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Underemployment and well-being in Europe

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Abstract

This paper examines the consequences of underemployment for the well-being of workers in European countries. Previous studies of the impact of underemployment on well-being have tended to focus on a single country or occupational group and have examined single dimensions of underemployment. This paper, by contrast, examines experiences across several European economies and explores two different dimensions of underemployment: the gap between hours of work and workers' desired hours and the under-utilisation of their skills and abilities. The paper uses data from the 2015 European Working Conditions Survey (EWCS) and explains the consequences of underemployment for well-being by drawing on the international comparative political economy literature, particularly the theorisation and analysis of comparative employment and welfare regimes. We find that while underemployment is generally associated with lower levels of well-being, the nature and strength of relationships between different dimensions of underemployment and well-being vary between employment regimes. The paper also highlights the detrimental consequences of 'over-employment' for workers' well-being and shows that the well-being of women tends to be lower than that of men, regardless of employment regime.

Introduction

This paper examines the consequences of underemployment for the well-being of workers in Europe. The term underemployment can refer to a variety of employment situations that are unsatisfactory from the perspective of the workers who occupy them (McKee-Ryan and Harvey, 2011: 963). Although commonly associated with involuntary part-time unemployment, underemployment can also refer to workers in full-time jobs that do not offer a sufficient number of hours or those employed in jobs that prevent them from fully utilising their skills and knowledge. Several studies have shown that underemployment can negatively affect workers' well-being (for example Bell and Blanchflower, 2019; Friedland and Price 2003; Kamerāde and Richardson 2018). Most studies that have examined the impact of underemployment on well-being have, however, focused on a single country or occupational group and examined single dimensions of underemployment. This paper, by contrast, examines

experiences across several European economies and explores two different dimensions of underemployment: the gap between hours of work and workers' desired hours and the under-utilisation of their skills and abilities. The paper utilises data from the 2015 European Working Conditions Survey (EWCS) and explains the consequences of underemployment for well-being by drawing on the international comparative political economy literature, particularly the theorisation and analysis of comparative employment and welfare regimes (Gallie 2007; Ferragina et al. 2015). The paper investigates whether the relationship between underemployment and well-being differs according to the employment regime within which workers are employed. Our findings demonstrate the relevance of comparative institutional analysis to our understanding of cross-national variations in the relationship between underemployment and well-being.

The first part of the paper reviews extant evidence relating to underemployment and well-being and considers ways in which socio-economic institutions might affect the extent and character of underemployment and the relationship between underemployment and well-being. We go on to describe the data and methods before presenting the findings. The analysis begins with an exploration of pooled data for European countries and proceeds to compare relationships in regional clusters associated with different employment regimes. We find that while underemployment is generally associated with lower levels of well-being, the strength of relationships between underemployment and well-being differs between employment regimes. The findings also indicate that there are substantial differences in well-being *within* regimes and that the measured well-being of women tends to be lower than that of men regardless of the regime being considered.

2. Underemployment, welfare regimes and well-being

The term 'underemployment' is commonly used to describe situations in which workers are employed part-time but would prefer a full-time job. This phenomenon, commonly referred to as 'involuntary part-time employment', has become more widespread in most European countries over the past decade, most notably in Greece, Spain, France, Italy, Cyprus, Hungary, Portugal and Slovakia (ILO 2016: 104). However, underemployment can also refer to workers having fewer hours than they would like, even if part-time employment has been chosen

voluntarily¹ (Abrahamsen, 2010; Blanchflower, 2019: 121; Wilkins, 2007). As such, ‘hours underemployment’ represents ‘an additional amount of labour market slack over and above the employment rate’ (Blanchflower, 2019: 119). A further type of underemployment arises in situations where workers are employed in jobs for which they are either over-qualified or that have been designed in a way that does not allow them to fully utilise their skills, experience or discretion (e.g. Burris, 1983; Feldman, 1996: 389; de Witte and Steijn, 2000; Green, 2013: 130; Scurry and Blenkinsopp, 2011). These different forms of underemployment can have substantial negative consequences for workers’ well-being. Studies have found that involuntary part-time employment reduces workers’ well-being relative to those in full-time employment and those who prefer to work part-time. Bell and Blanchflower’s (2019: 188) analysis of the UK Annual Population Survey data suggested that the ‘larger the size of the desired change in hours the lower the levels of well-being’. Well-being is also reduced where workers believe that they are overqualified for their job or are employed in a job that does not enable them to fully utilise their skills and knowledge (Allen and Van der Velden, 2001; Jones-Johnson and Johnson, 2004; Friedland and Price, 2003; Maynard et al., 2006; O’Brien, 1982).

Studies of underemployment and well-being have tended to be limited to a small number of Anglophone countries, primarily Australia (Wilkins, 2007), the USA (Friedland and Price, 2003; Maynard et al., 2006; Prause and Dooley, 1997) and the UK (Kamerāde and Richardson, 2017; New Economics Foundation, 2013; Oguz, 2013). Less is known about relationships between dimensions of underemployment and well-being elsewhere; nor have there been any comparative studies of variations in the relationship between underemployment and well-being between countries or between regional groupings of countries. The current paper addresses this gap in the literature. Its approach to comparative analysis draws on Gallie’s (2007) analysis of ‘employment regimes’ and Esping-Andersen’s (1999) analysis of ‘welfare regimes’. The employment regime concept is used by Gallie to categorise national work and employment institutions, principles associated with employment policies and the degree of social protection provided to unemployed workers and those in low-paid jobs. The resulting typology distinguishes between ‘inclusive’ regimes (such as Sweden and Norway) that aim to maximize

¹ Working time preferences are subject to a wide variety of influences, including national institutional and social policy contexts, family structures, care commitments, cultural norms and individual and household earnings (see, for example, Bünning and Pollmann-Schult, 2015; Kröger and Yeandle 2013; McGinnity and Russell, 2013).

employment levels and extend employment rights across the labour force, ‘dualist’ regimes (such as Germany) in which overall employment levels are considered less important and which extend strong employment rights only to ‘core’ workers (at the expense of those in the ‘periphery’), and ‘market’ regimes (such as the UK), in which employment rights and welfare protection are minimal². Regime differences reflect differences in the strength of organised labour and the extent to which trade unions are able to influence governments and employers. Inclusive regimes are characterised by trade unions that push for high employment, strong social protections and relatively compressed wage structures, encouraging the development of policies that help women to enter and remain in employment, encompassing safety nets and limited intra-workforce differences. Inclusive regimes are also characterised by extensive opportunities for workers to engage in lifelong learning and forms of work organisation that enable workers to exercise their discretion (Gallie, 2007: 28-29). In dualist regimes, union power is derived from the core workforce, which in turn provides the focus for union efforts to push for stronger rights and protections. Social protection for other workers is likely to be weaker and policies to support work-family balance and women’s participation in employment less developed than in inclusive regimes. Finally, in market regimes, trade unions have little involvement in decision-making, policy makers tend to focus on sharpening market mechanisms and social protections are relatively weak, particularly for vulnerable groups.

