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Abstract

While a reluctant European player now heading for the Exit, the UK was also an enthusiastic adopter of several key EU economic policies – namely, the skills and technology policies of Agenda 2020 and labour mobility. These initiatives worked with existing British policy, and structural biases, to exacerbate the already bifurcated structure of UK capitalism - between the high-paid technology and financial services sector on one hand, and low-cost, low-wage sectors on the other. In particular, and central to the argument of this paper, immigration from Eastern and Central Europe after 2004 helped to sustain low cost manufacturing and services industries by undermining firms' incentives to invest in training. This combined with endemic failures in the UK's skills system, which is heavily geared towards producing graduates with general skills but neglects the needs of mid and lower segments of the labour market. EU integration therefore exacerbated cleavages over skills between high and low productivity sectors and may have contributed to social divisions that led to Brexit.

1 Introduction

The UK has tended not to feature prominently in many analyses of European integration. One reason may be that, as one of Europe's leading examples of a 'liberal market economy', or LME (Hall and Soskice 2001), the country is already assumed to fit closely with the liberal order said to characterise the economic governance of the European Union (Scharpf 2010). Another reason stems from its semi-detached (soon to be fully-detached) status in the EU, exemplified by its decision to stand apart from several of the EU's most important projects, such as the Single Currency. Yet this perspective is slightly misleading. Aside from the UK's enthusiastic promotion of the Single European Market, there are two other important policy areas of European integration in which the UK has participated fully: labour mobility and skills policies.

Central to both has been its adoption of the competitiveness and high-technology policies of the Lisbon and 2020 Agendas. The UK does very well on the scorecard for adherence to 2020 targets, which arguably complement existing UK technology policy. The other was the UK's embrace of labour mobility - now, ironically, a major cause of the voter disquiet which led to Brexit. The UK was one of the very few EU states (the others being Ireland and Sweden) to fully open its borders to low-skilled immigration from the A8 accession countries in 2004, a decision which resulted in significant levels of low-wage immigration from eastern Europe (Wadsworth et al 2016).

These policies have had important economic and distributional consequences. The key argument is that the twin strands of European integration that were embraced by the UK and which fed into domestic policies – namely, a high-tech industrial strategy and labour mobility

– reinforced divisions in the UK labour market between its high and low-skilled sectors.[1] Moreover, there are reasons to suspect that low wage immigration may be an important structural feature of an economy such as the UK's, where economic growth and aggregate demand is fueled by domestic consumption rather than exports (Baccaro and Pontusson 2016). Thus, the article contributes to the focus of this special issue in two ways: it provides an example of continued institutional divergence; but it also highlights how European integration may exacerbate internal divisions and increase domestic political tensions.

The bifurcated structure of UK capitalism

Divisions between its high and low-skilled labour markets are a deep-rooted and long-standing feature of the UK's LME model (cf: Busemeyer and Trampusch 2012; Crouch et al 1999; Finegold and Soskice 1988). At the top end of the labour market, the UK is noted for producing large numbers of university graduates with general, transferable skills who go on to thrive in its large, and relatively well-paid, professional services sector. This success is, unfortunately, not matched at the lower end, where significant cohorts of school leavers equipped with inadequate educational and technical qualifications sustain a number of low productivity manufacturing, processing and services industries (Besley et al 2013).

Immigration plays an important part in both labour market sectors, although it has, arguably, been more critical for the low-cost segment in the past decade (Ruhs 2006). The success of the UK's innovative high-tech sector, as well as its powerful financial services industry, hinges on being able to recruit suitably qualified technology workers to meet firms' personnel demands in the face of rapidly changing business opportunities. Unsurprisingly, both the UK's technology and financial services sectors were enthusiastic lobbyists for free

movement of labour. Central to this has been the UK's ability to tap into large pools of international students studying STEM subjects at its highly-ranked universities, who go on to jobs in the finance and technology sector, alongside domestic graduates. The thrust of industrial policy, moreover, has tended to prioritise the UK's science and technology base, while overlooking lower-value sectors.

At the lower end of the scale, on the other hand, immigration from low wage countries appears to have served a very different purpose: to keep the lid on wages and make up for skills shortages. This provided an equally powerful incentive for politicians to camouflage failures over training policies by supporting low-wage immigration, in alliance with employers in labour-intensive sectors (Wright 2012). As was acknowledged by policymakers (House of Lords 2008: 29), the ready availability of cheap, energetic workers from A8 countries removed incentives for these industries to invest in training. This was despite the exhortation of successive governments, which have made 'rebalancing' and 'upgrading' the UK labour market a central plank of economic policy.

