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**Labour Market Outcomes of Different Institutional Regimes:
Evidence from the OECD Countries**

Abstract

The rise of populism has been widely ascribed, at least in part, to an inability of national systems to generate decent employment or, indeed, stem its decline. This paper explores the basis and nature of variations in labour market outcomes of different institutional regimes. For this comparative institutional analysis, we build indexes of labour market outcomes in the OECD countries, measuring actual cross-country variations and encompassing a much wider range of evidence in terms of countries and time periods covered than previous studies. We show that in terms of job availability and wages the liberal market economies (LMEs) have advantages, but once involuntary part-time employment, gender wage gap and wage inequality are considered, labour market outcomes appear superior in the continental European countries and the Scandinavia social democracies. However, any advantages of the LMEs appear to be diminishing since the global financial crisis. Compared to other regimes, Southern European and transitional economies have lower level of job availability and wage rates but are comparable in other aspects of the labour market.

Keywords: Labour market outcomes, Varieties of Capitalism, employment, gender wage gap, wage inequality, financial crisis.

JEL: J20, J30, D02

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1. Introduction

There is plethora of evidence that compares the flexible labour markets of the liberal market economies (LMEs) such as the US and the UK and the more rigid labour markets of the coordinated market economies (CMEs) such as the continental Europe. The LMEs appear relatively successful in creating jobs, but this goes hand in hand with more insecure jobs, less investment in firm-specific skills by both employers and employees and high earnings inequality (Green, 2006; Wright and Dwyer, 2006). In contrast, the continental European countries and the Scandinavia social democracies seem to fare considerably better in terms of wage equality, but at the same time they are less efficient in creating jobs (Howell, 2002; Green, 2006). Only limited attention, however, has been given to the changes over time of the labour market outcomes or the outcomes in those regimes other than the above broad categories (Hassel, 2014). This study addresses this important but largely unexplored gap in the literature by measuring and comparing the labour market outcomes across varieties of capitalism and over time. This is a pertinent and timely effort given that some more regulated economies have experimented with market reforms in the area of employment protection, and this has led to much debate as to whether this fundamentally undermines existing institutional orders or whether the defining features of such systems have persisted (Wood et al., 2014a; Hassel, 2014).

In this paper, we adopt the Varieties of Capitalism (VoC) framework, an influential school of thinking in comparing institutional settings, to compare the labour market outcomes of different institutional settings. The institutional literature asserts that labour market characteristics and employment protection regulations vary across institutional regimes as the state, firms and stakeholders play different roles in the employment relations in different regimes (Hall and Soskice, 2001; Amable, 2003; Holman, 2013). The VoC framework classifies regimes

into the shareholder-dominated Liberal Market Economies (LMEs), the stakeholder-oriented continental European capitalism and Scandinavia social democratic capitalism, and other regimes such as the emerging market economies of post-communist Central and Eastern Europe and the mixed market economies of Mediterranean Europe (Amable, 2003; Hancke et al., 2007). This VoC clarification is particularly applicable to this study as our sample of 24 OECD countries covers a wide range of institutional settings.

We build four annual country-level indexes for the period 2000-2015 using objective measures, including unemployment rate, unemployment duration, involuntary part-time employment, wages, gender wage gap and wage inequality. Our results indicate that the LMEs initially appear superior in terms of job availability, duration in employment and wages. However, they are associated with the highest levels of involuntary part-time employment and wage inequality, which make this regime inferior in vis-à-vis continental European and social democratic capitalisms. We also find evidence that the superior features of the LMEs have diminished since the 2007-2008 global financial crisis. The gap in terms of employment and wages between the LMEs and the continental European and social democratic capitalisms appear to close in the post-crisis period. Our results remain qualitative unchanged when we use the OECD job quality indexes which take into account the public unemployment insurance and quality of the working environment but are measured less frequently and for a shorter time period compared to our indexes.

This paper contributes to the literature in four important ways. Firstly, it provides a much wider range of comparative objective national-level evidence, complementing existing accounts based on subjective firm-level evidence, individual perceptions-based surveys and smaller number of country coverage (Smith et al., 2008; Gallie, 2007; Lallement, 2011; Holman, 2013;

Wood et al, 2014b). Second, it documents important time variations in the labour market outcomes, covering a continuous time-period longer than most existing comparative accounts (*c.f.* Gallie, 2007; Holman, 2013). More significantly, we document changes in the labour market outcomes in the lead up to, and in the immediate aftermath of the 2007-2008 global financial crisis, which has substantially changed corporate practices around the world (Campello et al., 2010). Third, in comparing the relationship between country-level institutional settings and specific dimensions of work and employment relations, we explicitly link the labour market outcomes to national institutional configurations. Our findings complement the existing contemporary comparative institutionalist literature, which, critics have argued, adopts only a broad brushstroke approach to specific variations in work and employment relations in favour of focus on inter-firm relations and broad societal and governance features (Gallie, 2007; Thompson and Vincent, 2010; Wood et al., 2014a; Wood et al., 2014b).

It also supplements recent work which explores variations between different types of capitalism according to internal and external corporate governance, inter-firm relations, regulations and education (Witt and Jackson, 2016; Witt et al., 2017). Although the latter studies also do cover employment relations, they cover a different range of metrics to our own. Witt and Jackson (2016) explore duration of tenure, collective bargaining and employment protection. They confirm persistent difference (*inter alia*, higher turnover and less centralisation of bargaining in liberal markets than in coordinated ones) and that these differences facilitate incremental innovation in coordinated markets and more radical innovation in liberal ones. However, they also conclude that no nation exactly conforms to a specific institutional archetype, and most incorporate some features typically associated with others (*ibid.*). Although Witt et al. (2017) employ a similar methodology, they reach broadly similar conclusions; in this

study, employment dimensions encompass union rights under the law, and type of unions (company, craft, industrial, and party). Persistent (but uneven) diversity in a range of dimensions regarding worker rights (Witt et al., 2017) might suggest the need for a closer evaluation of subsets of institutional features and associated practices related to actual labour market outcomes, and the relative extent to which they really help define specific national archetypes. Hence, this paper focuses much more closely on such labour market outcomes, incorporating a greater range of variables than earlier work. Finally, our results suggest that the LME model no longer generates some of the benefits it used to. Earlier work argues that a narrowing of the benefits the LME model affords has fed into the period of apparent populist ascendancy in the US and the UK (Sandel, 2018); our study provides fresh evidence on labour market trends that may have contributed to this phenomenon.

The remainder of the paper is structured as follows. Section 2 discusses the literature on the varieties of capitalism and labour market outcomes. Section 3 describes the data and methods. Section 4 analyses the variations in labour market outcomes of different institutional regimes. Section 5 examines the changes in labour market outcomes across regimes before and after the 2007-2008 global financial crisis. Section 6 compares the indexes built in this paper with the OECD job quality framework. Section 7 concludes.

2. The varieties of capitalism, employment regulations and labour market outcomes

2.1 The varieties of capitalism and labour market outcomes: Existing evidence

In a landmark 2001 collection, Hall and Soskice (2001) define the Liberal Market Economies (LMEs), examples being the US and the UK as ones where shareholders and creditors play key roles in corporate financing, managers are closely reined in and pressured to

maximise shareholders' returns. They also define the Coordinated Market Economies (CMEs), examples being Germany, Japan and Scandinavia, as regimes with a more active role for the state and other stakeholders, backed up by a more generous social security system. Hall and Soskice (2001) acknowledge that many developed countries fit into neither category. Amable (2003) offers a broadly similar taxonomy, but makes a very useful distinction between continental European capitalism (i.e. continental European CMEs) and Scandinavia (social democratic capitalism) and argues that they are distinct, without one necessarily being inherently superior to the other.

Existing literature focuses on broad differences and similarities in the labour market between these two archetypes of varieties of capitalism. In the LMEs, the promotion of shareholder value and weaker statutory protection for workers shift the balance of power against the latter in managerial decision-making, which could have detrimental effect on outcomes for many labour market participants (Dore, 2000; Froud et al., 2000; Wood et al., 2014a). Shleifer and Summers (1988) argue that the pressures on managers to act in the shareholders' interest forces managers to break implicit contracts that provide job security and long-term career progression to employees in the case of events such as (hostile) takeovers. Furthermore, workers in regular contracts tend to work overtime while part-time and insecure jobs increase (Green, 2006). A decline in job security leads to less investment in firm-specific skills by both employers and employees (Lazonick and O'Sullivan, 2003; Goergen et al., 2012). In the US, a tendency for jobs seems to be bifurcated between high and poor quality ones (Wright and Dwyer, 2006, *c.f.* Kalleberg et al., 2000) where the quality of low-end jobs significantly gets deteriorated (Lazonick and O'Sullivan, 2003). The real wages for those in the lower income brackets fall from the mid 1990s to the mid 2000s (Clark, 2005; Green, 2006) and earning inequality is

worsened (Hall and Soskice, 2001; Howell, 2002; Stockhammer, 2017). There are, however, counterarguments to this negative view on the impact of shareholder value primacy on workers. Critics point to the commitment by many large US and UK firms to employment security and human capital development as evidence of managers' strategic decisions to create value in the long run (see e.g. Hillman and Keim, 2001). Indeed, Edmans et al. (2014) reports that employee satisfaction is associated with higher shareholder returns in the UK and the US.

