



Economic democracy and labour productivity

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1. Introduction

In recent analysis, the Organisation of Economic Co-operation and Development (OECD) (2015) argues that productivity is the main driver of economic growth, which it views as a means to facilitating economic wellbeing. Moreover, the OECD claims that increasing labour productivity is the principal means of reducing pressures on government budgets associated with an ageing population, especially in developed economies, and the so-called “middle income trap” afflicting some emerging economies, which experience an erosion to their competitive advantage through rising wages.

Labour productivity is, in essence the value of the amount produced per employee over a given period of time. There is a longstanding concern about modest productivity growth and innovation in many Western economies. The work of Giovanni Dosi (2014) is especially notable in highlighting complex relationships between economic organization and innovation. The UK has a particularly pronounced productivity issue: policymakers and economists have long been troubled by Britain’s “productivity puzzle” (Office for Budgetary Responsibility, OBR, 2012). The UK’s productivity growth has lagged behind the average for G7 economies for a number of years (ONS, 2018). Various explanations include; measurement issues, a general decline in investment; a shift in economic activity from high to low productivity sectors; inefficiency in financial markets that lead to capital mismatches, and the impact of labour hoarding following the financial crisis. Here the idea is that firms preferred to retain employees’ services, but as demand contracted so did output per employee (OBR, 2012).

These explanations are entirely plausible, but overlook other potentially important factors. For instance, in parts of the academic literature worker motivation is acknowledged as a significant influence on productivity (for example, Frey, 2012). This briefing paper contributes to this aspect of the analysis of productivity by investigating its potential relationship with institutional arrangements in the form of economic democracy. We develop an index of economic democracy that attempts to represent different dimensions of economic activity – micro, meso, and macro. Our findings suggest that the degree of economic democracy is positively correlated with labour productivity.

The remainder of the paper is organised in three further sections. Section 2 provides a brief overview of the potential influences on productivity. The following section outlines the economic democracy index (EDI) and our findings on the nature of the relationship between

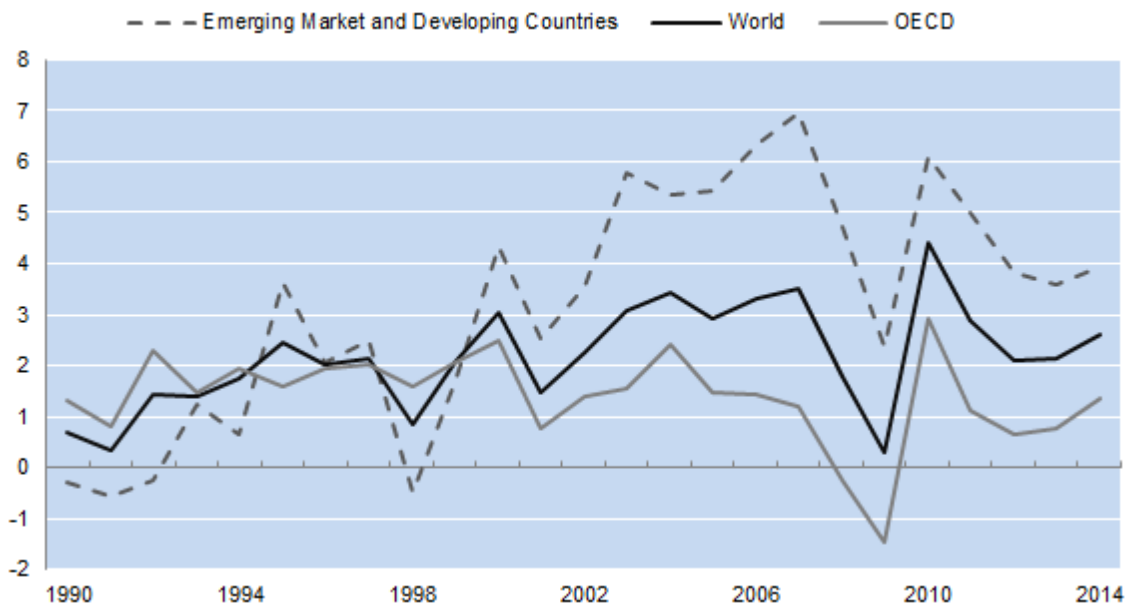
the EDI and productivity. Section 4 considers possible policy implications, particularly in relation to the UK.