This article suggests, therefore, that the EU's Agenda 2020 and free movement policies reinforce, in tandem, British labour market strategies and divisions. In a nutshell, the combination of the UK's LME institutions, particularly its flexible labour market and its voluntarist, uncoordinated training regime, with the EU's skills and immigration policies which foster a high-technology sector on the one hand, while reinforcing the competitive strategies of low-wage, low-productivity industries on the other, results in an economy with a notably bifurcated structure that reinforces social and geographical divisions.

These divisions became manifest in the recent 'Brexit' debate, with the immigration issue split between claims about the need for foreign workers to meet skills shortages (Portes

2016) alongside warnings about their impact on low wage sectors of society. The latter argument appears to have energized Brexit voters as well as fueling the rise of the nativist UK Independence Party (UKIP). Empirical analysis of the referendum result reveals a particularly strong correlation with education and skill levels, with the lack of a university education being among the clearest predictors of a vote to Leave (Clarke and Whittaker 2016; Goodwin and Heath 2016). The link was also explicitly made by Theresa May on becoming Prime Minister in July 2016: *'I'm very clear that the Brexit vote gave us a very clear message from people, that we couldn't allow freedom of movement to continue as it had done hitherto.'*[2]

But is there really a relationship between the EU (and free movement) and low wages? All the evidence shows either non-existent, or very small, downward pressures on wages from immigration, even at the very local level and in micro-economies already defined by low skill employment (Clarke 2016; Nickell and Saleheen 2015; Portes 2016). A significant influx of low-skilled immigration probably *did* have a negative effect on the economy and labour market, but its effect operated not on local wage rates but on the incentives of employers, who were presented with a solution to their training problems in the form of cheap workers. Meanwhile, successive UK governments from the 1990s onwards pursued a science-based industrial policy centred on promoting the high-skill 'Knowledge Economy', while also encouraging low wage immigration as the answer to stubborn deficiencies in skills.

This article therefore highlights contradictions in skills and industrial policies aimed at fostering more sustainable and socially inclusive sources of growth, and suggests that these have been exacerbated by EU policies, which the UK adopted and applied. But it also poses deeper questions over the future resilience of the UK's growth model, which is reliant on low

costs in many industries to drive consumption-led growth. This has exacerbated economic and social tensions to the extent that the UK is now set on a path to leave the EU entirely.

The remainder of the article is organized as follows. Section two situates the UK experience within debates about the development of European models of capitalism. Section three shows how the EU 2020 agenda and free movement impacted the UK labour market, highlighting how these exacerbated existing divisions over skills. Section four demonstrates that failure to tackle these divisions was not due to a failure of partisan politics; rather, these failures are institutional in nature and stem from the UK's voluntarist and un-coordinated nature of firm training, which is analysed in section five. Section six concludes.

2. The politics of the UK's liberal model of capitalism

Comparative political economy (CPE) debates about divergence or convergence among European models of capitalism have been fueled by a number of changes in political economies over the last 15 years. Nevertheless, as argued in the introduction to this special issue, there are few signs that European integration is leading to convergence around one particular economic or social model. On the other hand, the key drivers of divergence – economic, technological and political – are undoubtedly being rethought by CPE scholars.

The original VoC literature was mainly concerned with the preferences of firms in export-led sectors and the micro-economic institutions supporting their competitive strategies. Accordingly, VoC focused on manufacturing, tended to ignore the role of the State in shaping markets and highlighted the presence or absence of collective bargaining institutions in labour

markets as a key point of difference between coordinated (CMEs) and liberal market economies (LMEs) - the latter type exemplified in Europe by the UK and Ireland.

These assumptions have been challenged by socio-economic structural changes since then: notably the decline of manufacturing and the rise of services; falls in unionization and collective bargaining rates in CME labour markets; and new forms of capitalist organization, such as the 'sharing' and 'knowledge' economies (Hall 2015). Nevertheless, a number of VoC scholars have responded to these changes by adapting and improving, rather than abandoning, its core precepts. For example, Thelen (2014) acknowledges that radical reform programs in Nordic countries in the last decade have seen them diverge from CMEs like Germany. However, she argues that they retain their core institutions for coordination as well as a commitment to labour market decommodification, which sets them well apart from LMEs.

