to increase flexibility. Furthermore, there is a great variance within Europe regarding how many people with temporary contracts find the position involuntary; generally in Southern Europe and many East European countries almost everyone, while only 20% in Germany (Eurostat 2011).

Figure 3: Divergence in non-regular labour usage: the percentage of fixed-term (temporary) employed of total employment



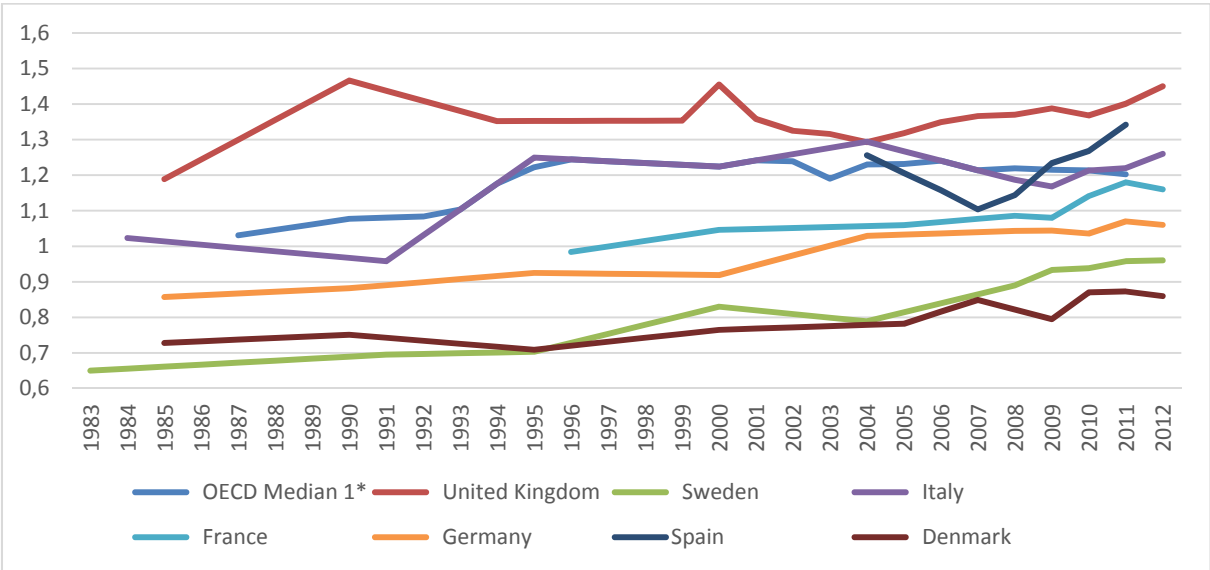
Source: OECD

Atypical jobs also vary greatly in their quality but are often associated with a lack of health insurance, pensions, and other fringe benefits. The lack of these benefits is especially problematic in countries where social security is heavily work-related (Kalleberg et al. 2000). Another classical aspect of job quality is payment. There are studies showing that part-time workers receive lower wage returns relative to their experience and seniority (Kalleberg 2000, Booth et al 2002). Giesecke (2009) argues that due to the dualism of labour markets, people with atypical contracts (outsiders) are expected to earn less than people with permanent contracts (insiders) because firms tend to apply efficiency wages for insiders but not outsiders.

According to the OECD study *Divided We Stand: Why Inequality Keeps Rising* (2011), atypical contracts and part-time jobs are becoming more common and have contributed to rising earnings inequality globally. Koeniger et al. (2007) suggest that there are not only more low-income workers, but the total wage disparity is also greatly increased because of labour market liberalisation, although their study considers a set of other institutions alongside employment protection (such as minimum wages). Fournier and Koske (2012) conclude that the negative effects of temporary contracts are concentrated on the lower end of earnings distribution, while more high-earning employees face much lower penalties, which further worsens the inequality problem.

One way to measure this rising inequality is the Palma ratio, a measure defined as the ratio between the income share of the richest 10% and poorest 40%. Higher ratio means higher inequality. An increase in the Palma ratio can be seen for every observed country between 1983 and 2010 (Figure 4); however, there are great differences between countries. Whereas the level of inequality is high in the United Kingdom, it is lower (but still increasing) in Sweden.

Figure 4: Development of the Palma ratio



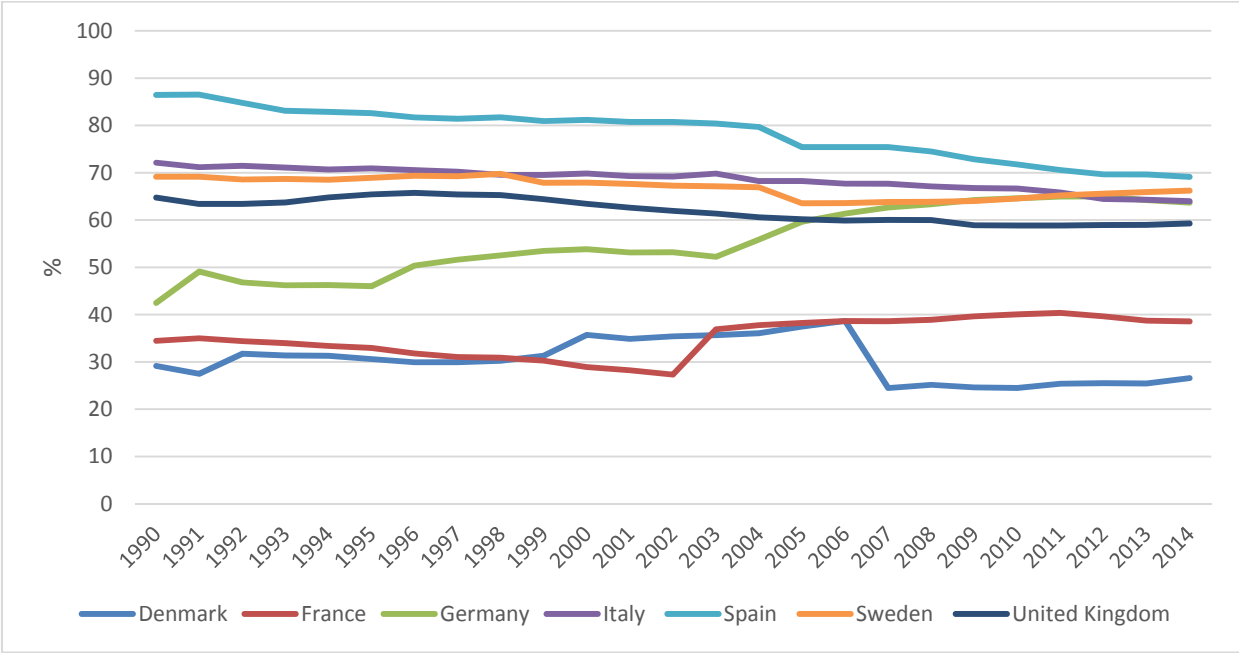
*OECD Median 1 is the median Palma ratio of the group of OECD countries with data available from 1987: Canada, Denmark, Finland, Germany, Greece, Israel, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Sweden, Turkey, the UK

Source: OECD

Besides income and security, the working environment also plays a crucial role in assessing the quality of labour. From an economic perspective, the most accessible indicator of the working environment is the length of working hours. Figure 5 shows the share of the work force that is not working in the range of more than 19 to 40 hours a week. Normally, 19 and 40 working hours a week define the boundaries of part and full-time employment in Europe, which is why we call this range usual working hours. However, having a look at figure 5 reveals that in most countries unusual working hours are the normal case, with the exception of France and Denmark. The share of the unusual working hours decreased in almost every observed country, with the exception of Germany and France. In comparison to France, the developments in Germany are striking because between 1990 and 2014 unusual working hours increased from 42 to 63 per cent. In general, though, the share of unusual working hours converged between countries. In the case of unsocial working hours like night and weekend work, a general declining and converging trend is also observable (Figure 6). However, as in the case of unusual working hours, an increase is observable in Germany, leading to the highest levels of unsocial working hours in 2014. The strongest decrease is observable in the United Kingdom, where the probability of working at night and at the weekend in one year decreased about 20 percentage points between 1992 and 2014.