The CMEs, on the other hand, are often identified with more influence of stakeholders such as union and employees in corporate affairs and more stringent employment protection regulations (Dore, 2000; Howell, 2002). These regimes are likely to be associated with higher quality of work and production ethos (Green, 2006; Gallie, 2007), greater awareness of labour's interests and the value of human capital, more stable and long-term employment as well as extensive in-house training (Goergen et al., 2012) which in turn could support firm productive efficiency (Rizov and Croucher, 2009). Within the CMEs, Amable (2003) highlights the differences between the continental European coordinated market and the Scandinavia social democratic ones where the latter fare particularly strongly in terms of job quality, employee well-being and positive job attitude (Green, 2006; Holman, 2013). This does not mean that in continental Europe there are not many features of high quality work. Even during the challenging times of the 1990s and early 2000s, there is an overall increase in real wages for those in the lower income brackets while highly educated and younger workers are better insulated in continental Europe (Clark, 2005). German firms are found to shorten working time to maintain employment rather than cutting jobs in response to the 2007-2008 financial crisis (Lallement, 2011).

Later extensions of the varieties of capitalism literature argue that some societies may persistently combine features of both the liberal and the coordinated regimes, such as the emerging market economies of post-communist Central and Eastern Europe and the “Mixed Market Economies” of Mediterranean Europe (Hancke et al., 2007; Amable, 2003)ⁱ. It is suggested that in both sets of countries, the outcomes both for shareholders and other stakeholders are generally less optimal than encountered in the mature varieties of capitalism (Hancke et al., 2007; Amable 2003; Wood et al. 2014a). For example, employment regulations are generally weaker and investment in education and training is more limited than the LMEs and the CMEs, but this is not compensated by superior rates of return for shareholders (Goergen et al., 2012; Holman, 2013).

Critics of the varieties of capitalism literature argue that it implicitly assumes that national archetypes are more rigid and static than actually is the case (Bosch et al., 2009). Indeed, it seemed possible for seemingly core features of specific national systems to be reformed, yet with other features being strengthened (Wood et al, 2014b). Studies of developments since the 2007-2008 crisis have linked the capturing of the political agenda in the two largest LMEs to structural developments in their labour markets and wider political economies; although pre-crisis, it was commonly assumed that the CME model was the more vulnerable, it has been the (LME) UK and the US which have faced the kind of existential political crisis more commonly associated with emerging markets or transitional economies (Wood et al., 2019; 2017). The early literature on comparative capitalism assume that LMEs and CMEs are equally capable of providing growth and jobs; however, it has recently been argued that LMEs have been increasingly unable to provide income, occupational and job security to a growing proportion of their population (Wood and Wright, 2016; Wood et al., 2019). Indeed, in

the case of the two largest (and purest) versions of this archetype, this has led to backlashes, with right wing populists seizing the political agenda, making for, at best, great uncertainty as to their political, social and economic futures (ibid.). In other words, in focusing on the relative ability of national systems to provide national economic competitiveness, the VoC literature has failed to take account of the extent to which light labour market regulation may impart so much uncertainty on labour – worsened by economic shocks - that the entire system may be undermined; this would confirm Amable and Palambarini’s (2009) argument that the VoC literature failed to take account of the political dimensions of systemic change, and, by implication, the interface between labour markets and politics.

2.2 Measures of the labour market outcomes

Existing literature documents a wide range objective and subjective measures of the labour market outcomes. Smith et al. (2008) recommend a comprehensive list, including *inter alia* equality in accessing the labour market, gender equality, flexibility and job security, social dialogue and work life balance. Clark (2005) argues that in addition to pay, promotion and security, key dimensions include flexible working arrangements and the ability to bargain effectively over terms and conditions of employment. Jones and Green (2009) argue that key importance is skill bias (the degree to which employment is skewed to skilled work) and employment polarisation (the degree to which jobs are clustered towards the bottom and top ends of the distribution). Stockhammer (2017) explores long term trends in wage share across a wide range of national economies, linking declines to the diminishment of the welfare state and financialisation.

Certain caveats are in place if one is to focus on certain dimensions of the labour market outcomes and not in conjunction with other dimensions. A focus on wages, for example, may discount inequality in wages, access to jobs and progression (Card et al., 2012), which are important determinants of workers' well-beings, job satisfaction and turnover (Clark and Oswald, 1996). Pfeffer and Langton (1993) document that wage inequality within academic departments leads to less collaboration and higher turnover among faculty members. In contrast, wage inequality could promote healthy competition among workers (Lazear and Rosen, 1981) and signal to workers in the low-income section of the distribution that their wages will increase in the future, making them work harder (Clark et al., 2009; Card et al., 2012). Blau and Kahn (1992) interpret high wage inequality in the US compared to other OECD countries as higher rewards to skills in the former and wage compression at the bottom of the distribution in the latter.

Job availability/employment is an important measure of labour market outcomes. High employment in the LMEs is often attributed to the flexible labour market in these regimes in contrast to high unemployment and the rigid labour market in Europe. However, more critical accounts suggest a more complex relationship between employment-related, particularly wage-setting institutions, incomes and jobs (Petrongolo and Pissarides, 2008; Goos et al., 2009). As noted above, the rise of the populist right has been linked to job and occupational insecurity; it is not so much a system's ability to generate work, but the quality thereof, that matters. Indeed, what may have helped sustain particular institutional orders may ultimately end up undermining them. Again, as the UN 2030 Agenda alerts us, it is not only systemic ability to generate growth that matters, but also its ability to provide economic security for the bulk of society (Colglazier, 2015).

Being unemployed is mostly involuntary and adversely affect one's well-being (Clark and Oswald, 1994). Non-standard jobs, such as temporary and/or part-time employment, could reduce unemployment and balance cyclical fluctuations in labour demand (Hamersma et al., 2014; Kahn, 2016). Workers may welcome such opportunity for more flexible working hours, allowing for a more optimal work life balance (Booth and Van Ours, 2008). However, such working hours may result in workers missing out in the training and development opportunities, and other benefits accruing to their regular counterparts; again working shorter hours may be less of a lifestyle choice than an option of last resort (Kalleberg et al., 2000). Buddelmeyer et al.'s (2015) Australian based-study confirms that part-time insecure workers generally believe their jobs are less desirable and of lower quality. However, Hamersma et al. (2014) report a wage premium among US temporary workers, which they interpret as compensation for taking jobs with less stability and/or shorter tenure. In contrast, Kahn (2016) documents a wage premium for permanent workers compare to temporary workers in Europe. Given the mixed evidence, it would be inadequate to focus on employment whilst ignoring non-standard employment, which could represent an indicator of either very poor or good quality jobs.

As the purpose of this paper is to compare the labour market outcomes associated with different types of capitalism, it is important that we build indexes of outcomes that consider different aspects of the labour market. Rather than relying on the more subjective dimensions, we use the objective measures which allow comparison across country and time (described in details in the next section). While the subjective measures such as scope of what people actually do and their own experiences and expectations remain of central important, there may be great differences in what people perceive as good or poor quality jobs (Smith et al., 2008)ⁱⁱ.

3. Data and methods

3.1 Sample selection and methods

To systematically analyse how the labour market outcomes differ across institutional settings, we construct annual country-level indexes for the period 2000-2015 using data from the OECD.Stat and OECD Employment Outlook reports. This period encompasses general pressures towards deregulation of employee rights and development in the labour market both in the lead up to, and in the aftermath of the financial crisis (see also OECD Employment Outlook, 2015). Twenty-four countries that have data available on all dimensions of the labour market outcomes (described in the next section) are included in our sample. Next we perform the non-parametric analysis comparing the indexes and their components across different institutional regimes based on the VoC classification. Following Amable (2003) and Holman (2013) we classify countries into the social democratic (*SocDem*), continental (*Cont*), liberal market (*LME*), Southern Europe (*SE*) and transitions (*Trans*) regimes. The countries in our sample are selected based on data availability to construct the indexes. In our sample, the social democratic archetype includes Denmark, Finland, Norway and Sweden; the continental regime includes Austria, Belgium, France, Germany, Luxembourg, the Netherlands and Switzerland; the liberal market archetype encompasses Australia, Canada, Ireland, the UK and the US; the Southern European archetype includes Greece, Italy, Spain and Portugal; and the transitional regime includes Czech, Hungary, Poland and Slovak Republic. We then carry out the random effects panel data analysis, regressing each of the four indexes on dummy variables representing the institution settings. This approach controls for the effect of unobservable heterogeneity across countries. Finally, we compare the variations in the labour market outcomes across institutional regimes before and after the global financial crisis.