Moreover, while most advanced European economies have responded to the challenge presented by the shift to the 'Knowledge Economy' by revamping their institutions for training and technology transfer, there remain considerable differences in the scope and impact of these across countries (Hall 2015; Coulter and Garcia-Calvo 2017). Overall, considerable evidence remains to support a view of continued diversity in European capitalism along lines suggested by VoC (Schneider and Paunescu 2012).

As for the UK, few commentators doubt that it remains firmly in the LME camp due to its reliance on markets in wage bargaining, skill formation and firm governance, as originally specified by Hall and Soskice. Indeed, it is striking how the left-leaning 'New' Labour government of Tony Blair, despite its landslide majority in 1997 followed by two further victories, chose to work firmly with, rather than against, the grain of its LME institutions

(Howell 2005). A better indication of the force of path dependency on political choice in the institutional development of capitalist democracies would surely be hard to find.

Nevertheless, ongoing transformations in economics and politics are leading other authors to explore alternative sources of divergence in European political economies. Where VoC emphasizes supply-side factors in accounting for diversity, Baccaro and Pontusson (2016) present a demand-side model which divides economies according to whether growth is export or consumption-led. The UK is in the consumption-led camp as net exports make a negative contribution to GDP growth, due partly to the dominance of domestic-oriented services industries. UK growth is fueled instead by rising real wages and credit expansion which together compensate for the UK's high level of inequality that might otherwise depress consumer demand. The importance of consumption fuels demand for goods and services in sectors like construction, retail, leisure and personal services. These sectors are highly cost-sensitive and remain competitive by paying low wages. Low wage immigration helps to dampen inflation, enabling the monetary authorities to keep interest rates low, fueling consumption – and so on. It also helped keep UK industry competitive in the face of EU enlargement in Eastern Europe and the Balkans, as well as the extension of Western firms' supply chains into Turkey and North Africa.

Baccaro and Pontusson present their model as an alternative to VoC. But their interesting distinction between consumption and export-led countries surely complements VoC's supply-side focus. Indeed, describing the UK as a consumption-led economy is arguably implied directly by VoC arguments about the UK's lesser ability to compete in high value export markets outside financial services and some technology sectors, as its domestic

institutions effectively limits other competitive strategies (Hope and Soskice 2016; Iversen and Soskice 2012).

A dualized labour market

A particular failing of the UK's system of capitalism is its inability to tackle long-standing inadequacies in technical training. As a result, it continues to produce large numbers of graduates with general, transferable skills alongside a long tail of school leavers with inadequate qualifications and poor employment prospects. This is in line with VoC's contention that the economies of LMEs like the UK face a dualized structure. Although some high-technology and radically-innovative firms at or near the top of global value chains may flourish in LMEs, the product strategies of many others will hinge on production of less sophisticated, price-sensitive goods and services, requiring low-cost inputs. A dualized labour force, comprising elite university graduates and skilled technicians at the top, and an abundance of cheaply-trained workers at the bottom, arguably suits these ambitions and the UK's model of economic competitiveness has not tended to be associated with a wide distribution of skills (Green and Sakomoto 2001).

Growing skills cleavages therefore pinpoint negative features of the UK's LME growth model that are at odds with the aspirations of policymakers to improve the general level of skills; namely, its inability to generate large numbers of high-skilled, high productivity jobs outside a small network of leading firms in service and manufacturing sectors. The training problem shows up in the UK's poor record on productivity and a hollowing out of the labour force between high and low skilled jobs (Plunkett and Pesoa 2013). Firms at the top-end are able to form networks or make use of the high level of general skills. At the low-end, low

costs are always more important and firm-specific skills less important, so the UK's low level of wage and product market regulation is a crucial competitive advantage.

Moreover, the UK arguably faces limited pressure to change as it has been able to sustain relatively high growth rates through economic policies that fuel consumption whilst encouraging households to take on private debt. Baccaro and Pontusson (2016) are correct to point out that this is not a sustainable strategy in the long-run as it produces current account deficits that ultimately have to be dealt with through painful devaluations. Nevertheless, it has let policymakers off the hook in regards to addressing the deep-seated structural problems within the UK economy, notably its skills system and low wage economy.