There is a correspondence between the ‘market’, ‘dualist’ and ‘inclusive’ employment regimes posited by Gallie and the ‘liberal’, ‘conservative’ and social democratic’ welfare regime models initially conceived by Esping-Andersen (1990, 1999). Liberal welfare states (corresponding to market employment regimes) are associated with modest and often means-tested state benefits with strict eligibility rules (generally focusing on low-income groups). Conservative welfare regimes, as exemplified by France, Austria and Germany (also examples of dualist employment regimes), are oriented to the preservation of ‘traditional’ family structures and the needs of (mainly male) workers in regular forms of employment and maintain a division between ‘outsiders’ and ‘insiders’. The final type of welfare regime,

² An alternative ‘varieties of capitalism’ approach to comparative institutional analysis, originating with Hall and Soskice (2001), treats countries associated with Gallie’s dualist and inclusive regimes as examples of ‘coordinated market economies’. There are, however, important differences between these countries in relation to their labour markets and social policies, which the employment regimes conceptualisation enables us to examine.

associated with the Scandinavian economies (the exemplars of the inclusive employment regime), aims to reduce inequality by limiting the importance of class, occupation and gender in relation to access to the welfare state and supporting high levels of employment through active labour market programmes and lifelong learning. Poverty risks in these countries are comparatively low (Gallie, 2007: 31).

Esping-Andersen's typology has been extended to include a 'Mediterranean regime' (Ferragina et al., 2013, 2013; Ferrera, 1996), characterised by limited social insurance coverage, benefits that are proportional to contributions, and an emphasis on family-provided support. Although the share of part-time work in total employment tends to be comparatively small in the countries associated with this regime type, the proportion of part-time workers who are involuntarily in this form of employment tends to be much larger than elsewhere in Europe (Sola et al., 2013).

Regime differences may have implications for experiences of underemployment and its consequences for workers' well-being. One important difference concerns the coverage and level of social insurance. Russell et al. (2013) found that the superior social security systems in countries associated with the inclusive employment regime category cushioned the impact of the post-2008 economic crisis on *unemployed* workers. Relatedly, as welfare states influence the extent to which workers' livelihoods are dependent on involvement in paid work, social protections may mitigate the negative financial consequences of involuntary underemployment, with potential consequences for workers' well-being. Poverty risks are particularly high for workers in involuntary part-time employment and the probability that part-time workers will be in low-paid work is highest in Mediterranean countries, which also have the highest rates of involuntary part-time employment (Horemans and Marx, 2013). Social transfers can counteract poverty risks to an extent, but this is most apparent in countries associated with the inclusive employment regime type. Denmark and Sweden provide unemployment insurance for involuntary part-time workers, which may lessen the financial penalties and strain associated with 'hours underemployment' (Schmid and Wagner, 2017: 34) when compared with countries that do not offer such support. All other things being equal, it is plausible that less financial strain, relative to equivalent workers in other countries, will be associated with higher levels of well-being. Inclusive regime countries also lead the EU in relation to 'social investment' policies, such as lifelong learning and active labour market policies, that support labour market transitions (Hemerijck, 2015; Schmid, 2011). They

therefore tend to score highly on Eurofound's 'prospects index' (Eurofound, 2017: 92), which combines measures of employment status, job security and career prospects to provide countries with an overall prospects score. Mediterranean economies, by contrast, tend to have the lowest scores on this index, which implies that underemployed workers might face greater difficulty in progressing to better jobs. These considerations lead to the following three hypotheses:

H1: Underemployment has a negative impact on workers' well-being.

H2: The negative consequences of hours underemployment for workers' well-being are less severe in inclusive employment regime economies than elsewhere.

H3: The negative consequences of hours underemployment for workers' well-being are more severe in Mediterranean regime economies than elsewhere

Regime differences also have potential implications for the well-being related consequences of skill underutilisation. Evidence from the European Working Conditions Surveys and detailed studies of occupations suggest that task discretion and opportunities for workers to develop themselves in their job tend to be more substantial in countries associated with the inclusive regime than elsewhere in the EU (Gallie, 2009; Lloyd and Payne, 2016). It is possible that opportunities for self-development and training will mitigate the negative consequences of 'skills underemployment' for well-being, to the extent that workers identify a realistic prospect of ultimately moving to a job for which they feel better suited. Furthermore, there is evidence that job autonomy can mitigate the negative impact of overqualification on well-being (Wu et al., 2015), which leads us to expect that any negative consequences of skills under-employment for well-being will be weaker in inclusive regime economies compared to elsewhere. Thus, we hypothesise that:

H4: The negative consequences of skill under-utilisation for workers' well-being are less severe in inclusive employment regime economies than elsewhere.

Recent research by Kamerāde and Richardson (2017) has drawn attention to the possibility that experiences of underemployment will differ between men and women. Examining evidence from the UK, they find that underemployment is most common in female-dominated

occupations and that the negative consequences of underemployment are greater for women than men when employees with relatively long tenures are compared. With regard to the influence of regimes, it is possible that the equality-promoting characteristics of inclusive regimes result in similar well-being experiences for underemployed men and women. Employment regimes theory predicts that differences between men and women will also be small in market regimes, assuming similar levels of qualification (Gallie, 2007: 19). By contrast, dualist and Mediterranean regimes, which are less supportive of women's participation in employment and which therefore limit women's choices relative to men, might lead to differences in the well-being related consequences of underemployment, particularly in relation to hours underemployment (given that men may find it easier than women to improve upon their circumstances). Our fifth and sixth hypotheses, therefore, are that:

H5: The experiences of men and women in relation to hours underemployment and well-being will be more similar in inclusive and market regimes than elsewhere.

H6: Any negative consequences of hours underemployment will be greater for women than for men in the dualist and Mediterranean regimes.