3.2 Variable construction

We construct four indexes of labour market outcomes, using annual country-level data on unemployment rate, unemployment duration, wages, involuntary part-time employment, gender wage gap and the 90th/10th earnings distribution. The availability of data across country and over a long period of time for these labour market outcomes allows us to conduct a much wider range of comparative objective national-level analysis than reported in existing studies. Definitions of all variables are described in Table 1. Different types of data (e.g., wages in dollars and unemployment rates in percentages) cannot be simply combined. To make cross-country and over-time comparison, we normalise each variable to a value between 0 and 1 using the Min-Max method. The minimum (maximum) value is set at the value of the worst (best) performer in the period of study. Except wages, all variables are reversed so that higher values of indices correspond to better labour market outcomes.

Index1 is the average of *Job_Availability*, which is the average of the normalised reversed unemployment rate and unemployment duration, and *Wage_Rate*, which is the normalised average annual full-time equivalent wages adjusted by the national GDP per capita. This allows wages data to be seen in terms of variations in the cost of living and at the same time to reflect the historic wealth of a nation. Our next index extends job availability to include incidence of involuntary part-time employment.

Index2 is the average of *Job_Availability* and *Involuntary_PT_Emp*, which is the normalised reversed share of involuntary part-time employment in total employment. Involuntary part-timers are defined as those who undertake part-time work because they cannot find a full-time job. This measure is a better indicator compared to variables such as the ratio of part-time workers in the total workforce, job tenures, or the number of hours worked because

workers may have non-standard employment, such as part time or short-tenure jobs, or work long/short hours to maintain/achieve work-life balance (Booth and Van Ours, 2008). Involuntary part-time employment could reflect, to some extent, whether there is sufficient demand for labour (see Messenger, 2011 for a review of part-time work in Europe).

Index3 focuses on earnings and earnings inequality. Freeman (2002) notes that, when comparing countries, relative labour market performance is not only about overall employment. In the US, for example, increases in number of jobs and average real wages take place along with earnings inequality, and indeed, declining real pay for many. Again, increased employment of women may be associated with changes in gender wage rates (*ibid.*). Building on this literature, we measure *Index3* as the average of *Wage_Rate*, *Gender_Wage_Equality* and *Wage_Equality*. *Gender_Wage_Equality* is the normalised reversed ratio of the difference between median earnings of men and women to median earnings of men. *Wage_Equality* is the normalised reversed ratio of the wages of full-time employees in the 90th percentile to that in the 10th percentile.

Index4 is the most comprehensive index, measured as the average of all five labour market outcomes: *Job_Availability*, *Involuntary_PT_Emp*, *Wage_Rate*, *Gender_Wage_Equality* and *Wage_Equality*. *Index4* is equivalent to a weighted average of *Index2*, which measures job availability/employment (which also covers involuntary part-time employment), and *Index3*, which measures wages and earnings quality, where the weights of the two indexes in *Index4* are 40% and 60%, respectively.

We recognise that our indexes come with methodological caveats. Firstly, in each index, every labour market outcome receives equal weight. Some studies assign their own normative weights (e.g. Leschke et al., 2008) to reflect how they view the relative importance of certain

outcomes compared to others (Decancq and Lugo, 2010; Paruolo et al., 2013). However, these methods are not based on theoretical arguments. The equal weighting scheme that we use reflects a balanced combination of different outcomes. Secondly, the indexes that we construct do not take into account dimensions of the labour market outcomes such as firm-level training, how quickly a worker being laid off finds a new job, or the differences in pays between jobs (see e.g. Clark, 2005; Gallie, 2007; Jones and Green, 2009). The inclusion of such factors may be problematic in a time-variant comparative institutional context such as ours. We address this shortcoming by conducting analysis using the OECD job quality indexes, which take into account unemployment insurance and working environment. This analysis is presented in Section 6.

INSERT TABLE 1 ABOUT HERE

4. Labour market outcomes in the OECD during 2000-2015

Table 2 presents the descriptive statistics for variables used to construct the indexes in our study. The results show wide variations in all aspects of labour market outcomes and in all indices across countries. Panel A shows that the average annual unemployment rate is 7.94%, ranging from 1.8% as the minimum to 27.47% as the maximum. Countries with the highest unemployment rate include Greece and Spain while countries with the lowest unemployment are Luxembourg, Switzerland and Norway. The average duration of unemployment across the OECD countries is 0.58 year (6 months), with the shortest 0.24 year (under 3 months) in the US, and the longest 0.85 year (10 months) in Greece. The average annual wage of a full-time employees is \$38,733 (in 2015 price): the lowest earnings is only \$11,414 and the highest

earnings is \$60,369. Countries with the highest wages are Luxembourg, Switzerland and the US, and countries with the lowest wages are in the transitional regimes, including Czech, Hungary and Slovak Republic. The average proportion of involuntary part-time workers in total employment is 3.42%. The ratio of involuntary part timers is highest in Spain and Italy (the maximum value is 11.84%) and lowest in the US and Slovak Republic (the minimum value is 0.63%). On average a full-time worker in the 90th percentile of the national earnings distribution has an income 3.28 times larger than the income of an employee in the 10th percentile. Countries with the lowest wage inequality are in the social democratic regime. The country with the highest wage inequality is the US.

INSERT TABLE 2 ABOUT HERE

Panels B and C of Table 2 present the descriptive statistics of normalised variable and the indexes, respectively. Similar to the statistics in Panel A, there are large variations in the normalised variables and indexes. Table 3 presents the correlation matrix for all the four indexes and their components. While the components are not highly correlated, due to the common components the indexes are highly correlated.

INSERT TABLE 3 ABOUT HERE

Figure 1 provides a visual examination of the indexes of the labour market outcomes across institutional regimes. It appears that the labour market outcomes differ across the five VoC regimes, and that no regime dominates in all aspects. The LMEs appear to have the best labour market outcomes in terms of the job availability and wage (*Index1*) but the continental (*Cont*) and social democratic (*SocDem*) appear to fare better in the indexes that take into account earning equality and involuntary part-time employment. It is also evident that there are

differences among countries within each regime. However, the within-regime differences appear mostly smaller than the between-regime differences. There are a few exceptions where the changes in certain countries drive the within-regime differences such as changes overtime in *Index2* in Ireland, Spain and Poland.

INSERT FIGURE 1 ABOUT HERE

Table 4 reports the mean values of the indexes and the components across the five VoC regimes. It also presents results of the test statistics for the difference in the means between one regime and the regime reported below it. Compared to all other regimes, the liberal regime has high level of job availability and highest wages, but also high involuntary part-time employment, and worst wage inequality and gender wage gap. The social democratic regime has the best level of job availability and wage equality and lowest gender wage gap compared to other regimes. The continental regime has lower job availability than the social democrat and liberal regimes but also lower involuntary part-time employment. Southern Europe has significantly lower level of job availability when compared to the other three regimes. However, the wage rate in Southern Europe is at a similar level to the continental regime. Southern Europe also fares much better in terms of wage equality and gender wage equality compared to the LMEs. While the job availability in the transitional regime is lowest, this regime has the lowest involuntary part-time employment and its gender wage equality is at similar level compared to the continental regime.

The variations in the indexes of labour market outcomes echo the variations in the components. The LMEs have the highest average value of *Index1* followed by the continental and the social democratic regimes. Once involuntary part-time employment is considered as in *Index2* or earning equality is considered as in *Index3* the coordinated regimes become more

superior and the transitional regime fares similar to the level of the continental regime. When all aspects of the labour market outcomes are taken into account in *Index4*, the social democratic and continental regimes have the best outcomes, then the liberal regime, and the Southern Europe and the transitional regimes have the worst outcomes. We also perform the analysis based on medians and differences in medians, which yields very similar results and are not reported here for the sake of brevity.

INSERT TABLE 4 ABOUT HERE

Table 5 reports the results of the multivariate analysis using the random-effects panel data regressions, using each of the four indexes as the dependent variable. We include four dummy variables indicating four VoC regimes, social democratic, continental, Southern Europe and transitional, to compare variations in the labour market outcomes in each regime to that in the liberal regime. We recognise that assigning each country to a certain VoC regime implicitly assume that countries' institutions are unchanged for the whole period of study. We include year dummies and country-level control variables (GDP growth and inflation) in all models to capture time-variant changes in these countries. All specifications are estimated with robust standard errors clustered by country.

Model (1) shows that the coefficients of all the regime dummies are negative and statistically significant. This indicates that countries in the liberal regime have better job availability and wages as measured in *Index1* compared to all other regimes. Model (2) shows that jobs availability and fewer incidence of involuntary part-time employment as measured in *Index2* in the liberal regime is higher only than in the Southern Europe regime but not statistically different compared to the other three regimes. This result could be explained by the

very high incidence of involuntary part-time employment in the liberal regime and very low in transitional countries (see Table 4).