An additional problem may lie with political and electoral alignments in the UK. These fail to produce overwhelming pressure for skills reform and other competitiveness issues, and in turn, widens the divide between skilled and unskilled workers. An emerging strand of recent CPE scholarship examines how economic policies ultimately devised by elites influence, and are influenced by, shifting electoral coalitions. Iversen and Soskice (2015) argue that in countries such as the UK, with majoritarian electoral systems favouring right of centre governments, unskilled workers will tend to be ignored by policymakers who tend to target middle class swing voters by investing in higher education.

On the other hand, Beramendi et al (2014) suggest that the UK has undergone a transition to a 'competitiveness-oriented capitalism' that prioritises flexibility over protection. Currently, the UK's major challenge lies in the increasing polarization of wealth resulting from technological change, which is fracturing previously stable interest coalitions. Policymakers are torn between appeasing either socio-cultural professionals in an alliance

with financial and technology industries, or helping low skilled workers vulnerable to automation and labour market competition from low-wage immigrants.

The structure of UK capitalism arguably makes it extremely difficult to accommodate both socio-economic groups as their electoral preferences on issues such as immigration and skills policies are drifting apart. The Thatcher and Major Conservative governments in the 1980s and '90s built a successful electoral coalition in a relatively low-immigration era by uniting business interests with low and medium-skilled workers. Blair's (initially very successful) strategy, by contrast, was to draw together business and socio-cultural professionals through open, pro-market policies while buying off the losers (Labour's traditional working class supporters) through tax credits for the low paid and substantial investment in public services. Austerity policies introduced to deal with the UK's large budget deficit in the wake of the financial crisis have rendered this strategy unworkable, however, and the Conservative governments from 2010 prioritised welfare retrenchment while forging ahead with New Labour's science and technology policies. This appears to have been built on a fragile political coalition which came apart over Brexit.

3. Top of the class? The UK, the 2020 agenda and labour mobility

Though the UK has been reluctant to participate in deepened European integration, it has been a more enthusiastic supporter of the EU's skills policies and growth strategies (particularly the 2020 agenda). Since the crisis, European governments and the EU have reached for technocratic solutions to the problems of low or unbalanced growth, set against a backdrop of difficult economic and fiscal restructuring. The Commission's Europe 2020 strategy,

launched in 2010, aims to transform the EU into *'a smart, sustainable and inclusive economy, delivering high levels of employment, productivity and social cohesion'* (European Commission 2010a: 5).

Among the seven 'flagship' initiatives' in the 2020 strategy, two stand out: *"An industrial policy for the globalisation era to improve the business environment"* and; *"an agenda for new skills and jobs to modernise labour markets and empower people by developing their skills.'* (European Commission 2010a: 5-6). While broad in scope, these objectives mesh closely with similar priorities adopted by the UK since 1997 under New Labour. Indeed, the UK's skills and industrial policy stance is arguably close to the Commission's ideal. For example, the Blair government published a long-term plan for science in 2004 (HM Treasury 2004) and intervened in supply chains to foster high technology industries in a policy framework that included significant new institution-building.[3] The interventionist tone has continued under the more pro-market Conservatives, with Theresa May calling for an 'industrial strategy' in her maiden speech as Prime Minister in July 2016, and launching a Green Paper on this theme in February 2017.

Although the UK has not reached the headline target on Europe 2020 of spending 3% of GDP on R&D, this benchmark has been widely criticized as a crude measure of innovation capacity, as it is biased towards manufacturing activities and ignores intangible investment taking place in services industries in which the UK excels. When intangibles are included, the UK's performance rises to third place, behind Sweden and Belgium (Roth 2010).

The skills component of 2020 calls for a dual approach to furnish the hi-tech industries of the future with appropriately skilled staff while also not neglecting the skills needs at the lower end of the labour market (European Commission 2010b). Skills obviously form an

extremely important part of the knowledge economy and the EU skills strategy embodies a similar approach to the UK's. It has four main objectives: more investment in skills (including a target of placing 40% of young people into higher education or the equivalent); more integration of education, training and work (by making educational qualifications more vocational); a better mix of skills (implying more high skills); and better anticipation of future skills needs (European Commission 2010b).