2. Influences on productivity

There has been a prolonged and extensive debate in various academic literatures exploring the influences on, and determinants of labour productivity. A substantial tranche of the economics literature maintains that competitive labour markets ensure high productivity levels. State intervention in the labour market in the form of regulation, which places constraints on business operation by imposing social costs or strengthening the hand of labour, potentially reduces firms' incentives to invest. If regulation increases workers' bargaining power, they may appropriate a higher share of the surplus generated by firms. Greater regulation is claimed to increase firms' costs in terms of adjusting their workforce. Again, this is seen as a disincentive to investment (for example, Malcomson, 1997; OECD, 2002; Scarpetta and Tressel, 2004). The obvious policy implication is that governments should avoid what the OECD classes as "excessive regulation", and frame policies in a way that increases labour market competitiveness. This is, in effect an echo of Chicago School thinking on reducing the "natural rate of unemployment" through supply-side measures, which align incentives in what is claimed to be efficiency-enhancing ways, such as encouraging people to seek work.

This type of reasoning has shaped global macro, industrial, and innovation policy trajectories for decades and has been broadly and enthusiastically absorbed by national policy makers. Yet, the evidence for the approach is contested (Storm and Naastepad, 2007). Figure 1, below, shows trends in global labour productivity growth from 1990-2014. Globally and for emerging economies there is an upward trend punctuated by crises events, such as the 2008 financial crisis. OECD member states share a similar pattern, but there is no obvious upward trajectory in productivity growth over the period.

Figure 1 – Growth in labour productivity (1990-2014)



Source: OECD (2015: 15)

Recently, the OECD (2015) revisited the issue of labour productivity. Arguably, in a change of tone, the body highlights "diffusion" as a key determinant of productivity. Perhaps reflecting the influence of the works of Dosi (2014) and Mariana Mazzucato (2013), the OECD notes

that impediments to diffusion leads to the persistence of low productivity in “laggard firms”. The OECD emphasises four central factors to effective diffusion, including; global connectedness, such as free trade, labour mobility, and global value chains; the scope for firms to experiment with technologies and business models; the ability of labour and capital to flow to the most productive firms, and investment in innovation, skills and organisational know-how.

From this, the OECD (2015) sets out three major policy implications:

- States should increase investment in research and development to support the emergence of “breakthrough innovations”. This will push the global “innovation frontier” outwards. The report expresses concern about the impact of on-going austerity on research and development investment.
- Policies should be structured in ways that ensure that new business entrants are not discriminated against, and are provided with sufficient tax incentives to engage in adequate research and development. In this way, the “diffusion machine” will be “revived”.
- The policy environment should encourage competitive product markets; reduce skills mismatches; address the scarcity of venture/risk capital, and reform bankruptcy laws to reduce the penalty for failure.

The OECD sees a clear role for the state in supporting the activities that it views facilitate innovation, innovation diffusion, and enhance productivity. This echoes Mazzucato (2013) and Jacobs and Mazzucato (2016) who argue that the state is necessary to assure as well as support innovation in the private sector. The authors highlight the prominent beneficiaries of public investment and expenditure, such as Apple.

The OECD explicitly acknowledges the importance of education in facilitating productivity. Again, this is well recognised in the academic literature with the likes of Stiglitz and Greenwald (2014) advocating a “learning society” that ensures workers are not only skilled, but also capable of acquiring new skills.

While the OECD highlights a prominent role for the state in promoting innovation and productivity, it does not emphasise other institutional relations, such as the influence of economic structure on motivation, and, the underlying social relations underpinning economic development. Other contributors, such as Storm and Naastepad (2007) present evidence that suggests that productivity levels are positively correlated with relatively more extensive state regulation of labour markets. There is some resonance with Bruno Frey’s (2012) studies on extrinsic, intrinsic motivations and productivity. Frey’s findings indicate that extrinsic motivators in the form of monetary incentives, such as performance related pay and rivalry are inferior to intrinsic sources, such as worker autonomy and dignity. Indeed, extrinsic elements may be counter-productive in crowding out work effort in important areas, and therefore ultimately lowering productivity. Workers who perceive that they are valued and secure in their employment are more committed to, and identify more with their work (Simon, 1991).