3. Data and methods

The findings are derived from the 2015 European Working Conditions Survey, a representative survey of people aged 15 or more (16 in the case of Spain, the UK and Norway) who are in paid employment for at least one hour per week. The EWCS was first conducted in 1990 and has since been repeated every five years, with a large number of questions on skills, job expectations, employment conditions and training which are consistent and comparable over time and between countries. The survey aims to collect data from at least 1000 employees in each country, but some countries collect data from considerably more respondents. The 2015 survey covered the EU27, Norway, Croatia, the former Yugoslav Republic of Macedonia, Turkey, Albania, Montenegro and Kosovo (35 countries in total). The total sample size was 43,850 individuals.

Following Gallie (2007), we grouped the countries covered by the 2015 EWCS into 'employment regimes' that are commonly argued to share institutional traits and that tend to be geographically clustered. The 'dualist regime' comprises Austria, Belgium, France and Germany. The 'inclusive regime' consists of Denmark, Sweden and Norway. Ireland and the

UK together represent the ‘market regime’. We also include a ‘Mediterranean regime’ composed of Greece, Spain, Italy and Portugal (Ferragina et al., 2013; Ferrera, 1996). Although some contributions to the international comparative political economy literature (e.g., King, 2007) identify a Central and Eastern European (CEE) regime, we have not included CEE economies in this paper. The number of countries within Central and Eastern Europe is relatively large and includes Vizegrad, Baltic and Balkan economies that differ substantially in terms of their welfare provision and institutions (Bohle and Greskovits, 2007). The analysis is therefore restricted to countries in the EU15. We present findings for each employment regime, in each case reporting findings for men and women separately. The findings relate to employees and therefore exclude the self-employed.

We do not assume that the regimes are necessarily internally coherent. The clusters into which countries are grouped are dependent on the indicators that are used to group them and can change over time as a consequence of policy reforms (Seeleib-Kaiser, 2016, Ferragina et al., 2015). Our analysis of employment regime clusters is therefore supported by an analysis of within cluster differences, in order to assess the consistency of findings across countries associated with particular regimes.

The models estimate the relationship between well-being and five variables that relate to different dimensions of underemployment. The first two variables give an indication of the level of hours underemployment experienced. The remaining variables provide measures of the under-utilisations of workers’ skills and knowledge (summary statistics of these variables broken down by regime and a correlation matrix are shown in Tables 1A and 1B):

Time based measures of underemployment:

Q24 of the EWCS asks workers ‘how many hours do you usually work per week in your main paid job?’. The survey also asks ‘provided that you could make a free choice regarding your working hours and taking into account the need to earn a living: how many hours per week would you prefer to work at present?’ (Q25). Participants can either choose the number of hours they currently work or give a different number. Using this information, we created two variables to measure time-based underemployment:

Underemployment 1-10 hours, which relates to workers who would prefer to work between one and 10 hours more per week than they currently do.

Underemployment 11 or more hours, which relates to workers who would prefer to work more than 10 hours a week more than they currently do.

The models also include two variables that relate to ‘overemployment’, comparing workers who work between one and 10 hours more than they would like (*Works 1-10 hours more than preferred*) and those who work 11 or more hours more than they would prefer (*Works 11+ hours more than preferred*). It is necessary to include these variables as independent variables since, as shown in the analysis, the overemployment effect is in the same direction as the underemployment effect (i.e. they both negatively impact on employee well-being). Thus, if overemployment is omitted from the models, our reference category with respect to underemployment includes overemployment, which causes underemployment in terms of hours to appear insignificant. This is clearly a misspecification in the model and produces a spurious result. Therefore, it is essential to maintain ‘working preferred hours’ as the reference category, which implies that we need to include both underemployment and overemployment in the models.

Under-utilisation measures of underemployment:

The EWCS also includes questions that enable us to create the following under-utilisation measures of underemployment:

Under-engaged, which relates to workers who responded negatively to the following statement (Q89e in the EWCS): *The organisation I work for motivates me to give my best job performance*. These are workers who feel that they are performing at a level lower than their capabilities would allow.

Overskilled: this variable is derived from Q64 of the EWCS, which asks workers to describe their skills in relation to their current job. Participants were asked to select one response from ‘I need further training to cope well with my duties’, ‘my present skills correspond well with my duties’, and ‘I have the skills to cope with more demanding duties’. We use the last of these as a measure of skill underutilisation.

Overskilled and no prospects, which relates to workers who said that they had the skills to cope with more demanding duties than were required in their current job *and* who responded

negatively to a question (Q89b) that asked them about their perception of their prospects for career advancement ('My job offers good prospects for career advancement').

Dependent and control variables

The well-being variable is derived from Q87 of the EWCS, which comprises the World Health Organisation's well-being index (WHO-5). The question asks participants to indicate for each of five statements 'which is the closest to how you have been feeling over the last two weeks?'. The statements are: 'I have felt cheerful and in good spirits'; 'I have felt calm and relaxed', 'I have felt active and vigorous'; 'I woke up feeling fresh and rested'; 'My daily life has been filled with things that interest me'. For each statement, participants were asked to select one of six possible responses (excluding 'don't know'): 'all of the time', 'most of the time', 'more than half the time', 'less than half the time', 'some of the time' and 'at no time'. For our analysis, the scaled responses to this question were recoded and added together to form a scale ranging from 0 if all the answers were completely negative to 25 if all the answers were completely positive. Thus, higher scores represent higher well-being. The Cronbach's alpha score for the well-being measure was 0.87.

The tables present findings for all workers and for men and women separately. The findings for all workers include a comparison of the overall well-being of men and women (men form the reference group for the comparison) while the separate findings for men and women show relationships between underemployment and well-being. Some studies have found a U-shaped association between individuals' subjective well-being and their age, in which well-being declines as individuals approach middle age and increases thereafter (e.g. Blanchflower and Oswald, 2008; Dolan, 2008). The models therefore control for workers' age, with workers aged 15-29 years comprising the reference group for the age comparison. They also control for temporary contracts, on the assumption that they will be associated with greater subjective insecurity than permanent contracts and this might affect workers' well-being. In addition, the models control for workers' occupation. Some studies have also found that workers in higher level occupations tend to be less content than those in lower level occupations, possibly because of the demands associated with higher-level occupations and resulting anxiety (Green 2006: 162). In controlling for occupation, we have included variables based on the International Standard Classification of Occupations (ISCO), which is a classification system for which the International Labour Organisation (ILO) is responsible. ISCO arranges jobs into categories, at different levels of aggregation, according to duties and tasks undertaken by workers. Major

occupational categories are associated with one of four levels of skill, ranging from performance of simple or routine manual or physical tasks (level 1) to complex decision-making, problem-solving or creativity (level 4). Occupations at levels 1 and 2, which together form the reference group for the analysis, are assumed to require primary or secondary education, but typically not tertiary education. Occupations at levels 3 and 4 typically require workers to have undertaken higher education (occupations in the level 4 category typically involve the longest periods of education and training and involve complex problem-solving and decision-making tasks).