There is considerable overlap between these objectives and core concerns of UK skills policies. The importance of preserving labour market 'flexibility' is continually emphasized and the strategy tends to define 'high-skills' in terms of possessing higher education rather than the German system of vocational education (Roth and Thum 2010). The UK is one of the relatively small number of EU countries to already meet the 40% tertiary education target and UK skills policies also embody the 2020 assumption that increasing the supply of high-skills will encourage industry to upgrade. Indeed, one of the striking features of the EU's education and skills agenda is the preference for elite education, observed through such schemes as the Bologna process for universities, alongside a comparative neglect of low and intermediate-level skills development (Powell and Trampusch 2012).

The UK's focus on industrial intervention, at least, has borne some fruit. Sectoral analysis examining comparative advantage and export specialization indicates broad strengths in areas like pharmaceuticals, aerospace and chemicals, which depend on deep capabilities in areas prone to market failure like technology transfer and R&D (BIS 2012). Crafts and Hughes (2013) have surveyed recent innovation policies involving the creation of dedicated institutions for collaborative purposes such as R&D and technology transfer and find these outperformed more traditional, horizontal policies, particularly tax incentives.

On the other hand, and despite the shared aims, the Commission notes glaring failures in the UK's growth model, which it blames on the failure of skills development. The most immediate of these is the near collapse in productivity since the Financial Crisis. Measured by output per unit of labour, UK productivity increased on average by 2.2 annually between 2000 and 2007, its best performance in decades and above the EU average. However, it fell at an annual average rate of 0.6% from 2008 onwards and the UK has experienced the weakest recovery in productivity in the EU bar Italy. The Commission attributes this to *'... various factors such as low capital investment, skills shortages, skill mismatches and a shift in the composition of the economy towards business sectors with lower productivity'* (European Commission 2016: 6). It was also swift to puncture any self-congratulation over the UK's good record of job creation since the end of the Crisis: *'The United Kingdom's labour market remains dynamic… Nonetheless, there remains scope for improvement in the prospects for inactive, underemployed and low skilled workers. Better labour market progression prospects and clearer routes to upskilling would assist those who find themselves confined to low-wage and/or low-hours of work. It would also address the skills shortages that are apparent in some parts of the economy'* (ibid).

The inability to foster a high, or even acceptable, level of skills provision across the board has been a long-standing failure of UK supply-side policies. Historically, the UK's education system has been geared towards production of general and high skills. In the proportion of university graduates it produces and provision of 'high skilled' workers, the UK does consistently well, ranking 11th globally and expected to climb to 7th by 2020 according to the UK government's skills agency (UKCES 2014). In low skills, however, the UK is ranked 20th, and is projected to remain in this position by 2020 in spite of a reduction in the

proportion of the population qualified at this level. In intermediate skills, the UK is ranked 25th but projected to fall to 28th place by 2020. UKCES said that the most pressing priority is to "address the long tail of low skilled in the UK population". However, UK education spending as a percentage of GDP has increased by 1.6% between 2000 and 2010, much more than the OECD and EU averages, which suggests that attaining this priority is easier said than done.

Focusing on the demand for skills presents a slightly different picture. Several recent studies indicate that the UK labour market is particularly prone to a process known as 'routinization' - how easily jobs can be automated (Bank of England 2014; Holmes 2014; Plunkett and Pesoa 2013). Both high *and* low skilled jobs tend to be more resistant to being replaced by machines or computers than medium-skilled jobs as the functions involved are more variable (Goos and Manning 2003). Taken together, the studies suggest that employment in high and low skills occupations has been rising at the expense of medium skill jobs. But if the UK training system is failing to keep pace with demand for low-skilled workers then how are firms in these segments meeting their recruitment needs?

The demand for low-wage immigration

One very obvious answer is immigration. The mismatch between the demand and supply of low-skill workers may help to explain UK employer's enthusiastic embrace of low-skilled immigrants, as well as successive UK governments' willingness to accommodate this. Immigrants from the post-2004 EU accession countries appear to have been strongly concentrated among low-wage sectors of the economy. A third of EU nationals are in the relatively low skilled 'elementary and processing occupations' compared with 10% of UK

nationals (Wadsworth et al 2016). In one detailed analysis covering the years 2014-16, almost all of the 15 economic sectors in which immigrants from the accession countries were most prominent are cost-sensitive manufacturing or services industries, such as food products or textiles (Clarke 2016). Average wages in all but five of these sectors was below £10 an hour and in all of them it was less than the all-industry average wage of £12.46 an hour.