Frey’s analysis complements a long tradition evident in both Smith’s *Wealth of Nations*, and Marx’s *Capital*, both of whom in their different ways evoke a concern with trends that diminish the social wage. Our study aims to augment this approach by investigating whether there is a relationship between economic democracy and productivity.

3. Economic democracy¹

3.1 Conceptualising economic democracy

We describe economic democracy as centring on an individual's rights and abilities to participate in economic decision-making processes. This represents a broader conceptualisation that goes beyond conventional associations of economic democracy with industrial democracy to include other areas of economic activity, such as the openness of governmental decision-making. Thus, economic democracy extends beyond the workplace, and reflects the different levels of economic activity and decision-making. On this basis, we develop four (potentially overlapping) dimensions of economic democracy:

1. Workplace and individual economic rights – Given the traditional emphasis of the academic literature, this is obviously an important area of economic democracy. Following the work of Robert Dahl (1985), we emphasise *individual* rights, autonomy, security, and influence in the context of work.
2. Degree of associational economic democracy – This dimension refers to the nature of economic governance. A diverse or pluralistic civil society enhances deliberation and consultation in economic discourse. Thus, the density of trade union membership, the ownership structure of firms, the nature and extent of co-operative arrangements (where finance is a surrogate for broader co-operative values), and the networks of employers' associations are all relevant considerations.
3. Distribution of economic decision-making powers across space and sector – This concerns the nature of economic decision-making, and the extent to which this is concentrated, or dispersed throughout society (for example, economic policy formation within and between different layers of government, nature of a country's financial infrastructure).
4. Transparency and rights to democratic engagement in macroeconomic decision-making. Of interest here is the deliberative process that informs macro-economic policy-making, particularly in its transparency, openness and democratic engagement of the broader population.

This model of economic democracy is the basis of the construction of a composite index.

3.2 The EDI

The development of the index follows the foremost technical guidance, *Handbook on Constructing Composite Indicators: Methodology and User Guide* (Organisation for Economic Co-operation and Development (Statistics Directorate and the Directorate for Science, Technology and Industry) and Joint Research Centre of the European Commission, 2008, hereafter OECD/JRC). The OECD/JRC (2008) specify ten linear stages, including the initial theorisation, the weighting of components, the testing of the relationships across variables, robustness tests, and correlations with other measures.

Table 1, below shows the variables employed in the composite index. The data relating to these variables are sourced from reputable bodies, such as the OECD, World Bank, International Labour Organisation, International Monetary Fund, etc. This is a double-edged

¹ For a fuller exploration, see Cumbers, *et al* (2018). Available on request from the authors.

sword: data reliability is more likely, but at the expense of country coverage. In other words, the EDI is confined to OECD member states².

Table 1 – Dimensions of economic democracy

Dimension	I – Work place and individual rights	II – Degree of associational democracy	III – Distribution of economic decision-making powers	IV – Transparency and democratic engagement of broader population in macroeconomic decision-making
Indicators	Labour market security; long-term unemployment; employment protection – individual dismissal	Trade union density; employers’ association density; credit union and financial co-ops	Net worth of financial corporations as % of GDP; attribution of tax revenues to local government as % of total tax revenue; total government expenditure as % of GDP	Involvement of trade unions and employers in government decisions – social and econ policy; voice and accountability; control of corruption

For the first dimension in Table 1, we include OECD data on labour market insecurity³, long-term unemployment, and strictness of employment protection (individual dismissal and temporary contracts). The second dimension – *degree of associational economic democracy* – includes indicators on employee representation and participation in labour agreement negotiations (trade union density, collective bargaining coverage rate, status of work councils, and employees’ stake in ownership structures), employers’ organisation density (chambers of commerce and the like), and the proliferation of credit unions and financial cooperatives.