INSERT TABLE 1A, 1B and 1C ABOUT HERE

The method adopted to test the hypotheses is simple ordinary least squares (OLS) regression with controls (fixed effects) for regimes or countries. In all cases the models are weighted by the country level weight provided by Eurofound to take account of the different sample and country sizes in the dataset.

4. Findings

We begin by presenting findings for the whole sample. Table 1A provides an overview of the percentage of underemployed and overemployed workers in each regime. The percentage of workers in hours under-employment is similar in each regime, although the distribution of workers across the two categories of hours underemployment varies. It should be borne in mind that the figures capture all employees who would prefer to work more hours, not simply those in involuntary part-time employment. Skill underutilisation appears to be most common in the market regime while over-employment appears to be most extensive in inclusive and market regimes. The percentage of workers who believe that their organisation does not motivate them is lowest in the inclusive regime and highest in the dualist regime, although the differences are not large. As shown in Table 1B, the mean well-being scores in the four regimes are very similar.

In order to enable an assessment of intra-regime differences and similarities concerning associations between underemployment and well-being, findings are reported controlling for individual regimes (Table 2) and then controlling for individual countries (Table 3). As some

of the underemployment variables become insignificant when we use a smaller sample (e.g., when breaking down by gender or into smaller sets of countries), we needed to check whether this was due to the reduction in sample size rather than a real change. To test for this, we estimated models (not reported here) using the full samples but interacting regime and gender with the underemployment variables in question. In no case did these models change any of the findings.

Taking Table 2 first, it can be seen that the overall well-being of workers in the dualist, inclusive and Mediterranean regimes is higher than in the market regime after controlling for the other factors in the model. It is also the case that the well-being of workers is highest in the Mediterranean regime overall, although men appear to fare slightly better than women. The findings demonstrate that all but one of our measures of under-employment are negatively associated with workers' well-being. The exception is the basic measure of the under-utilisation of workers' skills which, contrary to our expectations, is positively associated with well-being. The association becomes negative, however, when workers believe their career prospects to be poor. Workers who believe that their organisation does not motivate them to perform well also experience lower well-being. Indeed, the effect size for this form of underemployment is the largest overall.

Hours underemployment has a highly significant negative association with well-being, as does working more hours than desired. On average, women appear to have lower well-being than men while workers aged 15-29 years (the reference group) appear to have higher levels of well-being compared to older workers. In contrast to some previous studies, (e.g. Blanchflower and Oswald, 2008; Van Landeghem, 2012), we do not find a 'U-shaped' relationship between age and well-being. The results also suggest that workers in the highest-level occupations experience higher levels of well-being than those in lower-level occupations. However, analysing the results for women and men separately reveals that the positive association between occupation and well-being relates mainly to women.

INSERT TABLE 2 AND 3 ABOUT HERE

The initial comparison of countries (Table 3) does not suggest a clear pattern, indicating that there is considerable variation within regimes with respect to well-being scores. Although average well-being appears to be higher in some countries when compared to Greece (the reference category), this does not hold true for all countries and is not consistent within regimes (for example, overall well-being is higher in Spain and lower in Italy). Furthermore, there are clear gender differences in some countries (Italy and Germany).

The models in Tables 2 and 3 provide only partial support for our first hypothesis that well-being is negatively affected by underemployment: hours-related underemployment and under-engagement have clear negative impacts, but the effect of skill under-utilisation is negative only when workers believe that their prospects for career advancement are poor. We now discuss findings for the individual regimes, which will enable an assessment of our remaining hypotheses to be made.

Inclusive regime

The findings for the inclusive regime (Table 4) again indicate a strong negative association between under-engagement of workers and their well-being, although the size of the coefficient is noticeably lower than for other regimes, pointing perhaps to compensating features of the work environment (such as work autonomy). The findings also show that skill under-utilisation is associated with lower well-being only when workers are pessimistic about their career prospects. Time-based underemployment appears to have much less of an effect in terms of the size of the coefficient or the significance level. Working 1-10 hours less than desired hours appears to reduce well-being, but the effect is weak and disappears when men and women are considered separately. By contrast, working longer hours than desired has a substantial negative association with well-being and this applies to all of the other regime models, whether examining the pooled data or findings for men and women separately. The results also indicate that workers aged 40 years or over experience higher well-being than the reference group of workers aged 15-29 years and that subjective well-being increases with age. When men and women are compared, however, it can be seen that the positive association becomes common to both only from the age of 50 years onwards. We also find that women in the inclusive regime experience lower levels of well-being than men, a finding that is consistent across all regimes. Skill level effects (measured by the ISCO-based skill levels) appear to be relatively weak, perhaps being indicative of the relatively egalitarian nature of the countries associated with the

inclusive regime. In addition, the results shed further light on intra-regime differences. When compared with their counterparts in Sweden (the reference country) employees in Denmark and Norway report higher levels of well-being, although the difference applies mainly to women.

INSERT TABLE 4 ABOUT HERE

Market regime

The market employment regime includes only two countries: the UK and Ireland. As was the case for the inclusive regime, the basic measure of skill underutilisation is positively associated with well-being, becoming negative where workers believe their career prospects to be poor. Under-engagement has a strong negative relationship with well-being (measured by the size of the coefficient), particularly for women. Time-based underemployment has a statistically significant negative effect if more than 10 additional hours are desired, although it appears to be only men who are affected by this. A striking finding is that the average well-being of workers in the UK is much lower than that reported by workers in Ireland, a finding that holds for both women and men (although women in market regime economies experience lower levels of well-being than men after controlling for other factors).

INSERT TABLE 5 ABOUT HERE

Dualist regime

The results for the dualist regime are consistent with those for the inclusive and market regimes as far as the first two measures of under-utilisation are concerned. However, the negative association between skill under-utilisation in the presence of very limited career prospects and well-being does not achieve statistical significance for men.