There are a number of indications that labour markets in LMEs are particularly amenable to low-skilled immigration, and also that immigration suppresses incentives for firms to invest in training or lobby governments for state action to institute collective training mechanisms. Governments tend to incorporate employers' recruitment needs into immigration policy because fulfilling these needs helps sustain the UK's comparative advantage (Freeman 2006). Alfonso and Dewitt (2016) suggest that countries open to immigrants will encourage workers who complement their innovation and production system. LMEs like the UK will, accordingly, favour high as well as low-skilled migrants, whereas the FDI-led Irish economy has tended to focus on importing high skilled labour (Regan & Brazys this issue). Low levels of collective bargaining, inflexible housing markets that prioritise owner-occupation and thus limit labour mobility amongst the native population, and weakly regulated labour markets – all of these being characteristics of LMEs - also appear to encourage both kinds of immigration.

However, the effects of immigration on the labour market receiving them vary significantly by sector. As argued earlier, highly skilled immigrants at the top end of the labour market (Latvian computer programmers, French derivatives traders etc.) have tended to complement the domestic UK production regime, fueling growth in politically favoured high technology and financial sectors while drawing little in the way of political resistance. At the

bottom end, however, there may have been more of a substitution effect, with employers in sectors facing tight labour markets, such as construction, taking a more short-termist approach to training, given readily available low-wage labour from outside the UK. Such an approach, however, encourages a segmentalist labour market (Wright 2012) and is therefore potentially a source of socio-political tensions, as the Brexit debate clearly demonstrated.

4. The UK and the political economy of skills policies

A number of analysts have suggested that a low-wage immigration policy appears to be not just a solution to firms' resistance to invest in training, but also a symptom, more generally, of a breakdown in the relationship between a country's production system and its education and training regime (cf: Anderson and Ruhs 2012; Wickham and Bruff 2008). If so, it is logical to assume that this would be a major concern of policymakers, particularly on the centre-Left. The amount of political and bureaucratic energy devoted to the skills problem certainly indicates that the issue has been taken very seriously. By one estimate, since 1980 there have been 28 piece of legislation concerning skills (Norris and Adam 2017).

Thus, policy failures on skills seem to be related to employers' inability to move up the value chain, rather than a product of partisan politics. The gestation of these policies has been long and they are remarkably unpartisan, having been enthusiastically undertaken by governments comprising all three main political parties and with the firm support of the main producer groups, including the Confederation of British Industry and Trades Union Congress.

There is ample evidence that policymakers were keenly aware of the links between having a large, low wage sector of the economy and social exclusion. For New Labour in

particular, skills policy was fused with social policy with the aim of reducing in-work poverty and social exclusion (Lloyd and Mayhew 2010). The underlying assumption was that skills were the main driver of competitiveness and the panacea for most social problems, with the UK Treasury-sponsored Leitch review of training arguing that: *"Achieving world class skills is the key to achieving economic success and social justice in the new global economy"* (HM Treasury 2006: 9).

The resilience of demand for low skill jobs concerns policymakers as it is strongly associated with higher incidences of poverty and inequality (Hanushek and Woessman 2008). Skill-systems in LMEs such as the UK are characterized by educational stratification, which reflects and reinforces economic inequality. Altering this, either by shifting towards a more egalitarian continental-type skills system or, at the very least, significantly enlarging the proportion of the labour force engaged in higher skilled activities, was therefore an enormously attractive political proposition for the centre-left/centre-right governments since the mid-1990s.

Moreover, economists regularly emphasise the link between skills and economic growth (Crafts and O'Mahony 2001; Crafts 2007). As products and processes become more complex, the demand for workers with higher skills increases, meaning that a shortage of these workers can undermine prosperity. Increasing attainment should also lead to higher wages if these workers find jobs appropriate to their skill level, boosting tax receipts and driving consumption. The EU's 2020 strategy, likewise, integrates skills policies into the broader competitiveness and knowledge economy agenda, and other EU countries also view skills and industrial policies as a package (see, for example, Germany's 'Hi-Tech Strategy' and France's 'National Pact for Growth, Competitiveness and Employment').

Accordingly, UK policy statements since the late 1990s routinely embedded skills policies within an overall drive to improve competitiveness by combining multiple policy areas. The clear intention of policymakers was to shift the entire UK economy towards higher value-added activities rather than playing to existing strengths: *'The UK's distinctive capabilities are not raw materials, land or cheap labour…They must be our knowledge, skills and creativity'* (DTI 1998: 6). Scholars analyzing industrial interventionism in the modern era increasingly view skills as a hybrid industrial policy that integrates education and innovation systems into mainstream competitiveness policies, and incorporates broad socio-economic goals like the knowledge economy (Aiginger 2012; Smith 2000; Smits and Kuhlmann 2004; Warwick 2013).