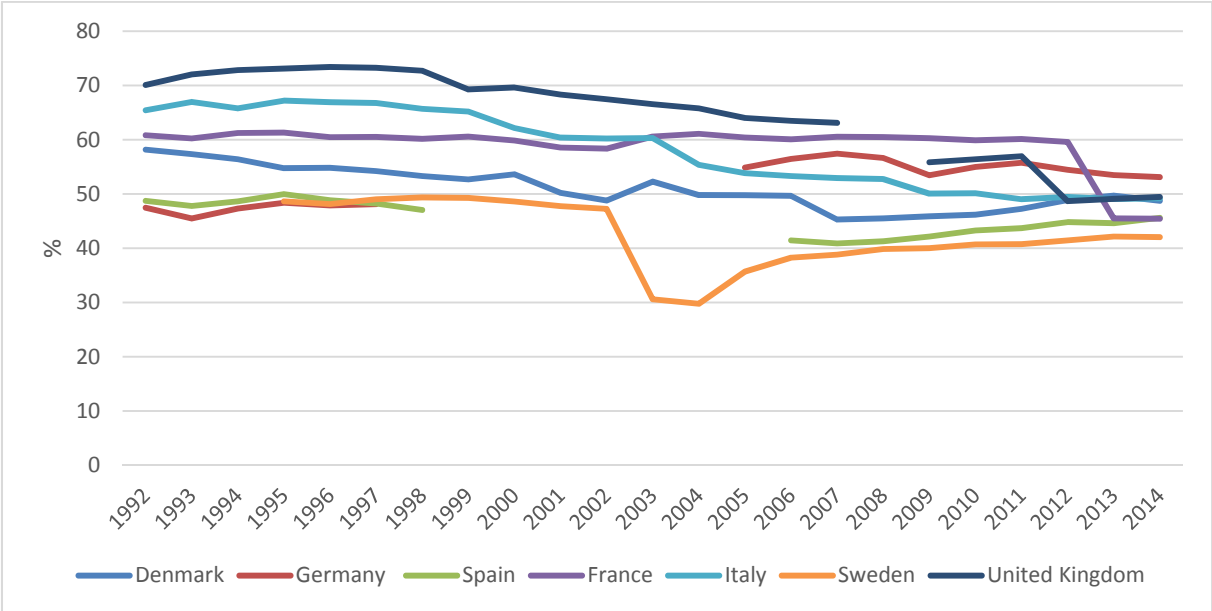
It is important to point out that working hours might be driven by the business cycle and thus may be an expression of a flexible labour force, at least in the short-term. However, the long-term reveals that countries like Denmark perform much better than the United Kingdom or Spain with respect to working hours.

Figure 5: Share of the working force (15-64 years old) working more than 40 hours or between 1 and 19 hours a week by country



Source: OECD

Figure 6: Probability that an employed person (15-64 years old) works on Saturday and at night in one year by country



Source: Eurostat, own calculation

This section has shown that differences exist between European countries regarding objective job quality measures, occurring both in the static and dynamic perspective. Concerning job

security, income differences and working time, there are countries like Denmark and Sweden which, in most cases outperform countries like the United Kingdom, Spain or Italy. However, in the long-run there are two rather general tendencies. Whereas income differences have been on the rise, the quality of working time/hours have tended to improve.

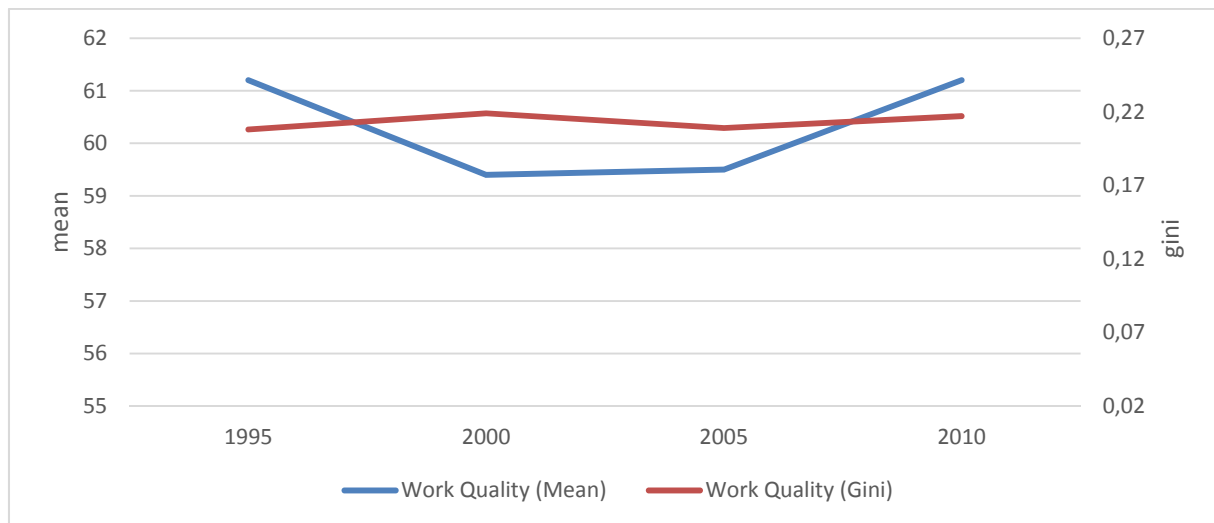
These objective changes in labour quality build the starting point for the next section, an assessment of changes in the perceived developments of labour quality.

4. Subjective indicators: Influences and their developments

Economics has traditionally put more focus on aggregate indicators such as the unemployment rate or wage dispersion. Summarising the discussion about “soft” or subjective indicators of job quality in OECD countries, Francis Green (2005) encounters a paradox: in some ways the quality has increased, but from other perspectives it has decreased. A large part of this research has been psychological or sociological, but there has been some research of the field of economics too, making the research field of the quality of work somewhat interdisciplinary. In the following, although focus is given to traditional economic indicators like employment insecurity and income, it is extended by subjective perceptions and other social-scientific indicators which represent possible changes in the working environment. Besides the general trend of how employment changed over time, having a closer look at different skill levels can be important because they might be affected differently over time. This relates to the consideration that globalisation disproportionately decreases job quality for the lower skilled because their occupations tend to face higher global competition. This is in line with Booth et al. 2002 who points out that temporary employed are less satisfied.

However, according to Green (2013), there is no evidence of any downward trend of the average job quality in the 2000s, or even quality distribution, since Green considers gini-coefficients of quality indicators as well. Figure 7 shows the development of Greens indicator. Whereas the development of the distributions between EU-15 countries is very stable over time working quality is slightly lower in 2000 and 2005 and recovers to the level of 1995 in 2010. The increase in 2010, however, might be misleading if occupations with low levels of work quality are stronger affected by the recent crisis than occupations with higher levels. Workers in the manufacturing industry, for example, were strongly affected by the crisis and have not the best working conditions. Especially when considering the fact that Greens working quality indicator scores complex tasks, solving unforeseen problems and influence on the order and method or speed of tasks. To deal with that issue we will also have look of developments for educational groups.

Figure 7: Developments of the mean and the gini-coefficient of the Index of Work quality for EU-15 countries



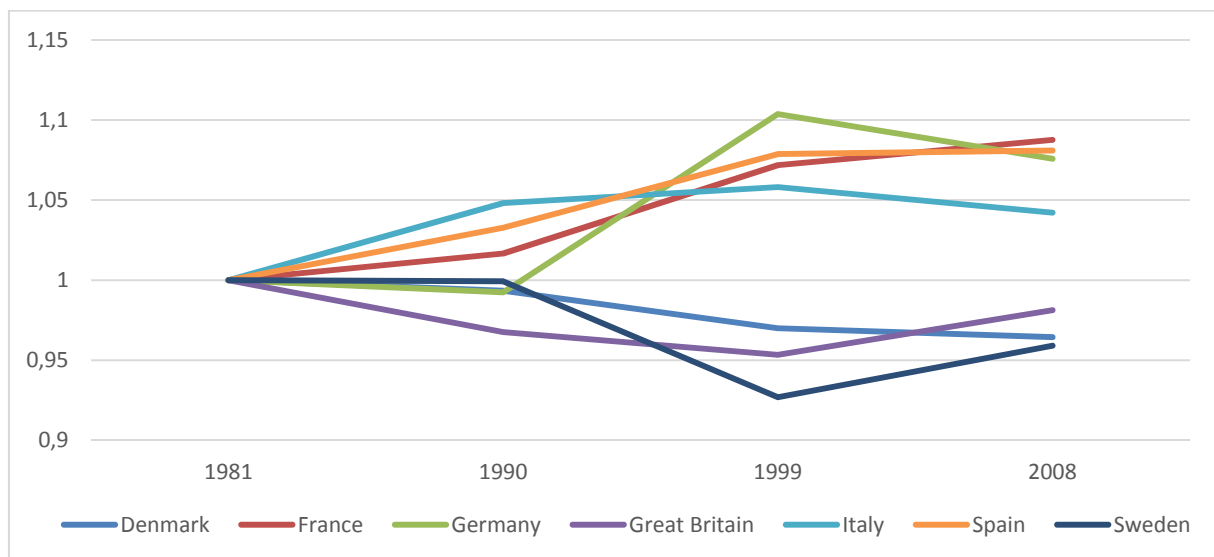
Source: Green 2013

According to Olsen et al. (2010), some aspects of job quality had a positive trend, advancement possibilities for instance, while interestingly there was a negative trend in working conditions 1989-2005. Recent data shows that job quality deteriorated in the last years in Europe and remain highly diverse. It is not surprising, therefore, that the numbers of workers who are afraid to lose their job have increased markedly due to higher risks of becoming unemployed because of the recent crisis (Leschke et al. 2012).

Job satisfaction combines several aspects of job quality. Figure 8 shows the developments of job satisfaction in different countries. Comparing absolute average amounts of job satisfaction does not make sense because differences in stated job satisfaction between countries could occur due to at least two channels: 1) the quality of work is much lower, whereas everything else is equal; and 2) sociocultural differences in answering the question of job satisfaction where different levels can be stated although work quality is exactly the same. Using descriptive data, it is hard to disentangle the first and the second channel. However, observing percentage changes in job satisfaction by country is unaffected by sociocultural differences as long as they stay constant over time.

According to figure 8, there is a mixed picture of how job satisfaction of the working population changed in the last 30 years. Unfortunately, there is no long-standing longitudinal cross country data available that is more up to date than 2008. Whereas job satisfaction increased in countries like France or Germany between 1981 and 2008, it decreased in Sweden, Great Britain and Denmark. As a result, job satisfaction is around eight per cent higher in 2008 compared to 1981 in Germany, France and Spain and around four per cent lower in Denmark and Sweden. However, there is no constant trend within countries, leading to swings in both directions between 1981 and 2008. This result does not suggest that there is something like a general trend in the development of job satisfaction.