Hours underemployment in the dualist regime is negatively associated with well-being, although it appears that women are most affected, particularly when more than 10 additional hours are desired. Once again working long hours is associated with lower well-being and we

again find that women tend to experience lower levels of well-being than men overall. The results also point to substantial intra-regime variations: average reported well-being in France is lower than that for the reference country (Belgium), whereas in Austria and Germany, well-being is higher, although the differences appear to be confined to women.

INSERT TABLE 6 ABOUT HERE

Mediterranean regime

Finally, we turn to the Mediterranean regime. The negative association between well-being and under-engagement is again clear, although the size of the coefficient is much larger for women than for men. Once again, we find a positive association between skill under-utilisation and well-being. However, although a perceived lack of career prospects does result in a negative association between skill under-utilisation and well-being, this mainly affects men. The findings demonstrate that there is a statistically significant negative association between well-being and hours underemployment, although the association relates to women and not to men. Once again, working more hours than desired has a substantial negative association with well-being. Furthermore, there is a marked negative association between age and well-being for both men and women: only in the Mediterranean regime does the size of the negative co-efficient consistently increase as workers age. We again find that women report lower overall levels of well-being when compared to men. As was the case for the analysis of the full sample, the reference country is Greece and the results demonstrate that average reported well-being in Portugal is higher in comparison for men and in Spain higher for both men and women.

INSERT TABLE 7 ABOUT HERE

5. Conclusions

This paper has demonstrated the ways in which underemployment and the well-being of European workers are associated. A consistent finding across all regimes is that workers who

feel that their employer does not motivate them to perform well in their jobs report lower levels of well-being than those who do feel motivated. This form of underemployment appears to have the strongest negative association with well-being, as measured by the size of its coefficient. Hours underemployment is also negatively associated with well-being, although the findings across regimes are inconsistent: for example, in the dualist and Mediterranean regimes it is mainly women who are affected whereas in the market regime men are more clearly affected (at higher levels of hours underemployment). By contrast, workers who believe they have the skills to cope with more demanding duties than are required in their job tend to have higher well-being. This is contrary to expectations based on previous studies (e.g. Allen and van der Velden, 2001; Maynard et al., 2006). One potential explanation relates to the measure that was used: the question asked workers whether they had the skills to cope with more demanding duties, as opposed to asking about the extent to which they made use of their skills and qualifications in their current job. It is possible that many workers who responded positively to the question were able to cope relatively easily with the demands of their job, which might have contributed positively to their well-being. The association between skill under-utilisation and well-being becomes negative, however, when workers believe that they have poor career prospects. This suggests that the consequences of skill under-utilisation are context dependent. Taken together, these findings provide mixed support for our first hypothesis, that underemployment has a negative impact on workers' well-being. The hypothesis is generally correct for under-engagement of workers and hours-related underemployment but is correct for skills underutilisation only when workers believe that their career does not offer them a means of improving their circumstances.

Our second hypothesis was that the negative consequences of hours underemployment for workers' well-being would be less severe in the inclusive employment regime than elsewhere. The findings support this hypothesis. Although the overall well-being of workers in inclusive regime countries is negatively affected by moderate hours underemployment, the strength of the association is relatively weak and becomes insignificant when women and men are compared separately. Furthermore, the sizes of the relevant coefficients are smaller than is the case in the other regimes. It is plausible that this reflects the cushioning effect of state-funded financial support for involuntary part-time workers (Schmid and Wagner, 2017) and thus points to the influence of the strong welfare states associated with inclusive regimes.

The paper's third hypothesis was that the negative consequences of hours underemployment for workers' well-being would be more severe in Mediterranean regime economies than elsewhere. This proved not to be the case. Although statistically significant negative associations between hours under-employment and well-being were found in the Mediterranean regime economies, they were confined to women and the coefficients for the two levels of hours underemployment were largest overall in the dualist regime (and again larger for women than for men).

The fourth hypothesis was that negative consequences of skill under-utilisation for workers' well-being would be less severe in inclusive employment regime economies than elsewhere. This hypothesis was not supported. As noted, contrary to expectations, the main skill under-utilisation variable was positively associated with well-being, with the strongest association found in the market regime. Although associations in all regimes became negative when workers thought their career prospects poor, the association was weakest in the Mediterranean regime economies. It is possible that the relatively high rates of unemployment experienced by these countries in the wake of the 2007-8 financial crisis have led to reduced expectations on the part of workers, moderating the consequences of poor career prospects for their well-being (for a related argument concerning the impact of the economic crisis on workers' perceptions, see Clark, 2011).

Our final two hypotheses related to gender differences across regimes in relation to hours underemployment and well-being. The fifth hypothesis was that the experiences of men and women in relation to hours underemployment and well-being would be more similar in inclusive and market regimes than in dualist and Mediterranean regimes. The findings support this hypothesis for inclusive regime countries but not for the market regime: the relationship between hours underemployment in the inclusive regimes was statistically insignificant for both men and women while elsewhere there were gender differences in relation to at least one of the two levels of hours underemployment. Our sixth hypothesis, that any negative consequences of hours underemployment would be greater for women than for men in dualist and Mediterranean regimes, was, however, fully supported.

Although the paper's primary focus is underemployment, it has also provided evidence relating to over-employment, in the sense of working more hours than are desired. This has been shown to have a substantial negative association with workers' well-being, regardless of the

employment regime in which they work. This paper's findings also, however, raise issues that relate to the internal consistency of welfare regimes, since it appears that workers in countries associated with specific regimes differ in terms of their average well-being. For example, well-being in Norway and Denmark is significantly higher than in Sweden, while Spain appears to be out of step with other Mediterranean regime countries in that average well-being appears to be much higher there. The dualist regime, by contrast, contains one country (France) in which average well-being is significantly lower than the reference country (Belgium), as well as countries in which well-being is significantly higher. These findings do not necessarily call into question the utility of categorising countries according to shared institutional characteristics but do indicate that socio-economic outcomes can differ markedly between countries associated with specific regimes.

The findings have implications for policy and practice. The lack of a negative association between hours underemployment and well-being in inclusive regime countries potentially points to the importance of income replacement benefits provided to workers who are in involuntary part-time employment and measures such as vocational education and training that support labour market transitions (Schmid, 2014) and help workers to find more adequate employment. The finding that skill underutilisation is negatively associated with well-being only when workers also believe their career prospects are poor further indicates the importance of measures to support mobility within external and internal labour markets. It is also reasonable to assume that workers who believe they have no prospects will be less motivated and potentially less productive. To that extent, employers might benefit from creating in-company pathways out of skills underemployment. Employers could also benefit from doing more to motivate their workforces, given the apparently deleterious consequences for employees' well-being when they believe that their employer does not encourage them to perform well at work.