On the other hand, and despite the rhetoric about 'upskilling' domestic workers, New Labour also resolved to tackle skills shortages through immigration, rather than industrial and skills policies on their own. The decision to allow unlimited immigration from A8 countries was prompted by a 2001 report from the Home Office noting that immigration had previously been concentrated in economic sectors characterized by chronic skills shortages which it had helped to solve. These included high as well as low-skilled sectors, such as medicine, IT and catering, with the report noting that: *'In all three cases there is a net economic benefit to the UK from filling the gaps through migration. The result of migration is to reduce inflationary pressures and increase the efficiency of firms'* (Glover et al 2001: 39). The report was used as evidence by Ministers to justify increasing the numbers of work permits and foregoing restrictions on immigration from A8 countries from 2004 (Bower 2016). A follow-up report from the Department for Work and Pensions on the impact of accession on the UK labour

market noted a preponderance of migrants from poorer EU countries filling vacancies in low-skill sectors (Gilpin et al 2006: 16).

The big increases in immigration following accession were justified on economic grounds. Lord Mandelson, the Trade and Industry Secretary, told a House of Commons select committee: *'I think it's important to note at the outset that the nationals coming here from the original eight new accession countries are helping to fill gaps in our labour market our British nationals are either not available to fill or are unwilling to fill."*[4] Mervyn King, the Governor of the Bank of England remarked in a speech that immigration dampened wage growth and helped to control inflation.[5]

In other words, while the thrust of industrial and skills policies during the 2000s was towards engineering a general upskilling of the UK's labour force, policymakers also appeared to have concluded that these would either be inadequate or would take too long to be effective. Immigration, especially of low-wage workers, was therefore the primary de facto policy for solving skills shortages and controlling inflation in the face of employers' reluctance to invest in training.

5. Accounting for the 'failure to train'

Rather than being a failure of policy design or lack of political will, the UK's longstanding 'failure to train' is rooted in the structure of its economy and has a number of causes. One, suggested by Finegold and Soskice (1988), is that it is stuck in a 'low skills equilibrium' where large parts of the economy have come to depend on cheap, low-skilled workers – particularly from 2004 accession countries – to produce low specification, less sophisticated good and services. This is suggestive of a problem of lack of demand for higher skills on the

part of employers. This may be due to firms' uncertainty that there is a market for more sophisticated, higher priced goods to justify the accompanying increase in wages. In his analysis of high-skills ecosystems in California, Finegold (1999) has shown that high skills are a necessary, but not a sufficient, condition for upgrading an economy to higher value-added production.

Busemeyer and Trampusch (2012) note that job training in the UK is provided through markets and in the general education system, with the State adopting a low-key role and the academic track prioritized over vocational routes into the workplace. Crouch et al (1999) have analysed the problem of low skills equilibria and suggest it highlights a central concern with skills policies in LMEs, in that public policy is geared towards the preferences of the individual firm which is not itself incentivized to push for or participate in skills strategies that will benefit the economy and society as a whole.

There is plenty of support for this analysis, although it is only part of the story. Certainly, policy throughout much of the 2000s appeared to operate under the simplistic notion that the low skills equilibrium was a market failure that could be resolved simply by boosting the supply of publicly-funded skills. Skills were seen as a sufficient, rather than merely necessary, ingredient in industrial upgrading (Keep and Mayhew 2010). Public policy was geared towards engendering a broad uplift in skill levels across the board and significantly greater resources were put towards education and training (see Fig.1). The New Labour government took the view that the number of low-skilled jobs was in decline and that it was the responsibility of the government and employers to invest to boost the numbers of higher skilled workers (Lloyd and Mayhew 2010).

The early part of the decade saw an enormous increase in the number of university graduates, based on the assumption that an economy increasingly geared towards flexible service and high technology industries would easily absorb a large increase in the number of workers equipped with a high level of general, transferable skills. This was very much in line with the EU's 2020 goals and the UK was one of the first countries to approach the 40% target for participation in tertiary education. Later in the decade, the same logic was applied to workers at the lower end of the educational spectrum, with major injections of funding into apprenticeships. This Conservative-only government elected in 2015 doubled down on this strategy with a pledge to create 3 million new apprenticeships by 2020 paid for by a levy on larger firms. However, the limitations of this policy has become apparent with OECD surveys of firms in a number of countries finding that the growth in demand for skills in the UK is the slowest of any advanced country bar the Netherlands and Ireland (OECD 2008).