In the third dimension – *distribution of economic decision-making powers across space and sector* – we attempted to select variables that indicate the importance of certain key sectors (in this case, financial institutions) and how some measure of the degree of centralisation in an economy. Thus, the indicators include; size of the financial sector (net worth of financial corporations as a percentage of GDP). This variable may act as a potential guide to the extent of financialisation in an economy, given *a priori*, that a greater degree of financialisation will prompt growth in the financial sector and a potential centralisation of decision-making. Other indicators in this dimension are: the proportion of tax revenue attributed to sub-national levels (attribution of tax revenues to regional and local government as percentage of total tax revenue) and the percentage of GDP attributed to total government expenditure.

The fourth dimension measures the *transparency and democratic engagement of the broader population in macro-economic decision-making*. These data cover diverse areas from individual attitudes and perceptions to a measure of the transparency of the activities and procedures of the central banks. Three indicators were selected: involvement of unions and

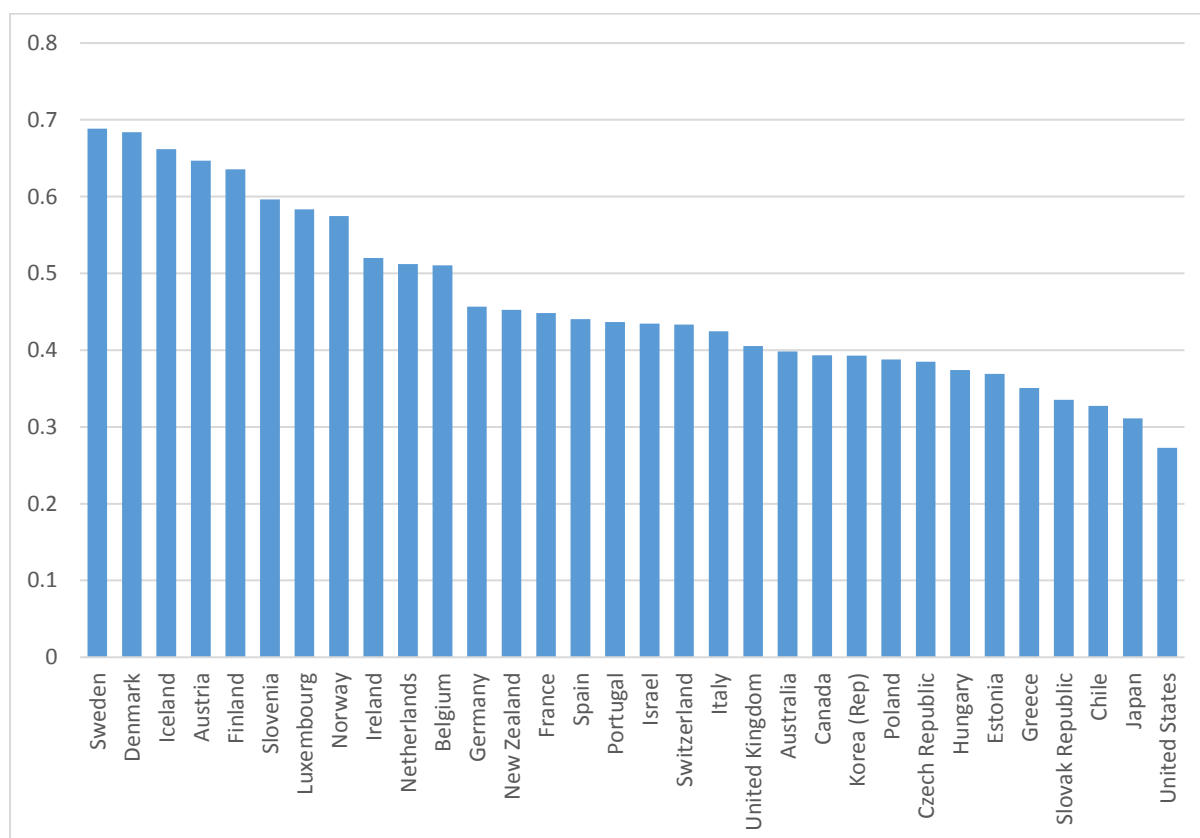
² Due to missing data, two OECD members were excluded - Mexico and Turkey.