INSERT TABLE 5 ABOUT HERE

Model (3) shows positive and statistically significant coefficient of *SocDem*, indicating that *Index3* which measure wages, wage equality and gender wage equality in this regime is higher than in the liberal regime. As wages are comparable in the two regimes, social democratic and liberal, this disparity could be attributed to high wage inequality and gender wage gap in the latter. Results in model (4) show that the labour market outcomes as measured in *Index4* in the two coordinated regimes are statistically higher than that in the liberal regime. This suggests that higher job availability and high wage in countries in the liberal regime are offset by high incidence of involuntary part-time employment, high wage inequality and gender wage gap, which is consistent with the results from the non-parametric analysis. In the last two models the aggregated labour market outcomes of the Southern Europe and transitional regimes are not different from that in the liberal regime.

The results presented above are consistent with the predictions of the VoC literature regarding the sharp contrast between the liberal regime and other regimes. Our results show that despite having more jobs available, workers in the liberal regime are more likely to take up part-time employment involuntarily. This confirms earlier work that suggests that in liberal markets, there may be higher levels of part-time and contingent working (see e.g. Lazonick and O'Sullivan, 2003 for the US labour market). This does not appear to be a lifestyle choice amongst most such part-timers: while firms may benefit from access to highly flexible labour force, the costs in terms of precarious and potentially fluctuating incomes, and general insecurity

and uncertainty within and beyond the workplace are borne by the individual workers (Richbell et al., 2011). Despite high average wages, workers in the low earning spectrum in the liberal regime earn much less than workers in the high earning end, resulting in higher jobs dissatisfaction, lower productivity, less collaboration and higher likelihood of worker turnover (see e.g. Pfeffer and Langton, 1993; Card et al., 2012). More coordinated markets, on the other hand, seem superior in terms of occupational security and equity. Overall our results reinforce the notion that the labour market outcomes should encompass various dimensions.

5. Labour market outcomes in the OECD and the 2007-2008 financial crisis

In this section, we compare the labour market outcomes across the five VoC regimes in two periods, 2000-2008 and 2009-2015ⁱⁱⁱ. The first period ends with the 2007-2008 global financial crisis which profoundly affects corporate policies around the world. During and after the crisis firms abandon profitable investment opportunities, cut jobs and reduce corporate expenditures (Campello et al., 2010). The post-crisis period witnesses an increase in unemployment throughout Europe, but adjustment mechanisms in the labour market vary across VoC regimes (Lallement, 2011).

Table 6 shows labour market outcomes in the pre- and post-crisis periods in the five regimes. Similar to the statistics reported in Table 4, in both periods the LMEs only perform better than other regimes in terms of *Index1*. As for the other three indexes, the continental and the social democratic regimes have the best outcomes both before and after the crisis. The labour market outcomes in all the four indexes in the social democratic and the continental regimes improve considerably in the post-crisis period (the improvements are statistically significant). While there is also improvement in the LMEs, such improvement is of much smaller magnitude.

Furthermore, the average value of *Index2* in this market decline due to the significant increase in the involuntary part-time employment. There is no significant change in the indexes in the Southern Europe and transitional regimes. The former even witnesses a decline in *Index2* in the post-crisis period. This is consistent with the reported increase in unemployment throughout Southern European countries (Lallement, 2011).

INSERT TABLE 6 ABOUT HERE

Next we re-estimate the models in Table 5 for the two sub-periods, 2000-2008 and 2009-2015. The results, reported in Table 7, are consistent with the results in Table 5, suggesting that no regime dominates in all aspects of the labour market outcomes. There is a clear upward trend in all labour market outcomes in the coordinate regimes in the post-crisis period. The LMEs only performs better than other regimes in *Index1* before the crisis. However, the gap in the job availability and wages (*Index1*) between the coordinated regimes and the liberal one becomes statistically insignificant after the crisis. More importantly, the social democratic and continental regimes outperform the liberal regime in both the pre- and the post-crisis periods in *Index3* and *Index4*. This would confirm what the most recent literature suggests: that the crisis has been associated with a relative decline in employment quality in the LMEs, with far reaching systemic consequences (Wood and Wright, 2016; Wood et al. 2019).

The coefficients of *SE* confirm that the Southern Europe regime fare even worse than the LMEs in terms of job availability and wage rate in both the pre- and post-crisis periods. This could be due to persistent unemployment and low wages in this regime (Petrongolo and Pissarides, 2008) as well as the extent to which the most vulnerable section of the labour force, the temporary and part-time workers, bore the brunt of the crisis (Lallement, 2011). While the

differences in *Index2* and *Index4* are statistically insignificant before the crisis, such differences become significant after the crisis. Again, Southern Europe fares worse than the CMEs. We observe a similar pattern in the case of transitional regimes where the gap between this regime and the LMEs in *Index3* becomes statistically significant after the crisis. This is mainly due to the decline in wage rates in the transitional economies. This would echo a core argument across the literature on comparative capitalism: that systems with less advanced complementarities are less able to provide internal coherence and stability (*c.f.* Hall and Soskice, 2001).

Overall our results extend earlier work on the impacts of the global financial crisis in Europe, the LMEs have done less well than the CMEs in shoring up decent jobs in the wake of the crisis; however, Southern Europe and the emerging market economies fare even worse in terms of their ability to generate work (see e.g. O'Reilly et al., 2011). Our findings are also consistent with the observed employment adjustment in response to the crisis: firms in the LMEs prefer to use external flexibility to adjust employment 'through wages, unemployment and underemployment' and firms in the coordinated regime prefer to use internal flexibility such as 'reduction and sharing of working time' (Lallement, 2011).

INSERT TABLE 7 ABOUT HERE

6. Labour market outcomes and the OECD job quality index

In this section, we compare our indexes with those built by the OECD.Stat to measure the quality of jobs. The OECD indexes include: i) the Labour Market Insecurity index which measures the risks and expected duration of unemployment and public unemployment insurance; ii) the Earnings Equality index which measures earnings and their distribution across the workforce; and iii) the Quality of the Working Environment index which captures non-economic

aspects of jobs including job demands (time pressure or physical health risk), working-time arrangements and workplace relationships (work autonomy and social support at work). These OECD indexes cover two aspects of the labour market that our indexes do not consider, namely public unemployment insurance and working environment. However, these OECD indexes are available only at intervals during 2007-2015. For example, the Labour Market Insecurity index is available annually for 2007-2013 while the Quality of the Working Environment index is available for 2010 and 2015 only. The advantage of our indexes is that they are measured annually for a longer time period, which not only allows a more comprehensive cross-country and over-time analysis but also evaluates of the changes following the 2007-2008 financial crisis.

To allow meaningful comparison between the OECD indexes and our indexes, we normalise and reverse each OECD index, except the Earnings Equality index, to a value between 0 and 1 using the Min-Max method. Hence the higher values of *OECD_Security*, *OECD_Equality* and *OECD_Environment* correspond to better job security, earnings equality and quality of working environment. We also construct *OECD_Job_Quality* as the average of all three aspects: *OECD_Security*, *OECD_Equality* and *OECD_Environment*. Table 8 presents the correlation matrix of the indexes that we build and the OECD job quality indexes.

INSERT TABLE 8 ABOUT HERE

Table 9 presents the results from the multivariate estimation, which is similar to that in Table 5 using the OECD indexes as the dependent variables. Given limitations in data availability, the value of *OECD_Environment* at 2010 is used for 2006-2010 and the value at 2015 for 2011-2015. Overall the results are consistent with our results in the previous sections. The social democratic and continental regimes have better labour market security and earnings

equality than the LMEs (models 1 and 2). The working environment in the LMEs is not different from that in the social democratic regime but better than the continental regime (model 3). If all aspects of job quality are considered as in the composite *OECD_Job_Quality*, both the coordinated regimes appear to have better job quality than the liberal regime (model 4). In all four models the liberal regime has better job quality than the Southern Europe and transition economies.

INSERT TABLE 9 ABOUT HERE

7. Conclusion

This paper reveals the persistence of differences across institutional setting and associated formal regulations. Based on Amable's (2003) taxonomy of national institutional regimes, we show that no single setting yields outcomes consistently superior in every dimension of the labour market. The fact that nationally distinct institutional arrangements persist would indicate durability and the utility of existing configurations for at least some core interest groupings, general and specific tendencies towards institutional redesign or substitution notwithstanding (*c.f.* Boyer, 2006). But, which combination of possible dimensions of the labour market outcomes is likely to lead to superior individual well-being, and economic and social betterment? Much of the existing debate on institutional effects is arguably associated with a selective usage of evidence (Deakin et al., 2007); the limited range of measures employed in this paper are in themselves selective, albeit that they point to a more nuanced reality. They also supplement recent studies by Witt and colleagues (Witt and Jackson, 2016; Witt et al, 2017) which compare capitalist archetypes, drawing on a wide range of governance and associational dimensions, and a different basket of employment dimensions to our own; these studies

encompass a strong focus on union rights and bargaining. In supplementing this work, this study sheds much closer light on labour markets; the latter is a crucial dimension in that the sustaining of social contracts is contingent on a basic degree of occupational, income and employment security (Kahn, 2018).