Although the paper's findings suggest important regime-related differences in experiences of underemployment and their consequence for well-being, further work is required in order to explain these differences. The analysis contained within the paper is based on cross-sectional data and we are unable to demonstrate that underemployment has a negative causal impact on, as opposed to a negative association with, well-being. We cannot entirely rule out the possibility that poor subjective well-being leads workers to accept jobs that involve underemployment. Country and organisation-level studies would be valuable, in that they

would enable an investigation into the connections between national employment and welfare institutions, skill formation systems and forms of work organisation (as, for example, in Lloyd and Payne, 2016), relating these phenomena to lived experiences of under-employment. Dynamic analyses of employment or welfare regime change (as advocated by Ferragina et al., 2013) might also be beneficial, in that they might enable an understanding of how underemployment and well-being are affected by changes in social policy over time. Finally, the length of time for which workers are in involuntary part-time employment or in jobs that do not fully utilise their skills and knowledge might have implications for their well-being. Further research on this issue, and on workers' transitions between employment, unemployment and underemployment would be welcome.

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Table 1A. Percentages of people underemployed and overemployed by regime

Variable	Inclusive (Norway, Sweden, Denmark)	Market (UK, Ireland)	Dualist (Belgium, France, Austria, Germany)	Southern (Greece, Italy, Portugal, Spain)	All
Under-engaged	12	16	17	14	16
Overskilled	28	33	24	26	27
Overskilled and no prospects	12	13	10	11	11
Underemployed 1-10 hours	8	8	10	5	8
Underemployed 11 or more hours	5	6	4	11	6
Works 11+ hours more than preferred	10	11	5	6	7
Works 1-10 hours more than preferred	28	24	21	16	21

Table 1B. Mean well-being scores by regime

	Inclusive (Norway, Sweden, Denmark)	Market (UK, Ireland)	Dualist (Belgium, France, Austria, Germany)	Mediterranean (Greece, Italy, Portugal, Spain)	All
Well-being	17.3	16.0	17.2	17.4	17.0

Table 1C. Spearman correlations between independent variables (whole sample)

	Under-engaged	Overskilled	Overskilled and no prospects	Works 11+ hours more than preferred	Works 1-10 hours more than preferred	Underemployed 1-10 hours	Underemployed 11 or more hours
Under-engaged	1.00	0.07***	0.19***	0.06***	0.06***	0.02**	0.01
Overskilled	0.07***	1.00	0.59***	0.03***	0.00	0.02	0.04***
Overskilled and no prospects	0.19***	0.59***	1.00	0.02*	0.01	0.03***	0.05***
Works 11+ hours more than preferred	0.06***	0.03***	0.02*	1.00	-0.14***	-0.08***	-0.08***
Works 1-10 hours more than preferred	0.06***	0.00	0.01	-0.14***	1.00	-0.15***	-0.15***
Underemployed 1-10 hours	0.02***	0.02	0.03***	-0.08***	-0.15***	1.00	-0.08***
Underemployed 11 or more hours	0.01	0.04***	0.05***	-0.08***	-0.15***	-0.08***	1.00

* significant at 5%, ** significant at 1%, significant at 0.1%

Table 2. All countries – OLS regressions (non-standardised coefficients shown with standard errors in brackets)

	<i>Dependent variable:</i>		
	Well-being scale		
	All	Male	Female
Under-engaged	-3.446*** (0.106)	-3.127*** (0.147)	-3.797*** (0.152)
Overskilled	0.944*** (0.106)	0.812*** (0.143)	1.126*** (0.156)
Overskilled and no prospects	-1.183*** (0.150)	-1.006*** (0.209)	-1.415*** (0.218)
Underemployed 1-10 hours	-0.807*** (0.141)	-0.661*** (0.208)	-0.962*** (0.191)
Underemployed 11 or more hours	-0.818*** (0.163)	-0.562** (0.265)	-0.985*** (0.207)
Works 1-10 hours more than preferred	-1.195*** (0.097)	-0.958*** (0.132)	-1.487*** (0.144)
Works 11+ hours more than preferred	-1.929*** (0.155)	-1.762*** (0.212)	-2.120*** (0.227)
Female	-0.686*** (0.076)		
Aged 30-39	-0.559*** (0.118)	-0.829*** (0.166)	-0.295* (0.168)
Aged 40-49	-0.649*** (0.117)	-0.798*** (0.166)	-0.524*** (0.165)
Aged 50+	-0.577*** (0.114)	-0.661*** (0.161)	-0.478*** (0.163)
No indefinite contract	0.246** (0.104)	0.286* (0.150)	0.220 (0.144)
Skill level 4	0.318*** (0.095)	0.218 (0.135)	0.448*** (0.134)
Skill level 3	0.068 (0.107)	-0.149 (0.153)	0.306** (0.149)
Inclusive (NO/SW/DK)	1.207*** (0.168)	1.534*** (0.234)	0.869*** (0.240)
Dualist (AT/BE/FR/DE)	1.246*** (0.102)	1.390*** (0.142)	1.081*** (0.148)
Mediterranean (GR/IT/PT/ES)	1.296*** (0.116)	1.371*** (0.162)	1.199*** (0.166)
Constant	17.679*** (0.134)	17.622*** (0.181)	17.055*** (0.186)
Observations	15,576	7,484	8,092
R ²	0.117	0.111	0.120
Adjusted R ²	0.116	0.109	0.118
Residual Std. Error	5.664 (df = 15558)	5.623 (df = 7467)	5.693 (df = 8075)
F Statistic	121.250*** (df = 17; 15558)	57.985*** (df = 16; 7467)	68.968*** (df = 16; 8075)

Note: Reference categories: working preferred level of hours, male, aged under 30, skill level 1/2, market regime

* significant at 5%, ** significant at 1%, significant at 0.1%

Table 3. All countries - OLS regressions (non-standardised coefficients shown with standard errors in brackets)