Figure 8: Changes in mean job satisfaction by country, 1981 is the base year

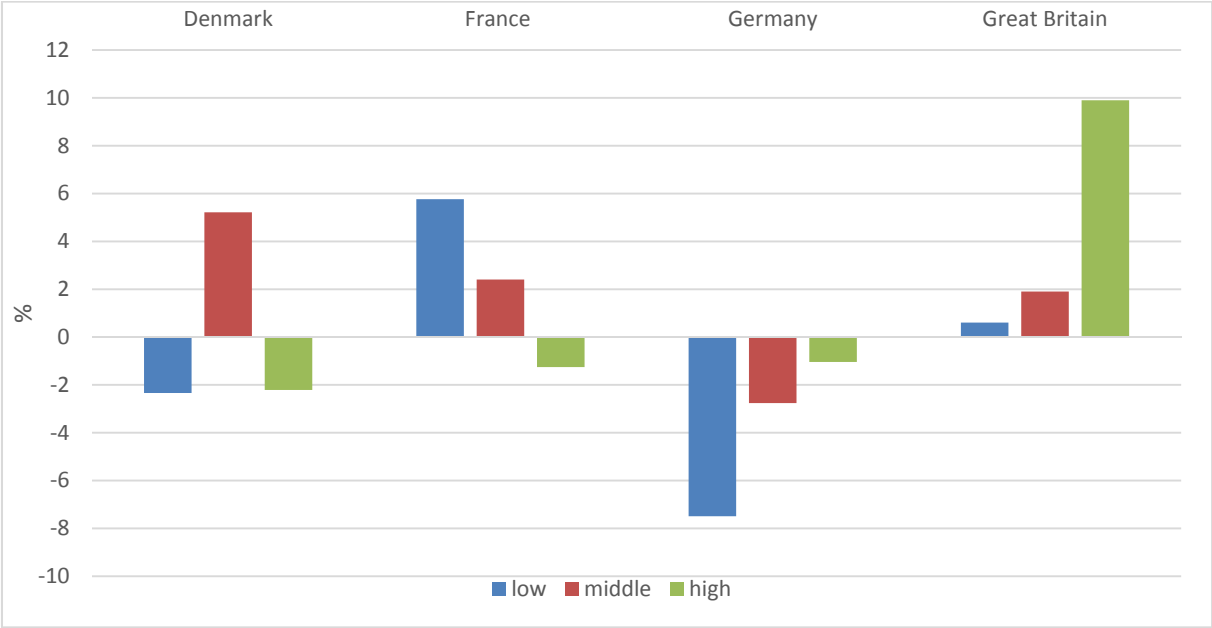


Job satisfaction was measured by stated values: 10 = satisfied, 1 unsatisfied

Source: EVS

Figure 9 shows that changes in job satisfaction between 1999 and 2008 differ between the highest educational attainments of individuals for selected countries. Due to a lack of data, observing developments between the highest educational attainments is only possible between 1999 and 2008. Between 1999 and 2008, the overall job satisfaction decreased in Germany and Denmark. In the case of Germany, this decrease was especially associated with a decrease in job satisfaction of people with low levels of education (Figure 9). However, the high and middle educated also stated lower levels of job satisfaction. The disproportional decrease for the low educated between 1999 and 2008 could be a hint that the low educated realise increases in average job satisfaction in an extenuated way. In Denmark, a decrease in overall job satisfaction is a result of a decrease in job satisfaction for low- and high-educated and an increase in job satisfaction for those with a medium level of education. In the case of France, this picture is completely different. Job satisfaction increased in general, but the overall increase in job satisfaction was driven by increases for lower and middle educated people, whereas the higher educated were less satisfied with their jobs. As for Great Britain, an overall increase in job satisfaction was achieved by increases in job satisfaction for every subgroup. The mixed picture of how jobs satisfaction changes between skill levels in different countries does not suggest that there is a transnational, systematic change in job quality for specific educational groups, at least between 1999 and 2008.

Figure 9: Percentage changes in mean job satisfaction between 1999 and 2008, by country and highest educational attainment



low: not more than primary education, middle: not more than secondary education, high: tertiary education

Source: EVS

Since changes in job satisfaction have occurred, having a closer look at possible influencing factors is important to understand driving mechanisms. Besides income and the working environment, job security is a very important factor for subjective wellbeing (OECD 2015). Job insecurity, however, is problematic to assess because it is closely connected to the business cycle. There might be a situation of objectively more insecure jobs but less unemployment overall, leading to no change in perceived job insecurity.

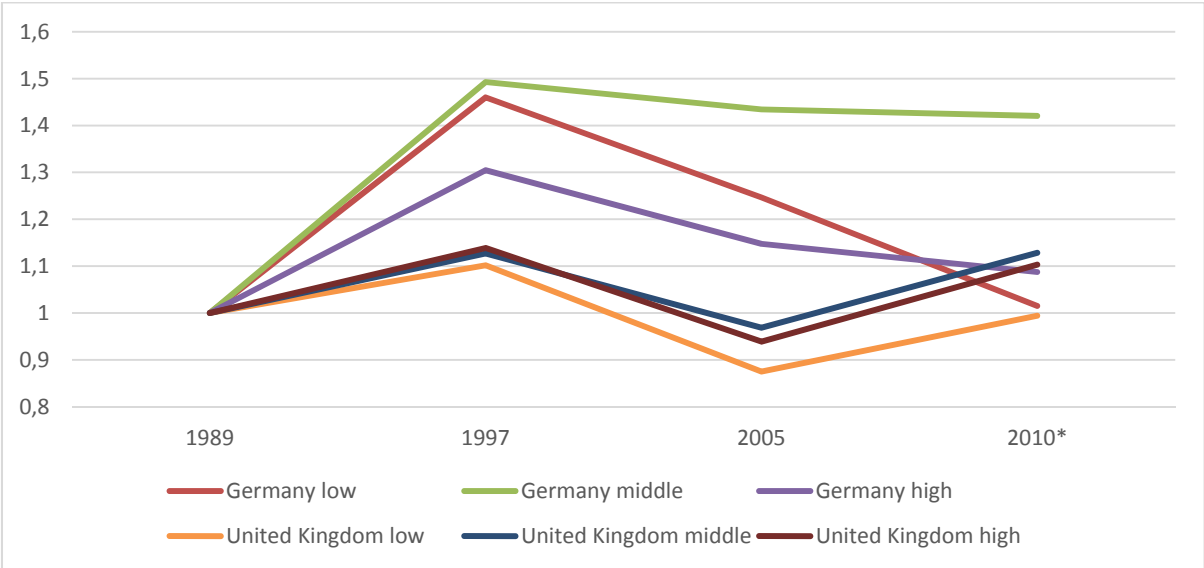
Olsen et al. (2010) report increasing perceived job insecurity in the early 1990s with more or less stable development in early 2000s in their study surveying Germany, Norway, the UK and the USA, after controlling the most important background factors. In both Germany and Norway the perceived level of job security is reported to be significantly lower in 2005 than 1989. Moreover, results show that the development of different aspects of job quality across countries or country groups might be quite adverse. The unfavourable development, however, might actually be convergence between countries with difference starting levels. The clearest case is job security between 1989 and 2005, where they find a strong downward convergence between the analysed countries.

Additionally, Green raises the point that the changes in employment structure might not radically change the average of perceived insecurity, but they could make it more polarised. One form of polarisation is the gendered aspect of job quality; women experiencing more insecurity than men (although not reported in all countries). These findings are also closely linked to various country regimes representing different kinds of institutional arrangements (Green 2008, Gallie 2007). Moreover, the incidence of job loss has more grave consequences in some

societies than in others. According to Green (2008), the overall change in perceived insecurity in Europe dropped from 20.1% to 18.6% between 1997 and 2005, but this is largely due to the changes in unemployment.

But are there differences between educational groups within a society? Unfortunately, there is a lack in long-standing cross-country survey data which addresses perceived job security for different skill levels. This is why an overview can only be given for Germany and the United Kingdom. Figure 10 shows that perceived insecurity increased between 1989 and 1997 in Germany and the United Kingdom for all educational groups of the working population. In the following years, perceived insecurity in Germany decreased strongly for the low and highly educated, while it remained high for the middle educated. As a result, perceived job insecurity strongly increased for the middle educated in Germany between 1989 and 2010, whereas the low educated experienced the smallest increase. The picture in the United Kingdom, on the other hand, is characterised by smaller differences between educational groups. Between 1997 and 2005 insecurity decreased, leading to lower levels of insecurity than in 1989, but it increased again from 2005 to 2010. By comparing all groups in both countries, Figure 10 does not show a general increasing trend or a trend in divergence between educational groups, with the exception of the middle educated group in Germany. With regard to the German labour market reforms, it is remarkable that the low educated experience such a strong decline in perceived job insecurity between 1997 and 2010. It might be the case that lowered levels of unemployment for this subgroup drive this development.

Figure 10: Changes in average perceived job insecurity of the working population by highest educational attainment in Germany and the UK, 1989 is the base year



low: not more than primary education, middle: not more than secondary education, high: tertiary education. Insecurity was measured by stated values: 5 = insecure, 1 = secure in the ISSP and in the EWCS measured by agreement (1 strongly disagree, 5 strongly agree) on the statement: I might lose my job in the next 6 month. * Since 2010 is based on a different question, it is adjusted by a multiplier which we have calculated by comparing the value of the ISSP and the EWCS in 2005.