³ Labour market insecurity is defined in terms of the expected earnings loss associated with unemployment. This loss depends on the risk of becoming unemployed, the expected duration of unemployment and the degree of mitigation against these losses provided by government transfers (OECD Labour Statistics definition, accessed online via http://www.oecd-ilibrary.org/employment/data/oecd-employment-and-labour-market-statistics_lfs-data-en).

employers in government decisions – social and economic policy; voice and accountability; control of corruption

Following the procedure set out by the OECD/JRC (2008), we applied specific weightings to each of the dimensions in Table 1. Given our description of economic democracy, noted in section 3.1 above and the weight of the academic literature in the field, we applied weights of 30% to each of dimensions I and II, and 20% to each of dimensions III and IV. It is obviously possible to recalibrate these weightings according to theoretical preference, but to reiterate we believe that the 30, 30, 20, 20 weightings represent a reasonable interpretation of the description of economic democracy and the emphasis of the literature. Following this, we are able to provide a ranking of the degree of economic democracy in OECD member states (Figure 2).

Figure 2 – EDI rankings (OECD member states, weights per dimension: 30, 30, 20, 20. Data from 2000 – 2016)



Our findings have some intuitive appeal in that Scandinavian economies, typified by extensive welfare states and progressive institutional arrangements are ranked relatively highly. There is then a clustering of mainland European economies, followed by Anglo-American, then East European and Asian (and Chile). Notably, in our most recent index, the US is the lowest ranked of OECD member states.

From here, we investigate whether there is any relationship between the EDI and labour productivity.

3.3 The EDI and labour productivity

Figure 3, below is a scatter plot of the EDI and labour productivity. Data for labour productivity was sourced from the OECD, and measured as Gross Domestic Production per hour worked⁴. From the chart, there appears to be an approximate positive relationship between EDI and labour productivity. Higher levels of economic democracy are associated with greater labour productivity. The extent of this association was tested via the Pearson correlation procedure. The result is displayed in Table 2.

Figure 3 – Economic democracy and labour productivity (GDP per hour worked US Dollars, 2010 constant prices and PPPs)

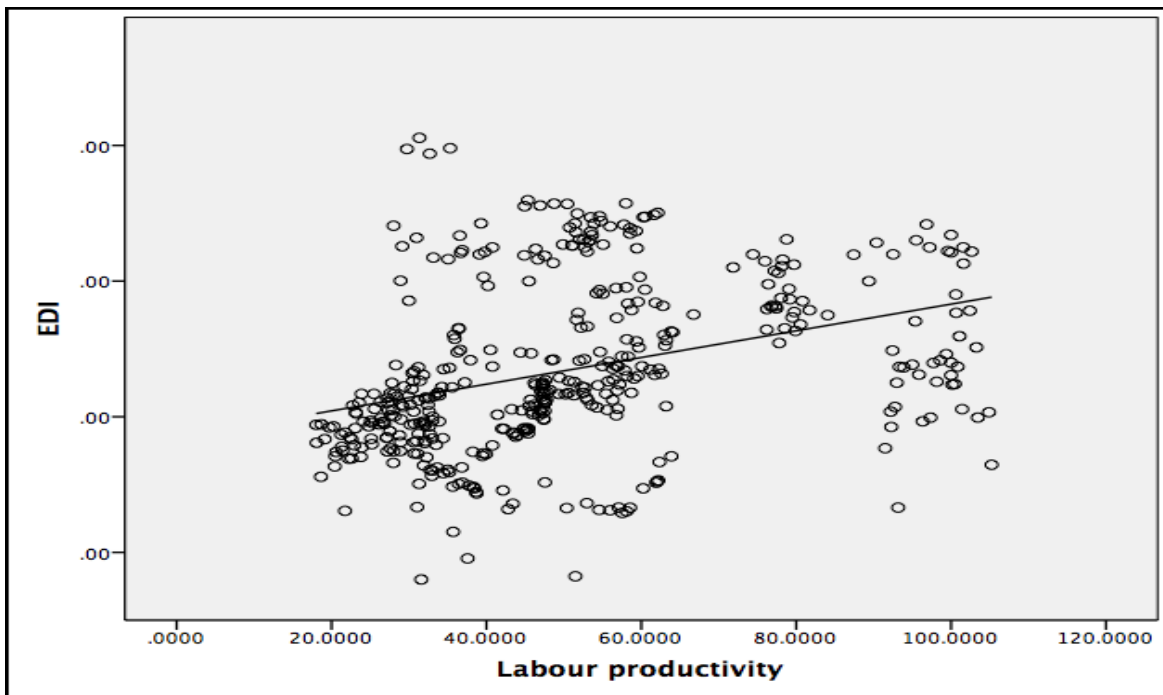


Table 2 – Economic democracy and labour productivity

Pearson Correlation	Labour Productivity	EDI
Labour Productivity	1	0.350***
N	429	Sig (2-tailed) .000