If the labour market outcomes are simply referred to job availability and average wages, the liberal markets seemed to provide better outcomes. However, in such settings, job availability and high average wages are accompanied with high incidence of involuntary part-time employment and wage inequality; average wage increases materially benefit only a few. Again, any advantages the liberal markets might have in terms of job creation have diminished since the financial crisis. If a failure to generate decent work may fuel widespread popular dissatisfaction, a subsequent reduced ability to provide employment and rising inequality may increase the latter to breaking point, leading as, we have seen, to right wing populist extremism penetrating mainstream politics in the US and the UK. The gap in the labour market outcomes between coordinated markets, social democratic and continental European capitalism, is not large, and appears to narrow after the global financial crisis, but around continued institutional support for the provision of key aspects of decent work, rather than its diminishment. Southern Europe has significantly lower level of job availability when compared to the other three regimes. However, it has similar wage level to the continental regime and better wage inequality compared to the LMEs. While the job availability in the transitional regime is lowest, this regime has the lowest involuntary part-time employment and its gender wage equality is at similar level compared to the continental regime. Persistent unemployment and low wages lead to no significant change in the labour market indexes in the Southern Europe and transitional regimes in the post-crisis period.

If the two types of coordinated markets appear to differ quite significantly in terms of employment regulations (Amable, 2003), they appear quite similar in terms of outcomes. This highlights the extent to which quite distinct types of institutions may generate similar results, and the continued viability of distinct recipes of market mediation. It could be argued that politics in the two largest and most deregulated liberal markets will only normalise when a new institutional basis for the provision of decent work is developed. Individuals may be willing to trade off occupational and wage for employment security, but if the latter becomes harder to secure, then matters may reach breaking point. Although neither the continental European or social democratic model may be easily replicated, this study suggests that there is more than one institutional path for generating decent jobs. At a theoretical level, this would suggest the need for a more nuanced understanding of institutional effects; economic crisis may cause specific types of institutions to stop working in the manner they did in the past, whilst one specific type of regulation will not necessarily translate into particular firm-level outcomes. Again, whilst it is widely predicted that national institutional arrangements are converging on the liberal market model owing to structural problems in sustaining coordinated markets, this study highlights the extent to which a traditional advantage of liberal markets has eroded. At an applied level, this study highlights that the continued viability of more than one path to market mediation: the rise of political extremism in the two largest liberal markets would highlight the urgency of working to identify new policy solutions for generating decent work particularly suited to such contexts.

The key limitation of our study is that our indices do not take into account several important elements of the labour market outcomes, especially at the firm-level, such as training, promotion opportunities, and more subjective measures of workers' well-beings and job satisfaction. The fact that our findings remain unchanged when the OECD job quality data are

used moderately address this concern. Data on some of these aspects can be obtained from surveys of firms and workers; supplementing our findings with such work might yield a fuller and more nuanced picture of the present state of the different manifestations of capitalism.

References

- Amable, B. 2005. *The Diversity of Modern Capitalism*. Oxford: Oxford University Press
- Bertrand, Marianne and Sendhil Mullainathan. 2001. Do people mean what they say? Implications for subjective survey data, *American Economic Review*, vol. 91, no. 2, 67-72
- Blau, F.D., and L.M. Kahn. 2005. Do cognitive test scores explain higher U.S. wage inequality?, *Review of Economics and Statistics* vol. 87, no. 1, 184–93
- Booth, A.L., and J.C. Van Ours. 2008. Job satisfaction and family happiness: The part-time work puzzle, *Economic Journal*, vol. 118, no. 526, 77-99
- Bosch, G, Lehnsdorff, S. and Rubery, J. 2009. European employment models in flux: Pressures for change and prospects for survival and revitalization. In Bosch, G, Lehnsdorff, S. and Rubery, J. (eds), *European Employment Models in Flux*. London: Palgrave, pp. 1-56.
- Botero, J., Djankov, S., La Porta, R., Lopez-de-Silanes, F. and A. Shleifer. 2004. The regulation of labor, *Quarterly Journal of Economics*, vol. 119, no. 4, 1339-1382
- Boyer, R. 2006. How do institutions cohere and change? in *Institutions and Working Life*, edited by Wood, G.T. and P. James (eds.), Oxford: Oxford University Press
- Buddelmeyer, H., McVicar, D. and M. Wooden. 2015. Non-standard “contingent” employment and job satisfaction: A panel data analysis, *Industrial Relations: A Journal of Economy and Society*, vol. 54, no. 2, 256-275
- Campello, M., Graham, J.R. and C. R. Harvey. 2010. The real effects of financial constraints: Evidence from a financial crisis, *Journal of Financial Economics*, vol. 97, no. 3, 470-487
- Card, D., Mas, A., Moretti, E. and E. Saez. 2012. Inequality at work: The effect of peer salaries on job satisfaction, *American Economic Review* vol. 102, no. 6, 2981-3003
- Clark, A.E. 2005. Your money or your life: Changing job quality in OECD countries, *British Journal of Industrial Relations* vol. 43, no. 3, 377-400
- Clark, A.E. and A.J. Oswald. 1994. Unhappiness and unemployment, *Economic Journal*, vol. 104, no. 424, 648- 659
- Clark, A.E. and A.J. Oswald. 1996. Satisfaction and comparison income, *Journal of Public Economics*, vol. 61, no. 3, 359-381
- Clark, A.E., Kristensen, N. and Westergaard-Nielsen, N. 2009. Job satisfaction and co-worker wages: Status or signal, *Economic Journal*, vol. 119, no. 536, 430-447
- Colglazier, W., 2015. Sustainable development agenda: 2030. *Science*, 349(6252),.1048-1050.
- Deakin, S., Lele, P. and M. Siems. 2007. The evolution of labour law: Calibrating and comparing regulatory regimes, *International Labour Review* vol. 146, no. 3-4, 133-162
- Decancq, K. and Lugo, M. 2010. Weights in multidimensional indices of well-being: an overview. OPHI Working Paper No 18. Oxford: Oxford Poverty & Human Development Initiative (OPHI), Oxford Department of International Development, University of Oxford.
- Dore, R. 2000. *Stock Market Capitalism: Welfare Capitalism*. Cambridge: Cambridge University Press
- Edmans, A., Li, L., and C. Zhang. 2014. Employee satisfaction, labour market flexibility, and stock returns around the world, CEPR Discussion Paper No. DP10066
- Freeman, R. B. 2002. The US economic model at Y2K: Lodestar for advanced capitalism? NBER Working Paper, and reprinted in D. Coates (ed.) *Models of Capitalism*
- Froud, J., Haslam, C. Johal, S. and K. William. 2000. Restructuring for shareholder value and its implications for labour, *Cambridge Journal of Economics*, vol. 24, 771-797

- Gallie, D. 2007. Welfare regimes, employment systems and job preference outcomes, *European Sociological Review*, vol. 23, no. 3, 279-293
- Goergen, M., Brewster, C., Wood, G.T. and A. Wilkinson. 2012. Varieties of capitalism and investments in human capital, *Industrial Relations: A Journal of Economy and Society*, vol. 51, no. 1, 501-527
- Gonzalez, F., 2016. Creditor rights, bank competition, and corporate investment during the global financial crisis. *Journal of Corporate Finance*, vol. 37, 249-270
- Goos, M., Manning, A. and Salomons, A. 2009. Job Polarization in Europe. *American Economic Review*, vol. 99, no. 2, 58-63.
- Green, F. 2006. *Demanding Work: The Paradox of Job Quality in the Affluent Economy*. Princeton: Princeton University Press
- Hall, P.A. and D. Soskice. 2001. 'An introduction to the varieties of capitalism', in *Varieties of Capitalism: The Institutional Basis of Competitive Advantage*, ed. by Hall, P.A. and D. Soskice, Oxford: Oxford University Press
- Hamersma, S., C. Heinrich and P. Mueser. 2014. Temporary help work: Earnings, wages, and multiple job holding, *Industrial Relations: A Journal of Economy and Society*, vol. 53, no. 1, 72-100
- Hancke, B. Rhodes, M. and M. Thatcher. 2007. *Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementarities in the European Economy*. Oxford University Press
- Hassel, A. 2014. The Paradox of Liberalization—Understanding Dualism and the Recovery of the German Political Economy. *British Journal of Industrial Relations*, vol. 52, no. 1, 57-81
- Hillman, A.J. and G. D. Keim. 2001. Shareholder value, stakeholder management, and social issues: What's the bottom line?, *Strategic Management Journal*, vol. 22, no. 2, 125-139
- Holman, D. 2013. Job types and job quality in Europe, *Human Relations*, vol. 66, no. 4, 475-502
- Jones, P.S. and A.E. Green. 2009. The quantity and quality of jobs: Changes in UK Regions 1997- 2007, *Environment and Planning A*, vol. 41, no. 10, 2474-2495
- Kahn, K. 2018. *Work and Wealth*. Washington: Aspen Institute.
- Kahn, L.M. 2016. The structure of the permanent job wage premium: Evidence from Europe, *Industrial Relations: A Journal of Economy and Society*, vol. 55, no. 1, 149-178
- Kalleberg, A.L., B. F. Reskin, and K. Hudson. 2000. Bad jobs in America: Standard and non-standard employment relations and job quality in the United States, *American Sociological Review*, vol. 65, no. 2, 256-278
- Lazear, E.P. and S. Rosen. 1981. Rank-order tournaments as optimum labor contracts, *Journal of Political Economy*, vol. 89, no. 5, 841-864
- Leschke, J., Watt, A. and Finn, M. 2008. Putting a number on job quality? Constructing a European job quality index. ETUI-REHS Working Paper No 2008/03. Brussels: European Trade Union Institute.
- Messenger, J.C. 2011. Working time trends and development in Europe. *Cambridge Journal of Economics*, vol.35, 295-316
- O'Reilly, J., Lain, D., Sheehan, M. Smale, S. and Stuart, M. 2011. Managing uncertainty: The crisis, its consequences and the global workforce. *Work, Employment and Society*, vol. 25, 581–595.
- Organisation for Economic Co-operation and Development (OECD). *Employment Outlook*. Paris: OECD. Various Issues