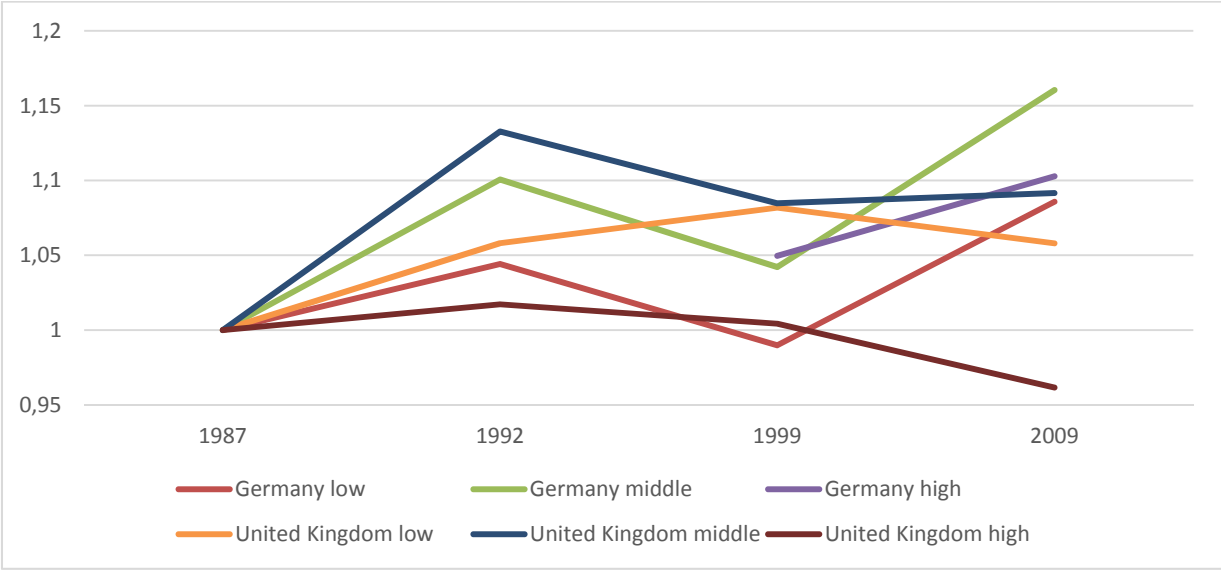
Source: ISSP, EWCS

Similar to job security, income is an important aspect of job satisfaction (Clark and Oswald 1996) and is associated with additional economic issues like health (Stronks et al 1997). Besides the absolute income level, the relative income level also determines job satisfaction and is, according to Clark and Oswald (1996), probably more important than the absolute level.

Olsen et al. (2010) reported decreasing trends in the perceived level of income between 1989 and 2005. This is in line with the objective data of the former section, where we showed that income inequality has increased over the last decades. However, work by Förster and d'Ercole (2005) shows that higher levels of actual income differences do not necessarily lead to higher levels, on average, of perceived income differences.

Figure 11 shows the development of how working educational groups in Germany and the United Kingdom agree, on average, that the income inequality in their country has been too high between 1987 and 2009. Unfortunately, like in the case of perceived job security, longitudinal data is fragmented, forcing us again to focus only on Germany and the United Kingdom. The perception that income differences are too high increased between 1987 and 2009 for all educational groups, especially due to the strong increase between 1999 and 2009 (where the increase in the Palma ratio was also the highest). What is remarkable is that those people in the middle education group were those with the highest increases in perceived income differences in Germany and the United Kingdom. However, whereas the low educated in Germany experienced the lowest increase in perceived income inequality, the highly educated in the United Kingdom were those with the lowest levels. In fact, perceived income inequality of the high educated in the United Kingdom is, in 2009, lower than in 1987. This clearly contradicts the objective increase in income inequality in the Palma ratio, which is why perceived income differences within a society depend on individual experiences. The overall picture shows that in the case of perceived income differences, a divergence process is observable between different educational groups.

Figure 11: Change in mean perceived income differences of the working population by highest educational attainment in Germany and the UK, 1987 is the base year



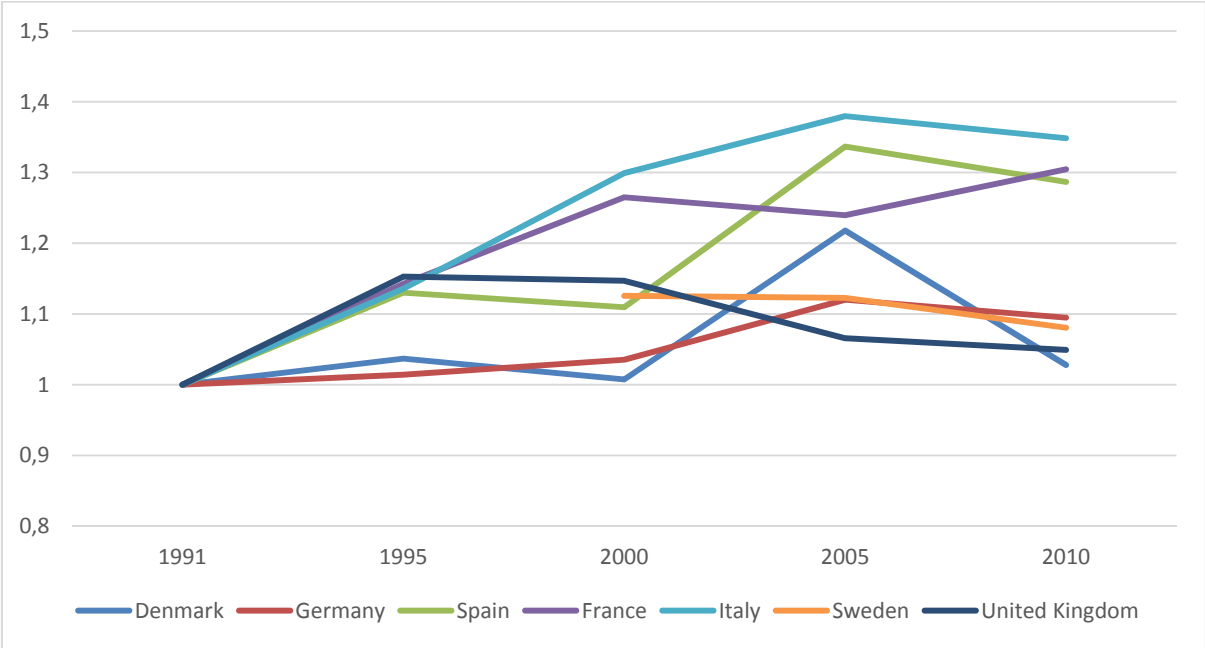
low: not more than primary education, middle: not more than secondary education, high: tertiary education. Perceived income differences were measured by stated values between: 5 = strongly agree that income differences are too high, 1 = strongly disagree that income differences are too high

Source: ISSP

The working environment is another fundamental determinant of work quality due to its influence on health and job satisfaction (OECD Employment Outlook 2014). The interplay of work intensity and work interdependence is important for the quality of work. Whereas higher levels of work intensity decreases work quality, lower levels of interdependence increase the possibilities of coping with higher workloads (Eurofound 2015). Thus, we will discuss both dimensions in the following section.

Work intensity is illustrated in Figure 12, which is based on questions about whether a job involves working at tight deadlines and/or working at high speed. It can be shown that the work intensity increased in every observed country between 1991 and 2010. As in the case of working hours, it is important to consider the business cycle, especially in Spain or Denmark where work intensity decreased between 2005 and 2010 after a strong increase between 2000 and 2005. In countries like Italy, France, Sweden and the UK, strong increases occurred especially in the 90s. As a result, perceived work intensity increased about 35% in Italy and about 30% in France and Spain between 1991 and 2010.

Figure 12: Changes in work intensity by country, 1991 is the base year

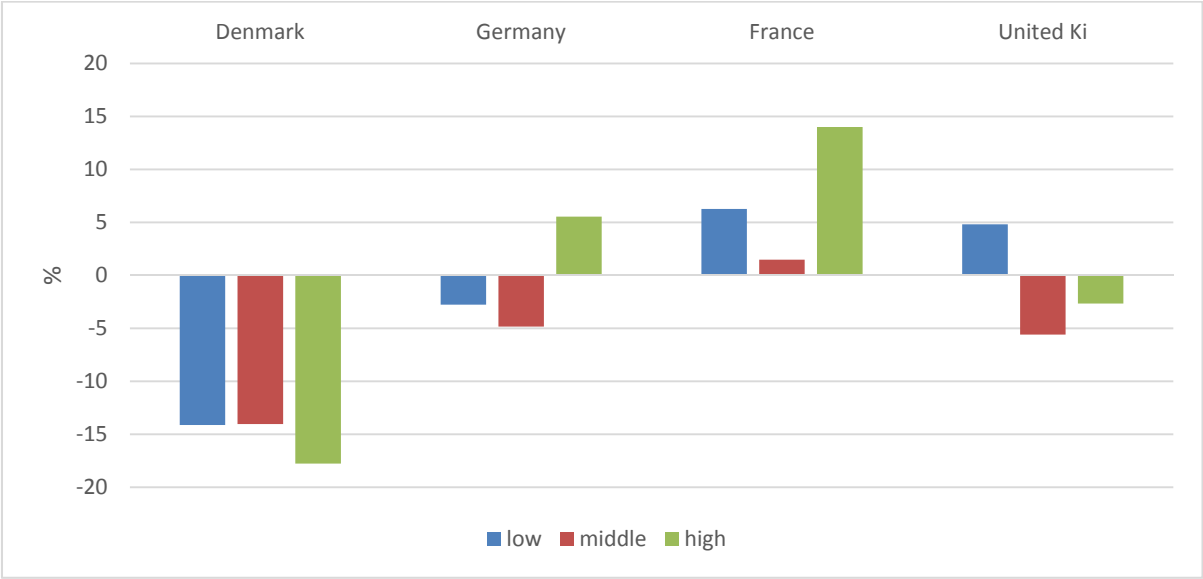


Work intensity is based on the questions: Does your job involve working at tight deadlines; does your job involve working at very high speed? We calculated the average stated level (from one to seven) for both questions, combined them and took the average again.