	<i>Dependent variable:</i>		
	Well-being scale		
	All	Male	Female
Under-engaged	-3.410*** (0.092)	-3.161*** (0.146)	-3.703*** (0.151)
Overskilled	0.802*** (0.091)	0.723*** (0.142)	1.028*** (0.155)
Overskilled and no prospects	-1.078*** (0.129)	-0.895*** (0.207)	-1.341*** (0.215)
Underemployed 1-10 hours	-0.673*** (0.121)	-0.548*** (0.208)	-0.982*** (0.189)
Underemployed 11 or more hours	-0.671*** (0.140)	-0.568** (0.262)	-0.939*** (0.205)
Works 1-10 hours more than preferred	-1.231*** (0.084)	-1.032*** (0.131)	-1.482*** (0.143)
Works 11+ hours more than preferred	-2.046*** (0.134)	-1.845*** (0.211)	-2.133*** (0.224)
Female	-0.661*** (0.065)		
Aged 30-39	-0.567*** (0.101)	-0.894*** (0.165)	-0.224 (0.166)
Aged 40-49	-0.561*** (0.101)	-0.799*** (0.164)	-0.448*** (0.163)
Aged 50+	-0.476*** (0.098)	-0.658*** (0.159)	-0.450*** (0.161)
No indefinite contract	0.140 (0.089)	0.149 (0.149)	0.213 (0.143)
Skill level 4	0.334*** (0.081)	0.269** (0.134)	0.494*** (0.132)
Skill level 3	0.158* (0.092)	-0.088 (0.152)	0.312** (0.148)
Denmark	-0.060 (0.268)	0.781 (0.545)	0.573 (0.584)
Norway	-0.174 (0.275)	0.707 (0.559)	0.461 (0.588)
Sweden	-0.808*** (0.216)	0.194 (0.492)	-0.323 (0.526)
UK	-1.735*** (0.128)	-1.139*** (0.413)	-0.844* (0.450)
Ireland	0.071 (0.335)	0.753 (0.642)	0.848 (0.647)
Belgium	-0.491** (0.226)	0.374 (0.501)	0.136 (0.537)
France	-1.188*** (0.130)	-0.163 (0.415)	-0.697 (0.451)
Austria	0.323 (0.233)	0.950* (0.515)	1.173** (0.539)
Germany	0.041 (0.121)	0.621 (0.408)	0.968** (0.446)
Spain	0.945***	1.652***	1.723***

	(0.146)	(0.425)	(0.462)
Italy	-1.587***	-0.940**	-0.747
	(0.144)	(0.425)	(0.461)
Portugal	0.004	0.710	0.779
	(0.248)	(0.540)	(0.546)
Constant	19.281***	18.714***	17.744***
	(0.135)	(0.421)	(0.458)
Observations	20,521	7,484	8,092
R ²	0.136	0.131	0.146
Adjusted R ²	0.135	0.128	0.143
Residual Std. Error	5.105 (df = 20494)	5.562 (df = 7458)	5.613 (df = 8066)
F Statistic	124.400*** (df = 26; 20494)	44.921*** (df = 25; 7458)	55.060*** (df = 25; 8066)

Note: Reference categories: working preferred level of hours, male, aged under 30, skill level 1/2, Greece

* significant at 5%, ** significant at 1%, significant at 0.1%

Table 4. Inclusive countries (Norway, Sweden, Denmark) – OLS regressions (non-standardised coefficients shown with standard errors in brackets)

	<i>Dependent variable:</i>		
	Well-being scale		
	All	Male	Female
Under-engaged	-2.573*** (0.265)	-2.804*** (0.357)	-2.299*** (0.392)
Overskilled	0.825*** (0.230)	0.896*** (0.288)	0.804** (0.370)
Overskilled and no prospects	-1.300*** (0.330)	-0.998** (0.435)	-1.590*** (0.506)
Underemployed 1-10 hours	-0.643* (0.328)	-0.586 (0.454)	-0.640 (0.474)
Underemployed 11 or more hours	-0.610 (0.402)	-0.761 (0.565)	-0.467 (0.573)
Works 1-10 hours more than preferred	-1.360*** (0.203)	-1.634*** (0.278)	-1.091*** (0.295)
Works 11+ hours more than preferred	-1.909*** (0.299)	-2.014*** (0.378)	-1.739*** (0.475)
Female	-1.084*** (0.170)		
Aged 30-39	0.225 (0.270)	-0.058 (0.365)	0.539 (0.396)
Aged 40-49	0.784*** (0.265)	0.255 (0.354)	1.388*** (0.395)
Aged 50+	1.109*** (0.250)	1.284*** (0.339)	0.984*** (0.369)
No indefinite contract	-0.251 (0.249)	-0.115 (0.342)	-0.415 (0.361)
Skill level 4	0.290 (0.198)	0.225 (0.266)	0.281 (0.294)
Skill level 3	-0.065 (0.236)	0.227 (0.324)	-0.314 (0.346)
Denmark	0.721*** (0.203)	0.502* (0.268)	0.932*** (0.304)
Norway	0.694*** (0.211)	0.413 (0.283)	0.885*** (0.312)
Constant	17.709*** (0.268)	17.991*** (0.345)	16.332*** (0.385)
Observations	2,693	1,287	1,406
R ²	0.107	0.128	0.076
Adjusted R ²	0.101	0.117	0.067
Residual Std. Error	3.281 (df = 2676)	3.108 (df = 1271)	3.426 (df = 1390)
F Statistic	19.971*** (df = 16; 2676)	12.409*** (df = 15; 1271)	7.675*** (df = 15; 1390)

Note: Reference categories: working preferred level of hours, male, aged under 30, skill level 1/2, Sweden

* significant at 5%, ** significant at 1%, significant at 0.1%

Table 5. Market countries (UK and Ireland) – OLS regressions (non-standardised coefficients shown with standard errors in brackets)