- Paruolo, P., Saisana, M. and Saltelli, A. 2013. Ratings and rankings: voodoo or science? *Journal of the Royal Statistical Society A*, vol. 176, no 3., 603–34
- Petrongolo, B and Pissarides, C. A. 2008. The ins and outs of European unemployment. *American Economic Review*, vol. 98, no. 2, 256-262
- Pfeffer, J. and N. Langton. 1993. The effect of wage dispersion on satisfaction, productivity, and working collaboratively: Evidence from college and university faculty, *Administrative Science Quarterly*, vol. 38, no. 3, 382-407
- Richbell, S., C. Brewster, M. Brookes, and G. T. Wood. 2011. Non-standard working time: An international and comparative analysis, *International Journal of Human Resource Management*, vol. 22, no. 4, 945-962
- Rizov, M. and R. Croucher. 2009. Human resource management and performance in European firms, *Cambridge Journal of Economics*, vol. 33, 25-272
- Sandel, M.J. 2018. Populism, liberalism, and democracy. *Philosophy & Social Criticism*, vol. 44, no. 4, 353-359
- Shleifer, A., and L. H. Summers. 1988. Breach of trust in hostile takeovers, in *Corporate Takeovers: Causes and Consequences*, ed. by A. J. Auerbach. University of Chicago Press
- Smith, M., B. Burchell, C. Fagan, and C. O'Brien. 2008. Job quality in Europe, *Industrial Relations Journal*, vol. 39, no. 6, 586-603
- Stockhammer, E. 2017. Determinants of the wage share: a panel analysis of advanced and developing economies. *British Journal of Industrial Relations*, vol. 55, no. 1, 3-33
- Witt, M.A., Kabbach de Castro, L.R., Amaeshi, K., Mahroum, S., Bohle, D. and L. Saez. 2017. Mapping the business systems of 61 major economies: a taxonomy and implications for varieties of capitalism and business systems research. *Socio-Economic Review*, vol. 16. no. 1, 5-38
- Witt, M.A. and Jackson, G. 2016. Varieties of Capitalism and institutional comparative advantage: A test and reinterpretation. *Journal of International Business Studies*, vol. 47, no. 7, 778-806
- Wood, G., Finnegan, J.J., Allen, M.L., Allen, M., Cumming, D., Johan, S., Nicklich, M., Endo, T., Lim, S. and Tanaka, S., 2019. The comparative institutional analysis of energy transitions. *Socio-Economic Review*. Early online at: <https://academic.oup.com/ser/advance-article-abstract/doi/10.1093/ser/mwz026/5544668>
- Wood, G. and Wright, M. 2016. What Brexit Tells us about Institutions and Social Action. *Socio-Economic Review*. 14, 4: 832-836.
- Wood, G., P. Dibben, and S. Ogden. 2014a. Comparative capitalism without capitalism, and production without workers: The limits and possibilities of contemporary institutional analysis, *International Journal of Management Reviews*, vol. 16, no. 4, 384-396
- Wood, G., Yin, S., Mazouz, K. and Cheah, J.E.T. 2014b. Foreign direct investment and employment rights in South-Eastern Europe. *Cambridge Journal of Economics*, vol. 40, no. 1, pp.141-163

Table 1. Variable definition

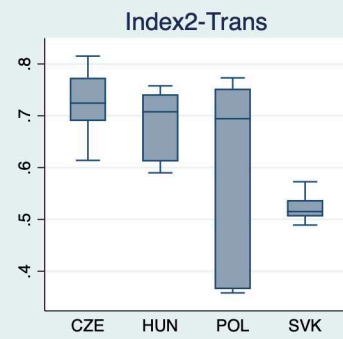
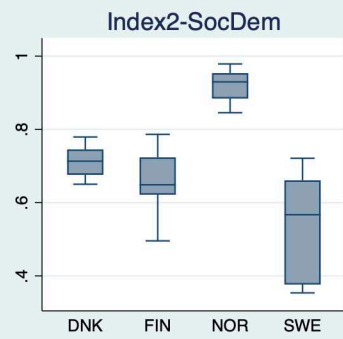
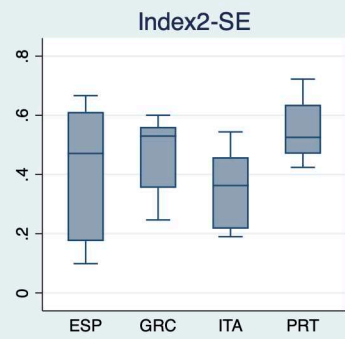
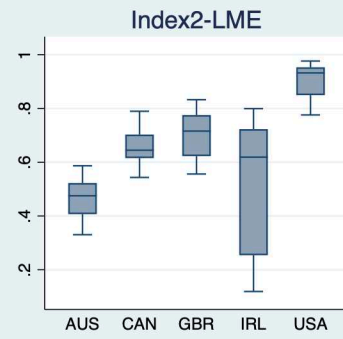
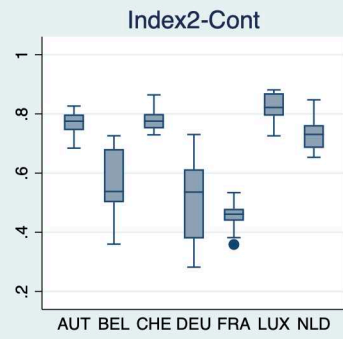
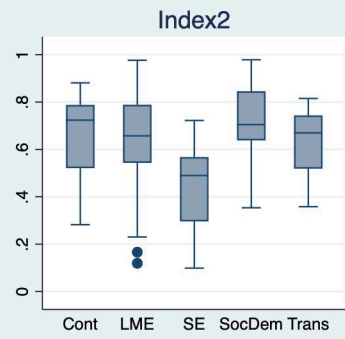
Variable	Description
<i>Unemployment_Rate</i>	Share of unemployed persons in total labour force.
<i>Unemployment_Duration</i>	The weighted average duration of unemployment expressed in years. The weight is calculated by unemployment (less than 1 month; >1 month and < 3 months; >3 months and <6 months; >6 months and <1 year; 1 year and over) among total unemployment.
<i>Wages</i>	Average wages per full-time and full-year equivalent employee in constant US\$.
<i>Involuntary_Part-timers</i>	Share of involuntary part-time workers in total employment. Involuntary part-time workers are part-timers because they could not find a full-time job.
<i>90/10 Earnings Distribution</i>	Ratio of gross earnings distribution of the full-time dependent employees in the 90 th percentile to 10 th percentile.
<i>Job_Availability</i>	Average of the normalized reversed unemployment rate and unemployment duration.
<i>Wage_Rate</i>	Normalised wages per full-time and full-year equivalent employee as percentage of GDP per capita.
<i>Involuntary_PT_Emp</i>	Normalised reversed share of involuntary part-time workers in total employment.
<i>Wage_Equality</i>	Normalised reversed ratio of gross earnings distribution of the full-time employees in the 90 th percentile and 10 th percentile.
<i>Gender_Wage_Equality</i>	Normalised ratio of the difference between median earnings of men and women to median earnings of men.
<i>Index1</i>	Average of <i>Job_Availability</i> and <i>Wages</i>
<i>Index2</i>	Average of <i>Job_Availability</i> and <i>Involuntary_Part-timers</i>
<i>Index3</i>	Average of <i>Wages</i> , <i>Wage_Inequality</i> and <i>Gender_Wage_Equality</i>
<i>Index4</i>	Average of <i>Job_Availability</i> , <i>Wages</i> , <i>Involuntary_Part-timers</i> , <i>Wage_Equality</i> and <i>Gender_Wage_Equality</i>
<i>SocDem</i>	Dummy variable that takes a value of 1 if country is Denmark, Finland, Norway or Sweden, and 0 otherwise.
<i>Cont</i>	Dummy variable that takes a value of 1 if country is Austria, Belgium, France, Germany, Luxembourg, the Netherlands or Switzerland, and 0 otherwise.
<i>LME</i>	Dummy variable that takes a value of 1 if country is Australia, Canada, Ireland, the UK or the US, and 0 otherwise
<i>SE</i>	Dummy variable that takes a value of 1 if country is Greece, Italy, Portugal, or Spain, and 0 otherwise
<i>Trans</i>	Dummy variable that takes a value of 1 if country is Czech, Hungary, Poland, or Slovak Republic, and 0 otherwise
<i>GDPGrowth</i>	Annual percentage growth rate of GDP at market prices based on constant local currency.
<i>CPI</i>	Consumer price index.
<i>OECD_Security</i>	Normalised reversed Labour Market Security Index, which measures the risk of unemployment, the expected duration of unemployment and the degree of public unemployment insurance.
<i>OECD_Equality</i>	Normalised Earning Equality Index which measures average earnings and their distribution across the workforce.
<i>OECD_Environment</i>	Normalised reversed Quality of the Working Environment Index, which captures non-economic aspects of jobs including the nature and content of the work performed, working-time arrangements and workplace relationships.
<i>OECD_Job_Quality</i>	Average of <i>OECD_Security</i> , <i>OECD_Equality</i> and <i>OECD_Environment</i>