Source: EWCS

Figure 13 shows that changes in work intensity differ between educational groups between 2005 and 2010. An overall decrease in work intensity is associated with a decrease for all educational groups in Denmark, and an overall decrease in the United Kingdom is associated with an increase for the low educated. In comparison, an overall decrease in Germany is associated with an increase for the highly educated. These differences between educational groups again reveal the importance of a differentiated view not only between but also within countries on how perceptions about job quality have changed.

Figure 13: Changes in work intensity between 2005 and 2010 by country and highest educational attainment



Work intensity is based on the questions: Does your job involve working at tight deadlines; does your job involve working at very high speed? We calculated the average stated level (from one to seven) for both questions, combined them and took the average again.

Source: EWCS

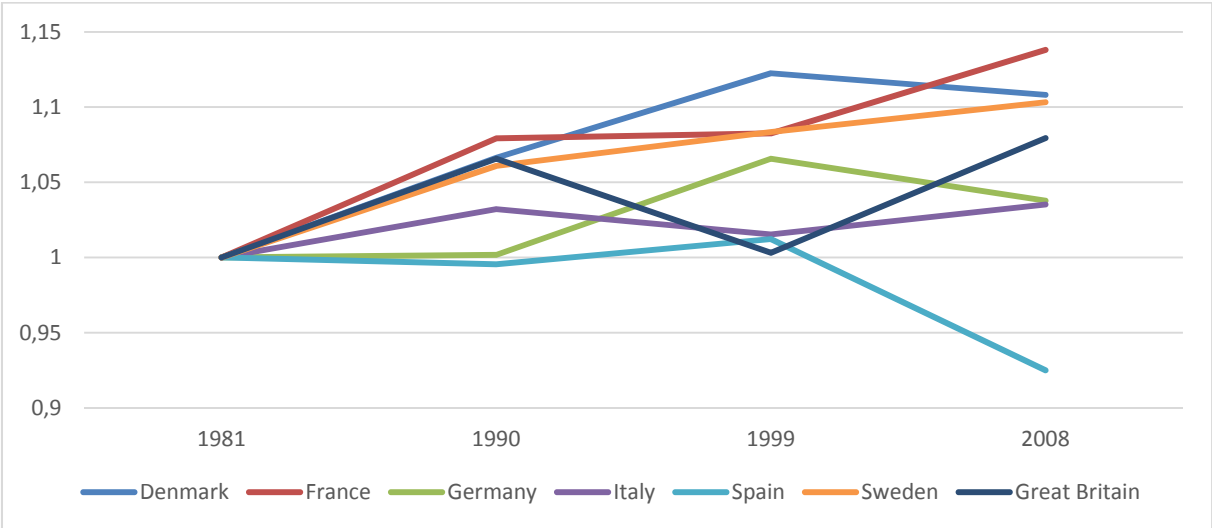
The level of decision making can help to cope with higher work intensity and is generally important for job satisfaction. Figure 14 shows that the level of decision making in a job increased in every country between 1981 and 2008, with the exception of Spain. However, the strong decrease in the case of Spain in 2008 might be driven by the incipient recession. The autonomy at work increased in countries like France, Denmark, Sweden and Germany. As a result, the perceived freedom in decision making at work increased in France between 1981 and 2008 by about 14 per cent and in Denmark and Sweden by about ten per cent, whereas it decreased about 7.5 per cent in Spain. According to this development, it is possible to argue that an increase in work intensity is cushioned by an increase in the freedom at work.

Again, having a look at educational differences reveals different developments for these subgroups (Figure 15). As for Denmark, a small total decrease between 1999 and 2008 was associated with a decrease for the low and high educated, but with an increase for those who attained middle education. Increases in France were driven by increases for the low and middle educated, but only marginal decreases were observed for the highly educated. In Germany, a total decrease was driven by strong decreases for the low educated and weaker decreases for the middle and highly educated, whereas strong total increases in Great Britain were driven by strong increases for the highly educated and lower increases for the middle and low educated.

If we would have only looked at the overall developments in work intensity and freedom at work, it is possible to argue that in countries like France, an increase in work intensity was associated with an increase in freedom at work. This is why it is possible to argue that workers

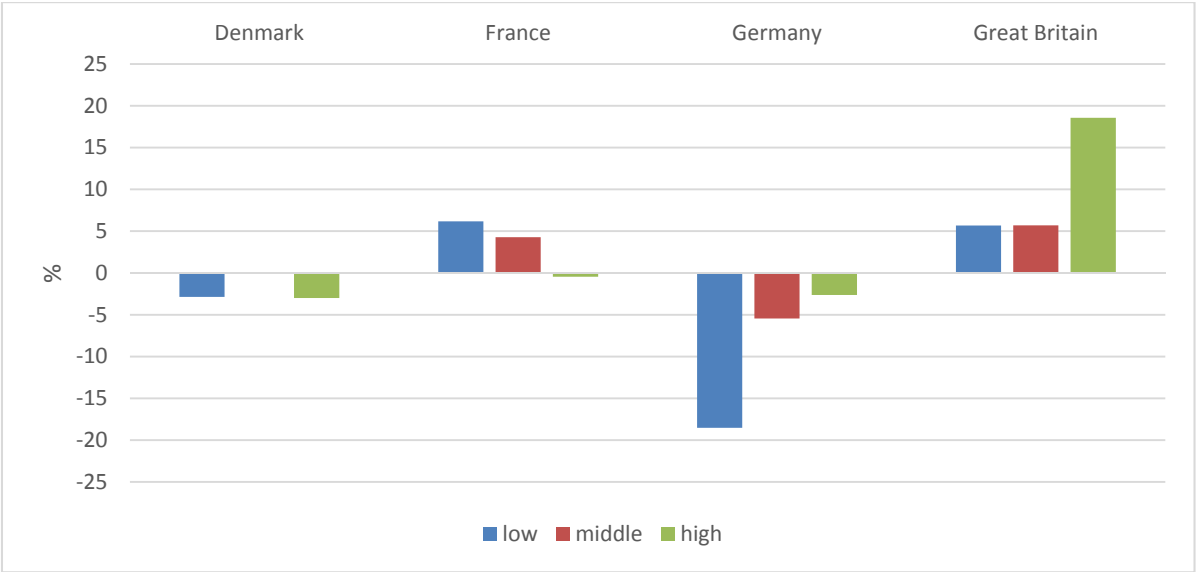
are able to cope with intensified work. However, having a look at educational differences reveals that an increase in work intensity for the highly educated was associated with small decrease in freedom at work in France. Thus, in the case of the highly educated in France, it is not possible to argue that increases in work intensity were balanced out by increases in freedom at work.

Figure 14 Change in mean perceived freedom at work, 1981 is the base year



Perceived freedom at work was measured by stated values between 1= none and 10= a great deal on the question: How free are you in making decisions at your job? Source: EVS

Figure 15: Change in mean perceived freedom at work between 1999 and 2008 by country and highest educational attainment



Perceived freedom at work was measured by stated values between 1= none and 10= a great deal on the question: How free are you in making decisions at your job? Source: EVS

Thus, time series data of subjective perceptions about income, job security and working environment does suggest that having a closer look and different skill levels is important. Assessing average developments that include amalgamations of all skill levels possibly leads to a smoothing of heterogeneous responses, if developments differ between skill levels. A consistent advancement of average perceptions can be driven by improvements for a single education class while others experience deterioration because the strength of the former may wash out the latter. This would ignore possible increases in the divergence of the society. Now that we have seen that the changes in job quality are important, and they actually take place, it is time to answer the question about what drives these changes.

5. Which factors determine the development of the quality of jobs?

Regardless of the subjective interpretation issues regarding job satisfaction, the question is how can the changes in job quality be explained? What kind of effects do institutional changes and policy reforms have on job quality? Are the changes due to labour market deregulation or something else?

Studies concerning the quality of employment and institutional changes using either economic or subjective indicators are not very abundant. Considering the full-time versus part-time distribution in different population subgroups, Bassanini & Duval (2006) argue in *Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions* that strict employment protection laws do not have a significant effect on aggregate unemployment, but women do substitute part-time jobs with full-time jobs. In addition, they find out that strict EPL reduces youth entry into labour markets. In their baseline two-way fixed effects equation, high EPL decreases female full-time employment but does not affect male employment. Additionally, they point out that macroeconomic conditions matter: negative total factor productivity shocks, deteriorations in the terms of trade, increases in the long-term real interest rates or negative labour demand are connected to increased unemployment. These effects also depend on institutional circumstances. They have also included the OECD definition of product market regulation in the analysis and found a significant positive correlation with unemployment, affecting also employment and part-time employment rates.