The correlation test is highly significant with a confidence level of 99%. In other words, our results suggest a strong correlation between the extent of economic democracy and labour productivity across OECD member states. We turn to the implications of our findings.

4. Discussion

Our results augment evidence from other work investigating the relationship between economic structure and productivity (for example, Storm and Naastepad, 2007). In our study, we conceive of economic democracy in terms of individual rights and capabilities, and the institutional arrangements that facilitate these. This is an area frequently overlooked or

⁴ 2010 constant prices and purchasing power parities.

relegated in parts of the economics literature. That is not to denigrate these studies, but rather to suggest that our study provides additional evidence of the potential importance of institutional arrangements on productivity. Thus, the analysis of economic democracy and its association with productivity may add a dimension to existing work, and therefore complements it. This research may also augment the analyses of the likes of Herbert Simon (1991) and Frey (2012), reported earlier, who in different ways stress the importance of economic structure on people's motivations and dispositions. At multiple levels, economic democracy may act to promote individual rights and autonomy. Accordingly, individual dignity is enhanced, and following Frey, this may increase intrinsic motivation.

The policy implications suggest that economic democracy should be promoted where possible, and especially in the workplace. This means that people should feel secure and valued in their employment. Moreover, economic democracy at other scales, such as collective rights at firm or sectoral level, and rights of democratic engagement at the macro level, may also engender conditions favourable to commitment and relatively high productivity. Of course, some occupations are more conducive to economic democracy than others are. For instance, some jobs have career trajectories and inherent professional autonomy that lend to flatter hierarchical structures to a greater degree than those typified by casualization and rigidity of routine. Under such circumstances, arguably dimensions of economic democracy beyond the workplace increase in significance in terms of facilitating individual autonomy and dignity.

In the context of the UK's "productivity puzzle", our study may highlight the potential importance of institutional arrangements that strengthen and safeguard economic democracy rather than 'flexibility' agendas that might constrain labour rights. Figure 4 shows that UK productivity levels have been consistently below that of the OECD average, and indeed the gap between the two may be increasing since the financial crisis. Since 2009, UK productivity growth has been sluggish relative to the OECD average. Yet, simultaneously, the UK records some of the highest hours worked per employee in Europe. Figure 5, below shows that over the past ten years the UK has consistently registered higher working hours than its European partners. This may indicate that the structure of the British economy generates a relatively high proportion of low productivity employment.

Figure 4 – OECD and UK labour productivity (GDP per hour worked, US Dollars, 2010 constant prices and PPPs)