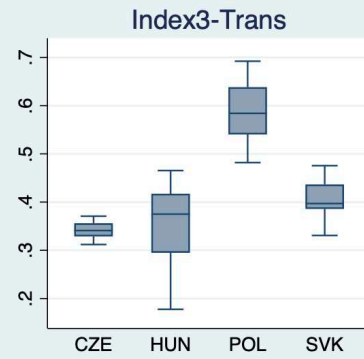
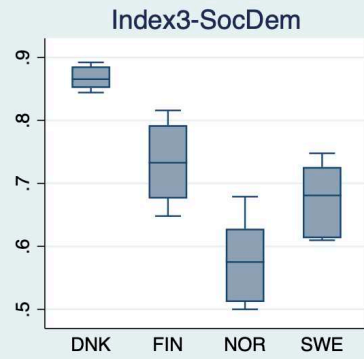
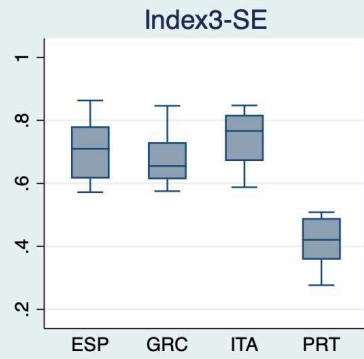
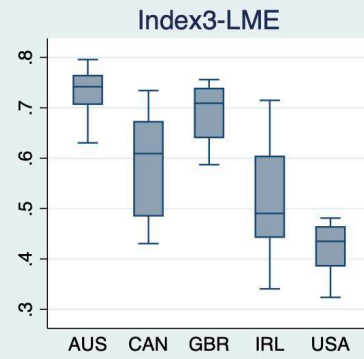
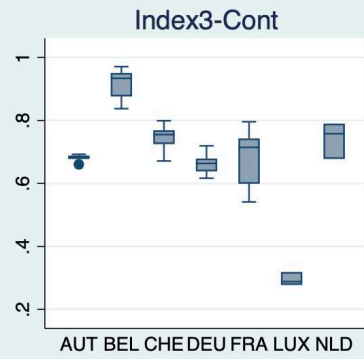
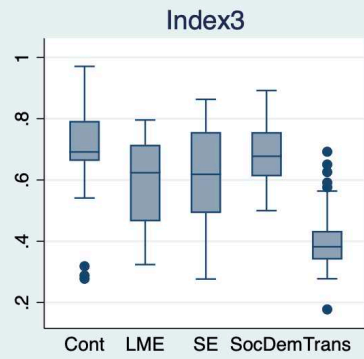
Table 2. Descriptive statistics

	Mean	St. Dev.	Min	Med	Max
Panel A: Variables					
<i>Unemployment_Rate (%)</i>	7.94	4.31	1.80	7.14	27.47
<i>Unemployment_Duration (Year)</i>	0.58	0.14	0.24	0.59	0.85
<i>Wages (US\$)</i>	38,733.15	11,414.52	15,021.00	40,786.00	60,369.00
<i>Involuntary_Part-timers (%)</i>	3.42	2.24	0.63	2.73	11.84
<i>90/10 Earnings Distribution</i>	3.28	0.72	2.00	3.33	5.22
Panel B: Normalised variables					
<i>Job_Availability</i>	0.58	0.23	0.00	0.62	0.99
<i>Wage_Rate</i>	0.61	0.27	0.00	0.67	1.00
<i>InvoluntaryPT_Emp</i>	0.67	0.27	0.00	0.74	1.00
<i>Wage_Equality</i>	0.60	0.27	0.00	0.59	1.00
<i>Gender_Wage_Equality</i>	0.64	0.22	0.00	0.64	1.00
Panel C: Index					
<i>Index1</i>	0.59	0.17	0.17	0.59	0.94
<i>Index2</i>	0.63	0.19	0.10	0.65	0.98
<i>Index3</i>	0.62	0.13	0.38	0.63	0.96
<i>Index4</i>	0.63	0.09	0.46	0.62	0.86

Fig. 1: *Boxplot of labour market outcome indexes in the OECD countries*







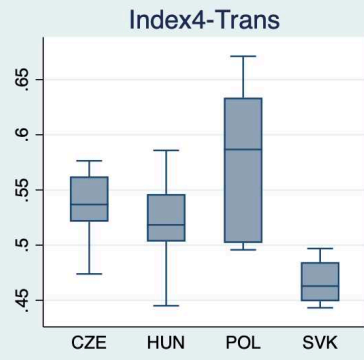
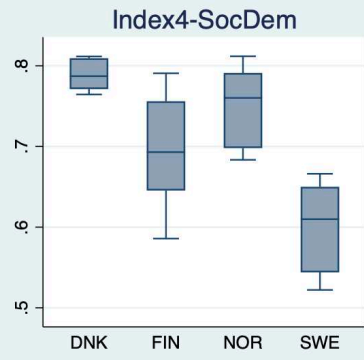
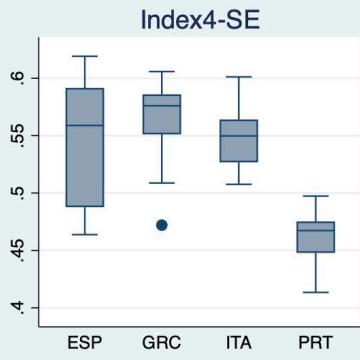
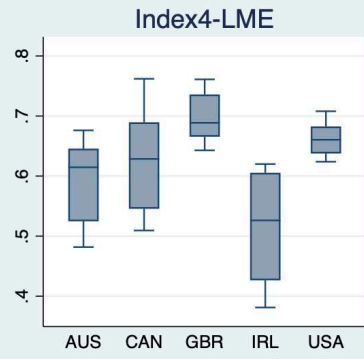
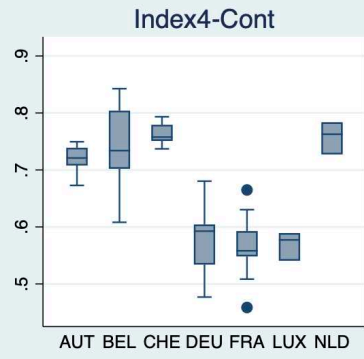
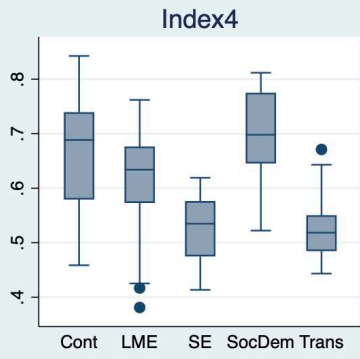


Table 3. *Correlation matrix of labour market outcome indexes*

	<i>Index2</i>	<i>Index3</i>	<i>Index4</i>	<i>Job_</i> <i>Availability</i>	<i>Wage_</i> <i>Rate</i>	<i>Involuntary</i> <i>PT Emp</i>	<i>Wage_</i> <i>Equality</i>	<i>Gender_</i> <i>Wage Equality</i>
<i>Index1</i>	0.23	0.37	0.55	0.63	0.74	-0.23	-0.04	-0.29
<i>Index2</i>	1	-0.31	0.56	0.68	-0.29	0.78	-0.15	-0.15
<i>Index3</i>		1	0.61	0.04	0.47	-0.44	0.71	0.40
<i>Index4</i>			1	0.57	0.23	0.23	0.51	0.23
<i>Job_Availability</i>				1	-0.05	0.07	0.11	-0.17
<i>Wage_Rate</i>					1	-0.35	-0.16	-0.25
<i>InvoluntaryPT_Emp</i>						1	-0.30	-0.05
<i>Wage_Equality</i>							1	0.30
<i>Gender_Wage_Equality</i>								1