Kahn (2007) uses micro-level household panel data from nine countries (1996-2001) to examine the effects of employment protection reforms on total and temporary employment. The countries in question are Belgium, Finland, France, Germany, Italy, the Netherlands, Portugal, Spain and the United Kingdom. He reaches the conclusion that reforms liberalising temporary employment do increase the likelihood of temporary jobs but do not necessarily improve general employment; in some cases they appeared to have actually lowered. In other words, the amount of people with permanent jobs has not increased. Kahn's conclusion is that employment protection reforms have increased the substitution of permanent work for temporary work, exactly opposite of the findings of Bassanini and Duval (2006). The likely explanation is

that Kahn focuses on partial reforms of temporary employment: according to the study, the reforms on permanent EPL result in small or insignificant effects on employment and temporary jobs. Also, Kahn notes that these might be short-run effects reacting to the changed legal environment.

Koeniger et al. (2007) present country-level panel data evidence on the effects of institutions, and changes in them, on wage inequality. They suggest that changes in the strictness of employment protection, benefit replacement rates, union density, and minimum wages explain a considerable part of the male wage inequality. The effects of labour market flexibilisation have had a particularly substantial effect on the increase in wage inequality. According to their estimations, if the institutions in Central-European countries were liberalised to match the level in the United States, the wage disparity would increase 50-80%. These results indicate a connection between liberalising labour market reforms and low-wage jobs, but they do not yet show anything about part-time or temporary work. Similarly, the OECD 2011 report *Divided We Stand: Why Inequality Keeps Rising* uncovers that even when controlling for globalisation effects, technological development and financial openness, labour market deregulation has played a major part in increasing earning inequality.

Hevenstone (2010) mapped the institutional determinants of atypical employment using macro-level fixed effects and random effects estimators on 30 developed countries. She found that fixed-term (temporary) employment increased with union density, higher unemployment benefits, higher wages and more women in labour force. Part-time jobs, on the other hand, are positively connected to low incidence of industrial action, high real wages, and a high amount of women in labour force. On high levels of self-employment, however, the significant factors seem to be patent rates, strict employment protection, low unemployment benefits, lower wages, and fewer women in labour force. Hevenstone, however, does not find a significant connection between employment quality and EPL, but she does detect that a wide gap between regular and fixed-term EPL results in more fixed-term employment. There is no connection between part-time employment and EPL, possibly stemming from the fact that in many countries part-time employment is covered by regular EPL.

Might there be some other factors—an omitted variable perhaps? A significant point raised by Green (2005) is that tertiarisation of the economy necessarily increases job flexibility due to the production nature of the service economy: services cannot be stored but must be consumed when produced. This creates an increased demand for flexible labour, which is also often perceived to be a job of lesser quality. This should not, however, affect the people who already work in the service sector. This is, however, a factor that can be controlled in survey-based analyses but not necessarily in “hard” macroeconomic analyses.

Other possible explanations for observed changes in the job quality besides labour market liberalisation and tertiarisation may be attributable to other phenomena caused by globalisation. Increasing global competition is sometimes argued to lead in a “race to the bottom” in several aspects of job conditions when seeking production from low-cost countries, but these effects are often exaggerated (Green 2005). Global competition also links to declining union

power since migration to for work has become more common, with unions finding them unable to regulate international labour markets. Nonetheless, the empirical findings do not supporting a radical fall in perceived job satisfaction.

In addition, technological change is one factor that should not be neglected. While some scholars believe that technological advancements generally lead to higher skill-levels, some suspect that technological development leads to the de-skilling of jobs (Olsen et al. 2010). Others, like Goos et al. (2004), suggest that digitalisation and automatisisation might polarise job quality. The jobs that stay are either in the low or the high end of skill requirements, but nonetheless non-routine. Low-skilled jobs, such as care, beauty and customer service, have often used cheap and abundant precarious labour, like migrant workers or workers in the Third World countries (call centres for example). These workers also suffer from worse working conditions, low pay, and otherwise low job quality. At the high end of skill demand, there are the knowledge workers with high productivity potential and high-level education. They enjoy high job quality with good compensation and working environments. According to this view, what will disappear are the semi-skilled professionals who are too expensive to keep but still replaceable with computers and robots. Digitalisation might further reduce job security and earnings of the low- and medium-skilled but, at the same time, increase the job quality in high-skilled jobs. (European Commission 2015)

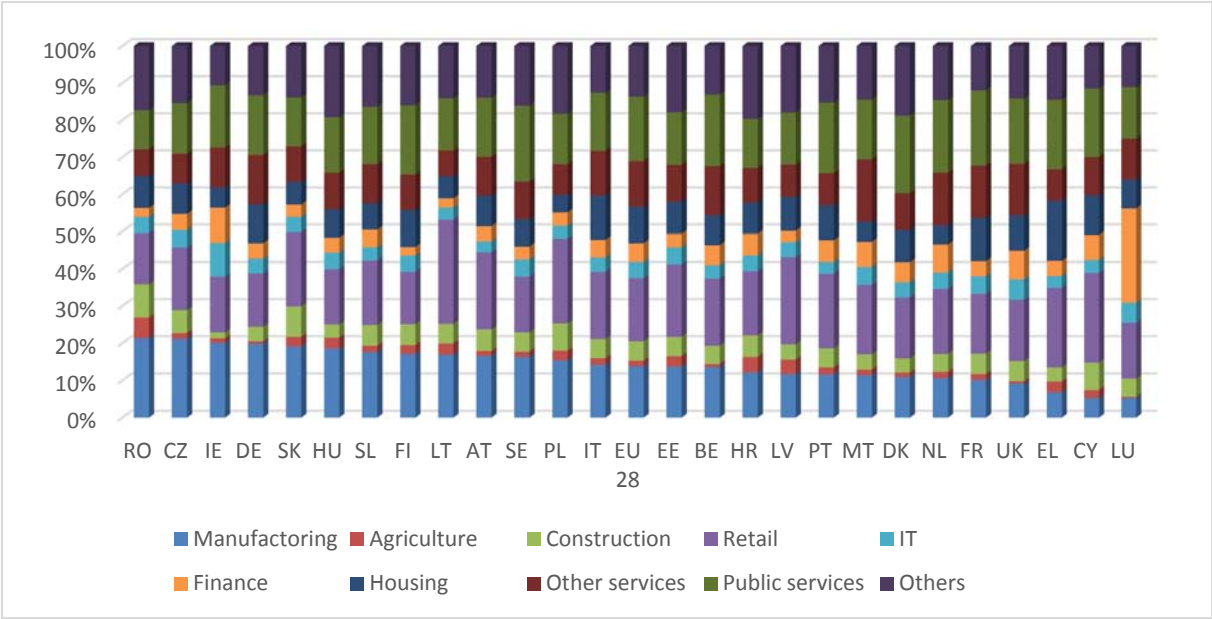
Finally, it is possible that the changes in perceived job quality are indeed caused by deliberate deregulation of labour markets. Considering the theory and empirical findings on subjective job quality indicators, it is plausible to assume that labour market deregulation has had an impact on the quality of jobs through increased uncertainty and precarious work. However, there is less evidence for significant effects on day-to-day job satisfaction.

6. Policy implications

In general, the influence of policy reforms on the quality of the working environment is limited. Job security and compensation are the job characteristics which can be determined more easily by policy-makers via employment protection legislation or the minimum wage, for example.

On the other hand, there are several reasons why policy implications are not straightforward for the quality of labour: one is because the generalisation of recommendations based on indicators is probably misleading. The most obvious reason, though, is the difference in the structural economic orientation of a country. Besides the general trend of tertiarisation, there are still country-specific differences. There are even strong differences within the European Union. Whereas the share of manufacturing's gross value added as percentage of GDP represents over twenty per cent in Romania, it is around five per cent in Luxemburg in 2010 (Figure 16).