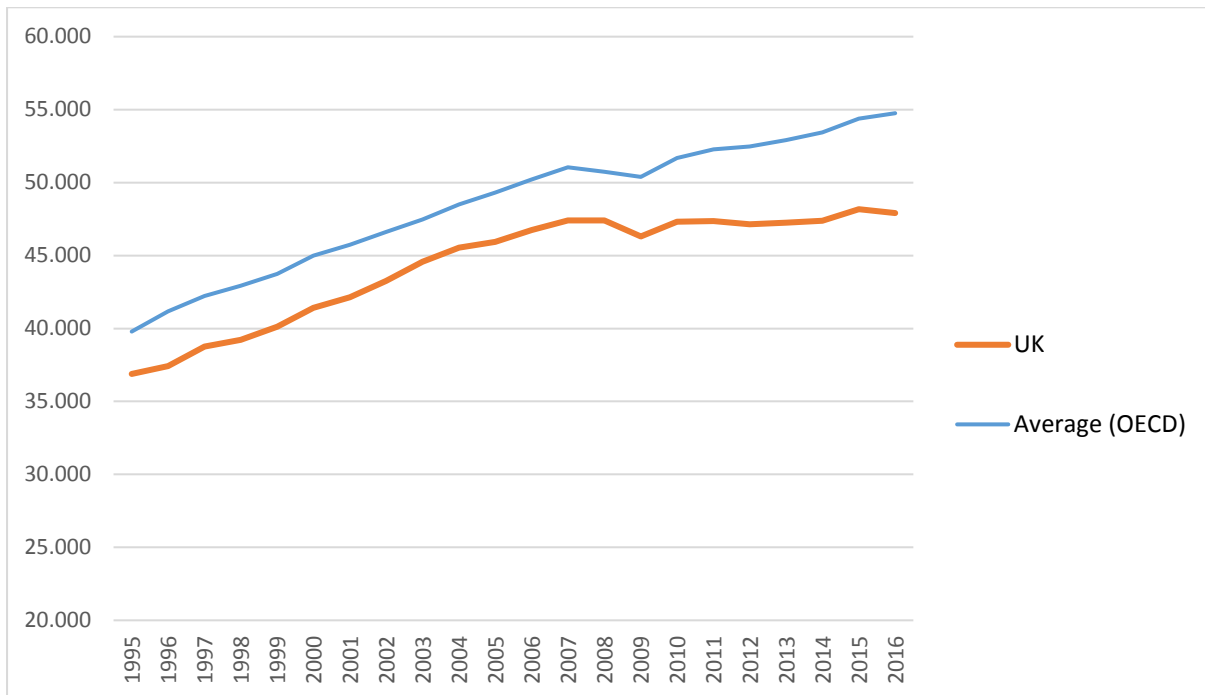
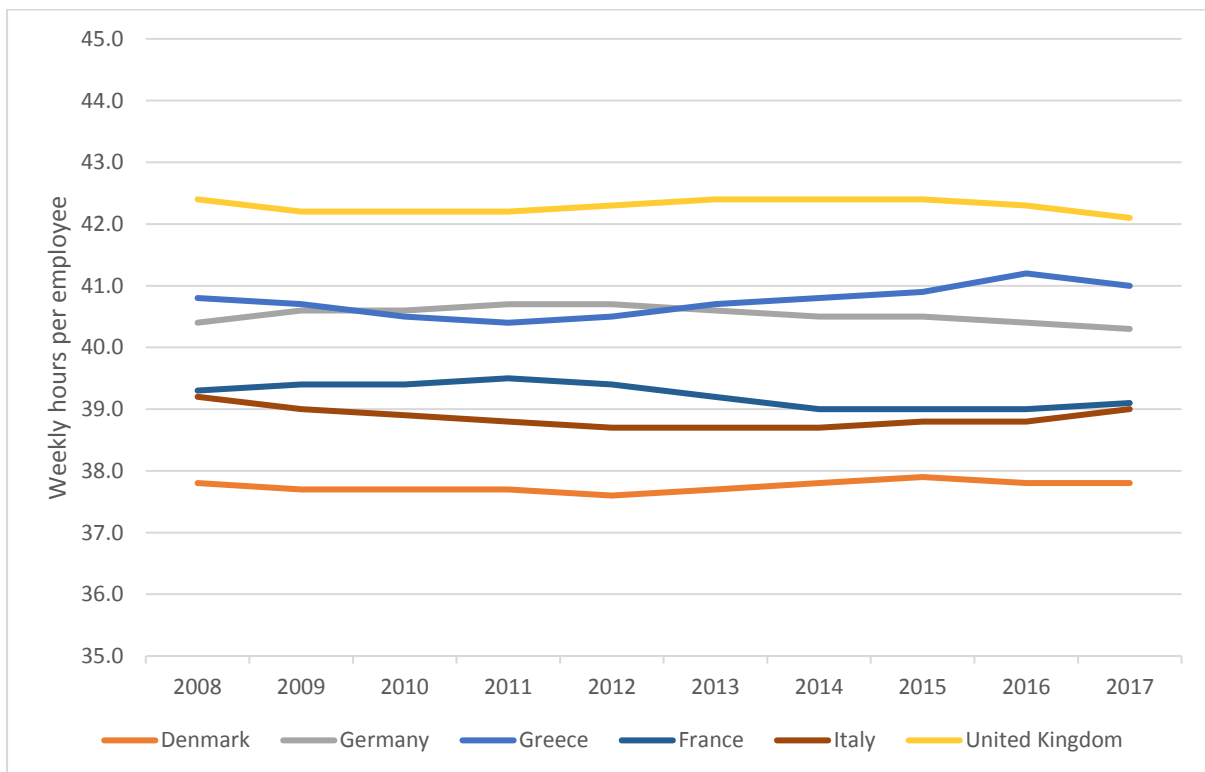