Table 4. Labour market outcomes in different varieties of capitalism (2000-2015)

	<i>Job_</i> <i>Availability</i>	<i>Wage_</i> <i>Rate</i>	<i>Involuntary</i> <i>PT Emp</i>	<i>Wage_</i> <i>Equality</i>	<i>Gender</i> <i>Wage Equality</i>
<i>SocDem</i>	0.789***	0.472***	0.626**	0.935***	0.743***
<i>Cont</i>	0.603***	0.652***	0.725***	0.717***	0.647***
<i>LME</i>	0.744***	0.779***	0.554	0.387***	0.566***
<i>SE</i>	0.352	0.630***	0.538	0.594***	0.720
<i>Trans</i>	0.349	0.435	0.908	0.418	0.624
	<i>Index1</i>	<i>Index2</i>	<i>Index3</i>	<i>Index4</i>	
<i>SocDem</i>	0.632	0.713**	0.703***	0.708***	
<i>Cont</i>	0.628***	0.662	0.701***	0.674***	
<i>LME</i>	0.761***	0.650***	0.581***	0.610***	
<i>SE</i>	0.491***	0.445***	0.640***	0.562	
<i>Trans</i>	0.392	0.630	0.509	0.516	

Table 5. *Labour market outcomes in different varieties of capitalism (2000-2015) – Multivariate analysis*

	Index1	Index2	Index3	Index4
	(1)	(2)	(3)	(4)
SocDem	-0.128** (-2.177)	0.080 (0.762)	0.131** (2.455)	0.110*** (3.001)
Cont	-0.130* (-1.924)	0.036 (0.385)	0.087 (1.426)	0.069** (2.198)
SE	-0.277*** (-5.348)	-0.186** (-2.180)	0.057 (0.787)	-0.043 (-1.392)
Trans	-0.381*** (-4.330)	-0.048 (-0.545)	-0.054 (-0.895)	-0.051 (-1.641)
GDP Growth	-0.004 (-1.017)	0.008 (1.490)	-0.005*** (-2.576)	-0.000 (-0.151)
CPI	0.011*** (3.214)	0.022** (2.038)	-0.003 (-0.734)	0.006* (1.948)
<i>N</i>	380	377	271	267
<i>R</i> ²	0.562	0.243	0.377	0.480

NOTE: All models include year dummies. t-values are in brackets. *, ** and *** denote significantly different from zero at the 10%, 5% and 1%.

Table 6. Labour market outcomes in different varieties of capitalism before and after the 2007-2008 financial crisis

	<i>Before the Crisis</i>				<i>After the Crisis</i>			
	<i>Index1</i>	<i>Index2</i>	<i>Index3</i>	<i>Index4</i>	<i>Index1</i>	<i>Index2</i>	<i>Index3</i>	<i>Index4</i>
<i>SocDem</i>	0.580	0.704	0.665	0.679	0.695**	0.723**	0.747	0.713***
<i>Cont</i>	0.598***	0.640	0.692***	0.652***	0.665***	0.690***	0.740***	0.705***
<i>LME</i>	0.746***	0.692***	0.551*	0.606*	0.781***	0.598***	0.621	0.615***
<i>SE</i>	0.489***	0.549	0.612***	0.573	0.493***	0.311***	0.667***	0.551
<i>Trans</i>	0.377	0.590	0.518	0.556	0.411	0.689	0.497	0.565

NOTE: The mean values for each institutional regime are reported. The mean value for an institutional regime is compared with that of the regime reported in the next row. Results of the difference in the mean test are shown. *, ** and *** denote significantly different from zero at the 10%, 5% and 1%.

Table 7. Labour market outcomes in different varieties of capitalism before and after the 2007-2008 financial crisis – Multivariate analysis

	<i>Index1</i>		<i>Index2</i>		<i>Index3</i>		<i>Index4</i>	
	Pre- (1)	Post- (2)	Pre- (3)	Post- (4)	Pre- (5)	Post- (6)	Pre- (7)	Post- (8)
<i>SocDem</i>	-0.163*** (-2.796)	-0.099 (-1.461)	0.012 (0.111)	0.133 (1.060)	0.132** (2.407)	0.118** (2.289)	0.089** (2.451)	0.121*** (2.607)
<i>Cont</i>	-0.144** (-2.231)	-0.125 (-1.625)	-0.042 (-0.395)	0.099 (0.985)	0.101 (1.607)	0.067 (1.070)	0.040 (1.311)	0.092** (2.361)
<i>SE</i>	-0.260*** (-4.688)	-0.315*** (-5.017)	-0.142 (-1.587)	-0.269** (-2.381)	0.050 (0.655)	0.054 (0.752)	-0.037 (-1.010)	-0.067** (-2.050)
<i>Trans</i>	-0.374*** (-4.412)	-0.377*** (-3.898)	-0.122 (-1.146)	0.083 (0.771)	0.003 (0.039)	-0.114** (-2.054)	-0.044 (-1.426)	-0.036 (-0.785)
<i>GDP_Growth</i>	-0.004 (-1.431)	-0.007*** (-3.249)	0.004 (0.863)	0.004*** (3.266)	-0.008*** (-2.777)	-0.007*** (-3.739)	-0.004* (-1.922)	-0.003* (-1.806)
<i>CPI</i>	0.006* (1.886)	0.002 (0.318)	0.005 (1.002)	0.004 (0.281)	-0.006 (-1.137)	-0.004 (-1.322)	-0.003 (-0.854)	-0.001 (-0.167)
<i>N</i>	212	168	209	168	150	121	146	121
<i>R</i> ²	0.569	0.561	0.141	0.470	0.330	0.445	0.389	0.558

NOTE: All models include year dummies. t-values are in brackets. *, ** and *** denote significantly different from zero at the 10%, 5% and 1%.

Table 8. *Correlation matrix of labour market outcome indexes and OECD job quality indexes*

	<i>Index1</i>	<i>Index2</i>	<i>Index3</i>	<i>Index4</i>	<i>OECD_</i> <i>Equality</i>	<i>OECD_</i> <i>Environment</i>	<i>OECD_Job_</i> <i>Quality</i>
<i>OECD_Security</i>	0.383	0.542	0.160	0.498	1		
<i>OECD_Equality</i>	0.625	0.197	0.661	0.717	0.550	1	
<i>OECD_Environment</i>	0.482	0.390	0.238	0.423	0.627	0.480	1
<i>OECD Job Quality</i>	0.663	0.373	0.469	0.634	0.855	0.830	0.822

Table 9. *OECD job quality in different varieties of capitalism (2005-2015) – Multivariate analysis*

	OECD_ Security	OECD_ Equality	OECD_ Environment	OECD_ Job Quality
	(1)	(2)	(3)	(4)
<i>SocDem</i>	0.107*** (2.605)	0.245* (1.806)	0.065 (0.882)	0.126* (1.860)
<i>Cont</i>	0.142*** (4.080)	0.305*** (4.823)	-0.164*** (-2.595)	0.096* (1.726)
<i>SE</i>	-0.408*** (-3.662)	-0.234** (-2.387)	-0.458*** (-4.786)	-0.352*** (-4.445)
<i>Trans</i>	-0.184** (-2.120)	-0.501*** (-16.390)	-0.307*** (-8.740)	-0.326*** (-6.453)
<i>GDP Growth</i>	0.012 (1.366)	-0.002 (-0.976)	-0.001 (-0.352)	0.004 (0.830)
<i>CPI</i>	0.017** (2.024)	-0.003 (-0.965)	0.012 (1.246)	0.011** (2.262)
<i>N</i>	168	137	195	116
<i>R</i> ²	0.701	0.846	0.550	0.787

NOTE: All models include year dummies. t-values are in brackets. *, ** and *** denote significantly different from zero at the 10%, 5% and 1%.

ⁱ It is acknowledged that in such contexts, it is more difficult for mutually supportive complementarities to emerge and persist; hence, they will face pressures to converge to one or other more mature model (Hancke et al., 2007).

ⁱⁱ Bertrand and Mullainathan (2001) cast doubt on the use of subjective data from surveys. They document how cognitive and social problems such as the wording or scales of the questions may affect the reliability of survey data.

ⁱⁱⁱ The global financial crisis affected some countries, such as the UK, earlier than others. For example, Lallement (2011) reports sharp increase in unemployment in Europe at various points after 2007. Gonzalez (2016) also shows that large declines in corporate investment around the world, especially in Europe took place after 2008. To address the concern that our results reported in Table 7 may be affected by the cut-off year that we select, i.e. 2008, we perform robustness checks for different post-crisis periods, where we define the post-crisis period as 2009 onward or as 2010 onward. The results (not reported here for brevity) show similar results to that in Table 7.