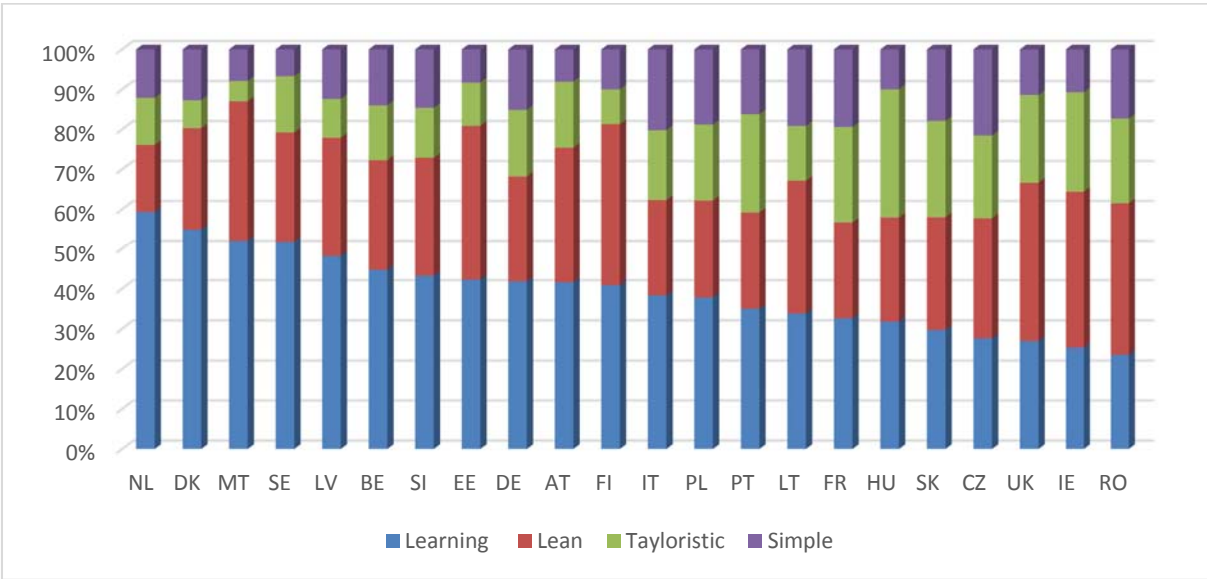
Figure 16: Gross value added of different economic sectors as percentage of GDP in 2010



Source: Eurostat

This leads to differences in the organisation of work because economic sectors have specific needs. Figure 17 shows how work is organised in different European countries. The highest amounts of learning work, meaning high levels of work autonomy, high cognitive demands and few monotonous tasks, are in the Netherlands and Denmark, whereas the lowest amounts are in Romania and Bulgaria. On the contrary, this leads to relative low levels of lean and Tayloristic work in the Netherlands and Denmark, which is related to less work autonomy and less cognitive demand.

Figure 17: Differences in work organisation across countries in 2010

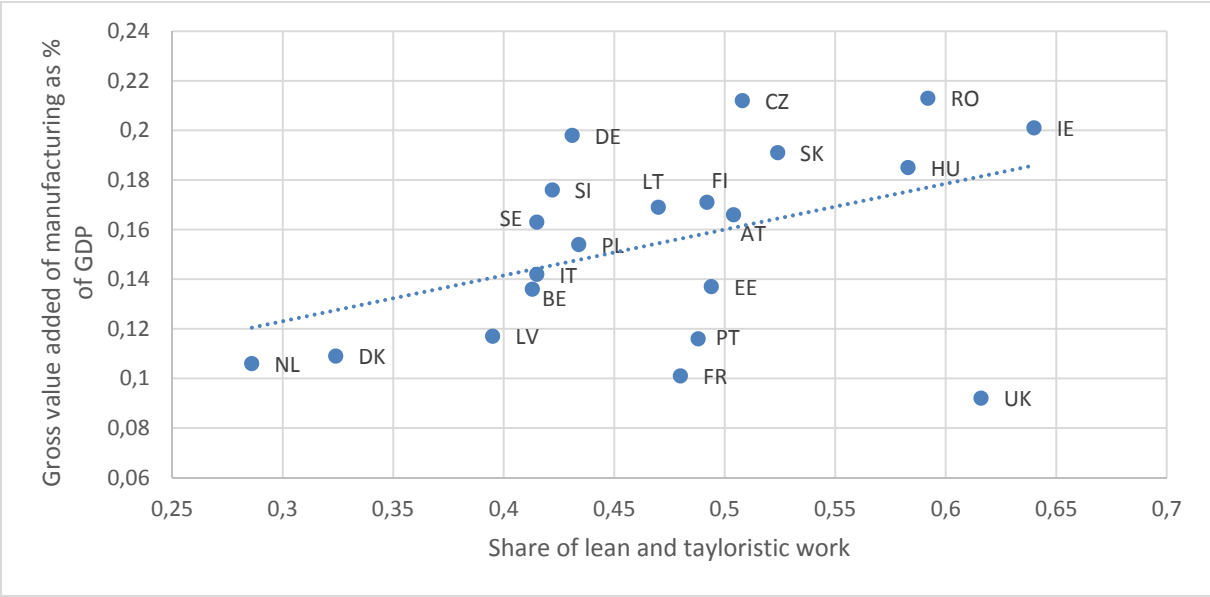


Learning: Characterised by the highest level of task autonomy, very high cognitive dimension, low level of monotonous tasks. *Lean*: strong presence of team work, highest level of task rotation and horizontal and norm-based constraints, a very high level of cognitive demands and higher levels of task autonomy, high level of pace constraints. *Tayloristic*: high level of non-autonomous team work, the lowest level of task autonomy, limited cognitive demands at work, very high level of pace constraints, created by machines or production flow. *Simple*: lowest incidence of work pace constraints, less work pace autonomy, generally face the least cognitively demanding tasks, largely informal organisation methods

Source: European Commission 2015

Having a closer look at this issue reveals a general link between the sectoral specialisation of an economy and the organisation of work. Figure 18 plots the share of lean and tayloristic work and the percentage of GDP coming from the gross value added of manufacturing. This demonstrates a positive correlation between the importance of manufacturing for an economy and the amount of lean and tayloristic work because the manufacturing sector is often organised in assembly line work or group work.

Figure 18: Gross value added of manufacturing as % of GDP, share of lean and tayloristic work in 2010



Source: Eurostat, European Commission

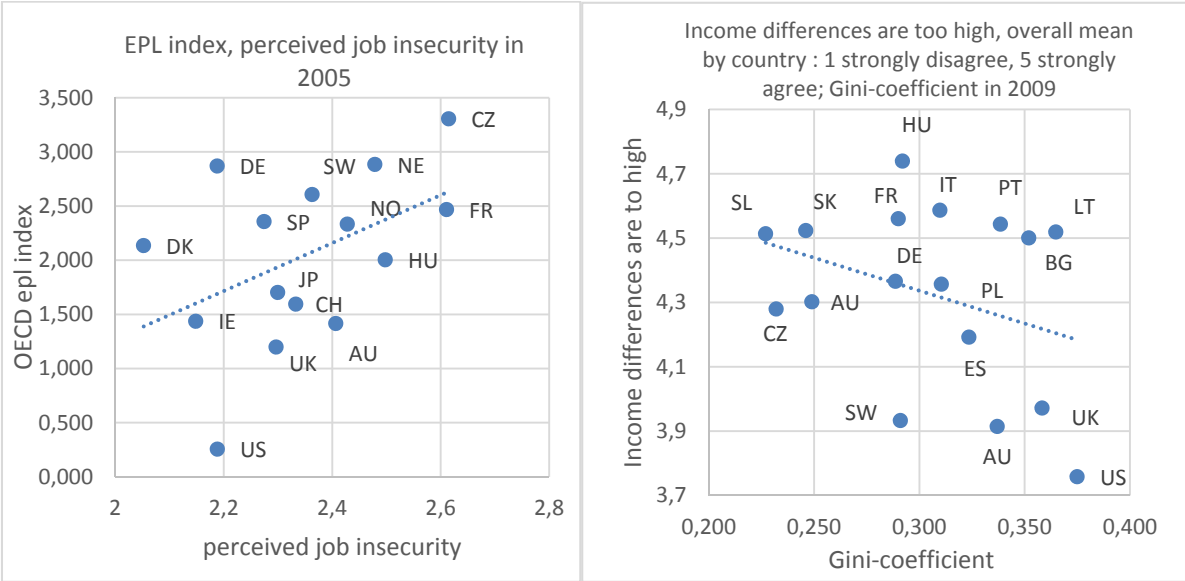
Thus, country-specific recommendations are needed because economic specialisation needs specific forms of work, at least in the shorter run. Increases in working autonomy, for example, will probably not lead to the same economic improvements between countries if the amount of cognitive tasks differ.

Another important aspect is the interaction of perceptions and policies. Figure 19 shows the relation between EPL and perceived job security and the relation between the perceived income differences within a country and the actual income differences. Both plots show counter-intuitive results: Higher EPL leads to less job security, and lower actual income inequality leads to higher perceived inequality. There are at least two explanations for the results.

First, Figure 19 illustrates the political processes and thus a reverse causality where people’s awareness of job security and income differences leads to higher levels of EPL and more redistribution. Second, in the case of EPL, the results are probably determined by the omission of other relevant variables such as the unemployment rate, which is expected to be higher in countries with high employment protection legislation. However, the result is in line with Clark and Postal-Vinay (2009), who controlled for other relevant factors like the business cycle. The complexity of objective inequality measures and subjective perceptions is demonstrated by Lembregts and Pandelaere (2014). They have shown that an equal percentage increase in income across all income levels leads to an increase in perceived income inequality even if purchasing power is held constant.

This is why generalised policy recommendations are insufficient. Increases in EPL do not necessarily increase perceived job security, which is why positive effects on health, parenthood or skill formation are possibly left out.

Figure 19: Policies and their influence on perceptions



Source: ISSP, Gini Project

These results indicate that there is no generalisable optimal level of income inequality, job security or working environment. Besides the normative aspect of how decent work should look, the economic dimension is also important. Even if objective improvements in job security, working environment or income within a country improve the related subjective perceptions, holding everything else constant, marginal productivity gains, which are induced by better working quality, will diminish. This relates to the assumption that improvements in job quality cannot increase productivity infinitely. If related costs, such as wages, taxes or redundancy costs, are not balanced out by gains in productivity, employment will decrease with obviously negative consequences for the dismissed employee, but also for the employed because they will perceive their jobs as less secure when unemployment increases. Therefore, improving economic outcomes by improving work quality is always a country-specific optimisation problem. However, institutions play a role, and 'good' regulation can try to reconcile job quality with necessary flexibility. Rather than regulating different segments of the labour market differently, thereby creating 'artificial' divides between types of jobs, a unified arrangement might be preferable. More efficiency, both in terms of labour market permeability and fairness, likely results from a model inspired by a 'single contract' combining flexibility and minimum standards of protection, thereby also facilitating transitions between jobs as they are available and eventually leading to good matches between jobs and employee preferences and abilities. At the same time, education and training are important elements to change the economic structure of the economy, moving to more knowledge-intensive jobs with higher productivity and better quality.