	<i>Dependent variable:</i>		
	Well-being scale		
	All	Male	Female
Under-engaged	-3.837*** (0.318)	-3.482*** (0.412)	-4.182*** (0.488)
Overskilled	1.367*** (0.292)	1.021*** (0.391)	1.783*** (0.433)
Overskilled and no prospects	-2.132*** (0.416)	-1.951*** (0.569)	-2.364*** (0.607)
Underemployed 1-10 hours	-0.550 (0.447)	-0.813 (0.657)	-0.694 (0.614)
Underemployed 11 or more hours	-0.935* (0.498)	-1.886** (0.800)	-0.656 (0.649)
Works 1-10 hours more than preferred	-1.331*** (0.287)	-0.411 (0.385)	-2.252*** (0.426)
Works 11+ hours more than preferred	-2.745*** (0.378)	-2.318*** (0.502)	-3.388*** (0.567)
Female	-0.501** (0.229)		
Aged 30-39	0.112 (0.336)	-1.208*** (0.461)	1.405*** (0.491)
Aged 40-49	0.160 (0.335)	-0.461 (0.467)	0.565 (0.479)
Aged 50+	0.519 (0.321)	0.058 (0.431)	0.803* (0.477)
No indefinite contract	0.488 (0.334)	0.815* (0.447)	-0.038 (0.501)
Skill level 4	0.384 (0.259)	0.128 (0.344)	0.743* (0.389)
Skill level 3	-0.250 (0.363)	-1.131** (0.486)	0.692 (0.545)
UK	-1.679*** (0.493)	-1.841*** (0.688)	-1.550** (0.701)
Constant	18.660*** (0.578)	19.354*** (0.781)	17.642*** (0.811)
Observations	2,088	1,043	1,045
R ²	0.135	0.143	0.156
Adjusted R ²	0.129	0.132	0.145
Residual Std. Error	7.596 (df = 2072)	7.278 (df = 1028)	7.810 (df = 1030)
F Statistic	21.520*** (df = 15; 2072)	12.280*** (df = 14; 1028)	13.600*** (df = 14; 1030)

Note: Reference categories: working preferred level of hours, male, aged under 30, skill level 1/2, Ireland

* significant at 5%, ** significant at 1%, significant at 0.1%

Table 6. Dualist countries (Austria, Belgium, France, Germany) – OLS regressions (non-standardised coefficients shown with standard errors in brackets)

	<i>Dependent variable:</i>		
	Well-being scale		
	All	Male	Female
Under-engaged	-3.445*** (0.156)	-3.537*** (0.221)	-3.357*** (0.221)
Overskilled	0.652*** (0.166)	0.528** (0.222)	0.829*** (0.251)
Overskilled and no prospects	-0.731*** (0.239)	-0.413 (0.328)	-1.175*** (0.353)
Underemployed 1-10 hours	-0.869*** (0.195)	-0.611** (0.290)	-1.185*** (0.267)
Underemployed 11 or more hours	-0.944*** (0.294)	-0.203 (0.488)	-1.320*** (0.370)
Works 1-10 hours more than preferred	-1.352*** (0.146)	-1.268*** (0.197)	-1.421*** (0.218)
Works 11+ hours more than preferred	-2.140*** (0.276)	-2.259*** (0.376)	-1.920*** (0.408)
Female	-0.771*** (0.116)		
Aged 30-39	-0.974*** (0.184)	-1.046*** (0.261)	-0.882*** (0.260)
Aged 40-49	-1.069*** (0.181)	-0.976*** (0.258)	-1.151*** (0.254)
Aged 50+	-0.766*** (0.176)	-0.781*** (0.251)	-0.715*** (0.248)
No indefinite contract	0.054 (0.168)	-0.151 (0.248)	0.256 (0.230)
Skill level 4	0.271* (0.154)	0.146 (0.220)	0.363* (0.218)
Skill level 3	0.189 (0.149)	0.128 (0.219)	0.153 (0.205)
France	-0.682*** (0.256)	-0.512 (0.359)	-0.864** (0.366)
Austria	0.791** (0.342)	0.598 (0.486)	1.023** (0.482)
Germany	0.515** (0.251)	0.261 (0.351)	0.803** (0.359)
Constant	19.259*** (0.288)	19.357*** (0.395)	18.378*** (0.405)
Observations	6,045	2,877	3,168
R ²	0.148	0.140	0.153
Adjusted R ²	0.146	0.136	0.149
Residual Std. Error	5.975 (df = 6027)	5.960 (df = 2860)	5.978 (df = 3151)
F Statistic	61.730*** (df = 17; 6027)	29.184*** (df = 16; 2860)	35.579*** (df = 16; 3151)

Note: Reference categories: working preferred level of hours, male, aged under 30, skill level 1/2, Belgium

* significant at 5%, ** significant at 1%, significant at 0.1%

Table 7. Mediterranean countries (Greece, Italy, Portugal, Spain) – OLS regressions (non-standardised coefficients shown with standard errors in brackets)

	<i>Dependent variable:</i>		
	Well-being scale		
	All	Male	Female
Under-engaged	-3.223*** (0.199)	-2.108*** (0.281)	-4.453*** (0.281)
Overskilled	0.809*** (0.192)	0.921*** (0.273)	0.706*** (0.271)
Overskilled and no prospects	-0.681** (0.268)	-0.974** (0.390)	-0.395 (0.368)
Underemployed 1-10 hours	-0.507* (0.303)	0.132 (0.475)	-0.963** (0.389)
Underemployed 11 or more hours	-0.453** (0.229)	-0.195 (0.378)	-0.679** (0.287)
Works 1-10 hours more than preferred	-0.960*** (0.188)	-0.989*** (0.256)	-0.983*** (0.279)
Works 11+ hours more than preferred	-0.900*** (0.283)	-0.594 (0.408)	-1.182*** (0.392)
Female	-0.643*** (0.134)		
Aged 30-39	-0.835*** (0.217)	-0.874*** (0.310)	-0.845*** (0.303)
Aged 40-49	-0.969*** (0.215)	-1.267*** (0.310)	-0.749** (0.299)
Aged 50+	-1.732*** (0.218)	-1.786*** (0.311)	-1.693*** (0.304)
No indefinite contract	0.074 (0.161)	-0.036 (0.240)	0.170 (0.215)
Skill level 4	0.606*** (0.172)	0.710*** (0.263)	0.568** (0.225)
Skill level 3	0.246 (0.217)	-0.080 (0.311)	0.597** (0.302)
Spain	1.680*** (0.281)	1.577*** (0.392)	1.748*** (0.403)
Italy	-0.683** (0.282)	-0.761* (0.394)	-0.633 (0.404)
Portugal	0.848** (0.345)	0.760 (0.498)	0.867* (0.479)
Constant	18.745*** (0.333)	18.767*** (0.463)	18.148*** (0.471)
Observations	4,750	2,277	2,473
R ²	0.128	0.104	0.162
Adjusted R ²	0.125	0.098	0.156
Residual Std. Error	5.005 (df = 4732)	5.101 (df = 2260)	4.882 (df = 2456)
F Statistic	40.846*** (df = 17; 4732)	16.467*** (df = 16; 2260)	29.598*** (df = 16; 2456)

Note: Reference categories: working preferred level of hours, male, aged under 30, skill level 1/2, Greece

* significant at 5%, ** significant at 1%, significant at 0.1%