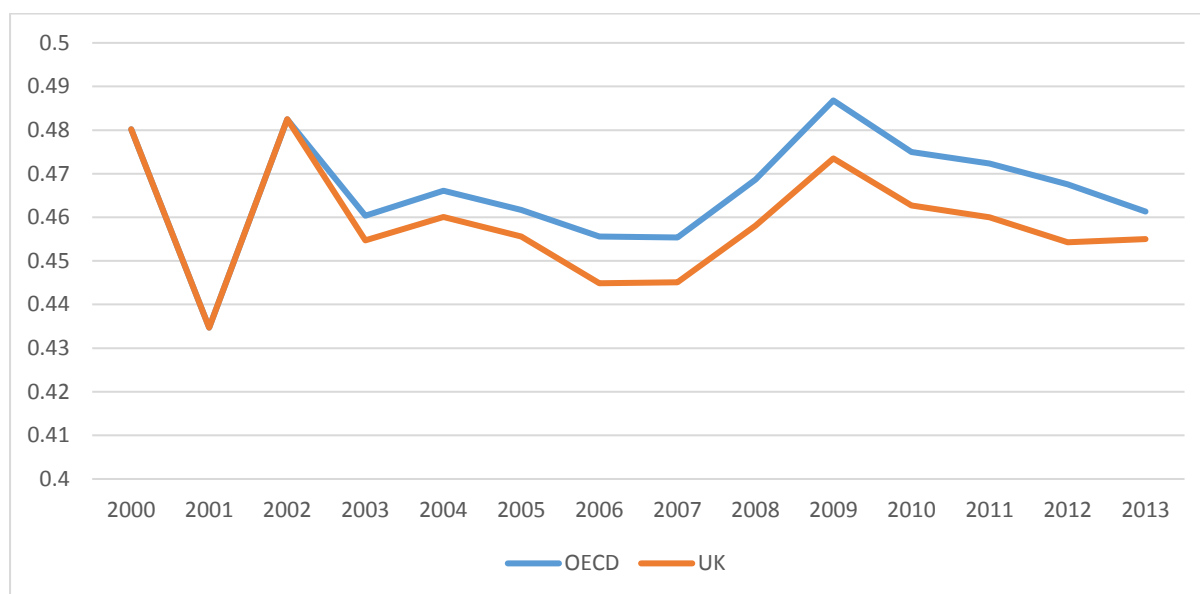
Figure 5 – Average number of weekly hours of work (selected European countries)



Source: Eurostat (2018) How many hours do Europeans work per week?

Our study highlights a further dimension to the analysis of productivity. Figure 6, below shows the average EDI rank for the thirty-two OECD member states for which there is reliable data and the UK.

Figure 6 – Average EDI score (2000-2014): OECD and UK



The UK and OECD averages are identical over the initial two to three years of the sample period. Thereafter, the trend demonstrates similar movements, but the UK remains consistently below the OECD average from 2003. It is beyond the scope of this briefing paper to hypothesise possible reasons for this differentiation. Nonetheless, *en passant*, the UK increasingly shares with the US a model of economic structure that emphasises deregulation and liberalisation.

For the purposes of this study, it is interesting how the UK's productivity and its EDI averages are consistently lower than the averages for the OECD members in the study. Again, these may be associated with particular evolution of the structure of the UK economy. What our study does highlight, is a case for the promotion of economic democracy on *economic* grounds. This would seem to be particularly relevant to the British context, given that workers in the UK appear to work longer hours than their mainland European counterparts, but produce less by value. Accompanying this is a lower level of economic democracy in the UK than many parts of Europe. If the OECD (2015) is correct about the centrality of productivity in addressing economic issues and facilitating growth, then the role of economic democracy is deserving of further attention.

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