7. Conclusions

This paper has shown that a general negative trend in the development of work quality has not taken place. This can be observed by examining both 'hard' indicators, like the amount of temporary employment or working time, and 'soft' indicators, like job satisfaction or perceptions about job security. In most cases developments are rather country specific. However, some general trends do exist. With regards to objective indicators, income inequality has increased in every observed country. However, we have shown that this does not necessarily lead to an increase in perceived income inequality. A similar relationship is observable for perceived job security. Higher levels of EPL do not necessarily lead to higher levels of perceived job security for the whole working force or with respect to different educational groups. Furthermore, work intensity increased in the last decades while, at the same time, freedom at work also increased for the overall workforce. This could be interpreted as a process of balancing out different dynamic forces. However, having a look at educational differences reveals that work intensity and freedom at work do not necessarily balance out even if the overall picture suggests so. The differentiation between educational groups is thus one important, but still often neglected, aspect in the case of soft indicators.

There is some evidence suggesting that if the average objective quality of employment has deteriorated, the process has partly been caused by labour market deregulation. Especially partial labour market reforms liberalising only non-regular contracts are expected to have adverse effects on the average quality of employment. The deterioration of job quality has had negative effects in both individual well-being and economic efficiency. This is, however, not the full picture. There has also been polarisation and divergence in quality trends within countries. Increases in employment caused by heavy liberalisation might come with the cost of less equal society. It is, however, a matter of debate whether the effects of liberalisation are acceptable if more people in a weak social position are able to enter the labour market. Moreover, the quality of jobs is being threatened concomitantly by a number of phenomena, such as globalisation, digitalisation and tertiarisation, which are all difficult to control.

In order to reduce the negative effects of deregulation, a relevant policy conclusion here is that labour market liberalisation could be compensated for with extended social security to better cover people most exposed at atypical work. Besides the normative aspect of how decent work should look, the economic dimension is also important. This paper has shown that policy recommendations always have to consider country specific characteristics. Higher objective levels of employment protection or income equality do not necessarily lead to improvements in the related subjective perceptions on a cross-country level.

References:

- Bassanini, Andrea; Duval, Romain (2006) Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions. OECD Social, Employment and Migration Working Papers no. 35. OECD Publishing.
- Berglund, Tomas; Furåker, Bengt; Vulkan, Patrik (2014) Is job insecurity compensated for by employment and income security? *Economic and Industrial Democracy* 2014 Vol. 35 (165).
- Booth, Alison; Francesconi, Marco; Frank, Jeff (2002) Temporary Jobs: Stepping Stones or Dead Ends? *The Economic Journal*. Royal Economic Society, Vol. 112(480), 189-213.
- Clark, Andrew E.; Oswald, Andrew J. (1996) SATISFACTION AND COMPARISON INCOME. *Journal of Public Economics*. Vol. 61(3), 359–381.
- Clark, Andrew; Postel-Vinay, Fabien (2009) Job security and job protection. *Oxford Economic Papers* 61, 207–239.
- Eichhorst, Werner (2014) Are fixed-term contracts a stepping stone to a permanent job or a dead end? IZA World of Labour. Bonn: Institute for the Study of Labour.
- Eichhorst, Werner; Marx, Paul (2009) Reforming German labour market institutions: A dual path to flexibility. *Journal of European Social Policy*, 21(1), 73-87.
- Esping-Andersen, Gøsta (1990) *The three worlds of welfare capitalism*. Cambridge: Polity Press.
- European Commission (2015) *Employment and Social Developments in Europe 2014*.
- Ferry, Jane E.; Shipley, Martin J.; Stansfeld, Stephen A.; Marmot, Michael G. (2002) Effects of chronic job insecurity and change in job security on self-reported health, minor psychiatric morbidity, physiological measures, and health related behaviours in British civil servants: the Whitehall II study. *Journal of Epidemiol Community Health*, Vol. 56, 450-454.
- Fournier, Jean-Marc; Koske, Isabell (2012) The determinants of earnings inequality: evidence from quantile regressions. *OECD Journal: Economic Studies*, Vol. 2012/1.
- Förster, Michael F., and Marco Mira D'Ercole (2005) "Income Distribution and Poverty in OECD Countries in the Second Half of the 1990s." Paris: OECD.
- Gallia, Duncan (2012) Skills, Job Control and the Quality of Work: The Evidence from Britain, Geary Lecture 2012. *The Economic and Social Review*, Vol. 43(3), 325–341.
- Gallie, Duncan (2007) Production Regimes and the Quality of Employment in Europe. Published in the book "Employment regimes and quality of work".
- Giesecke, Johannes (2009) Socio-economic Risks of Atypical Employment Relationships: Evidence from the German Labour Market. *European Sociological Review*, Vol. 25(6), 629-646

- Green, Francis; Mostafa, Tarek; Parent-Thirion, Agnes; Vermeylen, Greet; Van Houten, Gijs; Biletta, Isabella; Lyly-Yrjanainen, Maija (2013) Is Job Quality Becoming More Unequal? *Industrial & Labour Relations Review*, Vol. 66, 753-784.
- Green, Francis (2009) *Job Insecurity, Employability, Unemployment and Well-Being*. University of Kent, Studies in Economics 01/2009.
- Green, Francis (2008) Subjective Employment Insecurity Around The World. *Cambridge Journal of Regions, Economy and Society*. Cambridge Political Economy Society, Vol. 2(3), 343-363.
- Green, Francis (2005) *Demanding Work: The Paradox of Job Quality in the Affluent Economy*. Princeton, New Jersey: Princeton University Press.
- Grip, A. de, Hoevenberg, J.; Willems, E. (1997) Atypical Employment in the European Union. *International Labour Review* Vol. 136, 49–71.
- Goos, Maarten; Alan Manning; Anna Salomons (2014) "Explaining job polarization: Routine-biased technological change and offshoring." *The American Economic Review* 104, No. 8, 2509-2526.
- Hevenstone, Debra (2010) National Context and Atypical Employment. *International Sociology* Vol. 25, 315-347.
- Janiak, Alexander; Etienne Wasmer (2014) *Employment Protection and Capital-Labour Ratios*. IZA Discussion Paper No. 8362. Bonn: Institute for the Study of Labour.
- Kahn, Lawrence (2007) *Employment Protection Reforms, Employment and the Incidence of Temporary Jobs in Europe: 1995–2001*. IZA Discussion Paper No. 3241. Bonn: Institute for the Study of Labour.
- Kalleberg, Arne (2000) Nonstandard Employment Relations: Part-time, Temporary and Contract Work. *Annual Review of Sociology* Vol. 26.
- Kalleberg, Arne L.; Barbara F. Reskin; Ken Hudson (2000) "Bad jobs in America: Standard and nonstandard employment relations and job quality in the United States." *American Sociological Review*, 256-278.
- Kauhanen, Merja; Nätti, Jouko (2011) *Involuntary temporary and part-time work, job quality and well-being at work*. Discussion Paper 272. Helsinki: Labour Institute for Economic Research.
- Koeniger, Winfried; Leonardi, Marco; Nunziata, Luca (2007) Labour market institutions and wage inequality. *Industrial and Labour Relations Review*, Vol. 60 (3).
- Konle-Seidl, Regina; Trübswetter, Parvati (2011) *Are insecure contracts the price of more employment?* IAB Brief Report 25. Nürnberg: Institute for Employment Research of the German Federal Employment Agency.
- Lembregts, Christophe; Pandelaere, Mario (2014) "A 20% income increase for everyone?": The effect of relative increases in income on perceived income inequality. *Journal of Economic Psychology*, Vol. 43, 37-47.

- Leschke, Janine; Watt, Andrew; Finn, Mairead (2012) Job quality in the crisis - an update of the Job Quality Index (JQI), ETUI Working Papers
- Månsson, Jonas; Ottosson, Jan (2011) Transitions from part-time unemployment: Is part-time work a dead end or a stepping stone to the labour market? *Economic & Industrial Democracy*, Vol. 32 (4).
- OECD (2015) *Going for Growth 2015*. Paris: OECD
- OECD (2014) *Employment Outlook*. Paris: OECD.
- OECD (2011) *Divided We Stand: Why Inequality Keeps Rising*. Paris: OECD.
- Olsen, Karen; Kalleberg, Arne; Nesheim, Torstein (2010) Perceived Job Quality in the United States, Great Britain, Norway and West Germany, 1989-2005. *European Journal of Industrial Relations*, Vol. 16 (3).
- Osterman, Paul (2013) Introduction to the Special Issue on Job Quality: What Does it Mean and How Might We Think about It? *Industrial & Labour Relations Review*, Vol 66. 739-752.
- Rubery, Jill (2011) Towards a gendering of the labour market regulation debate. *Cambridge Journal of Economics*, Vol. 35 (6)
- Wasmer, Etienne (2006) *The Economics of Prozac (Do Employees Really Gain from Strong Employment Protection?)*. IZA Discussion Paper No. 2460. Bonn: Institute for the Study of Labour.