On the other hand, the UK Commission on Employment and Skills, a government agency set up to coordinate skills policy, finds plenty of evidence of unmet appetite for training, with 4 in 10 firms wanting to undertake more training but facing barriers to doing so; consequently, only 58% of British firms are in a "skills equilibrium", either high or low (UKCES 2014: 31). The number of UK firms providing training to workers (80%) in 2010 was well above the EU average of 66% and higher than Finland's 74%. Yet this measure takes no account of the *quality* of training, and is hard to square with a picture of UK firms being too timid to invest in training because of widespread fears of over-skilling.

The abortive drive to 'upskill'

Governments from the mid-1990s onwards focused on improving skills across the board in close consultation with industry as part of a coordinated drive to move the UK economy into higher value-added sectors. The UK's limited success in addressing skills shortages as part of this strategy, however, serve as a possible warning to the EU over the limitations of Agenda 2020 and the tendency of hi-tech programs to reinforce labour market dualisation. Certainly, the signs were encouraging when New Labour took power in 1997. The new government made education and skills a priority and proposed a new 'coordinating' role for government in concert with firms. Early mission statements issued by Labour acknowledged that strategies based on low labour costs were futile and pledged to upgrade skills across the board.

Labour established 21 'Sector Skills Councils' to liaise with industry over training in specific industries and placed these under the auspices of a UK Commission on Employment and Skills (UKCES). The intention was to overcome centralization and move towards a de-centralised skills system. Attempts to produce such a system, however, foundered due to over-centralised policy structures and the inability of employers to organize collectively to compensate for the failures of the state. One result has been severe mismatches of skills. A widely reported analysis found that 94,000 hairdressing trainees were produced in 2010/11 for an industry with only 18,000 vacancies. By contrast, only 40,000 trained in building services engineering when there was double the number of vacancies in the sector (Gardiner and Wilson 2012).

The principal review of skills strategy for the Blair government (the Leitch Review) published in 2006 recommended a move from a supply-led to a demand-led skills regime, but proposed no new structures on which to build this and confined intervention to correcting

market failures rather than providing any incentives for employers to upgrade their skills needs. This was criticized by the OECD, which lambasted the UK's policymaking structure for being more complex and unstable than in most OECD countries, inhibiting employer engagement. The OECD noted that few countries have been able to achieve strong employer engagement without an equally strong apprenticeship system, something which was lacking at the time (OECD 2009: 18-19). Labour succeeded in increasing the number of apprentice places, but failed to increase the number of firms employing apprentices, or significantly expanding the number of internationally-competitive Level 3 apprenticeships (Steedman 2013 - see Fig 2).

Arguably, therefore, training policy over the last quarter century has tried to address both supply *and* demand factors. But it has been hamstrung by, among other things, over-centralisation and an inability to harness employers in a demand-led training system. The result leaves the UK with a skills system that is virtually unique in Europe. The government retains central control to set and micro-manage the curriculum and broad policy but, compared to most other countries, the central ministry has little direct responsibility for setting curricula, designing qualifications, allocating funds, or inspecting provision. This has led, ironically, to an overemphasis on written specification of training quality which is impossible to enforce centrally (Keep and Mayhew 2006).

In summary then, enormous energy has been expended on devising strategies to resolve deficiencies in training at all levels, but these have not narrowed gaps in attainment between the UK and other countries in low and intermediate skills levels. The failure of policymakers to devise effective structures to address deficiencies in the demand for and supply of skills across the board is arguably *rooted in the structure of the UK economy* and

particularly its competitive and voluntarist tradition of inter-firm and industrial relations (Ashton and Green 1996). The central management of skills provision may, in turn, undermine employers' confidence that improvements would be maintained, and negate the possibility that the shift to higher value-added activities in UK industry might produce a general increase in demand for skills in affiliated sectors. As a result, skills policy in the UK, while arguably improving the supply of skills, has not by itself encouraged the majority of *firms to move upmarket*.

Does this have negative implications for the EU's skills strategy? Not necessarily. The 2020 skills agenda places considerable emphasis on fostering 'partnership' between employers, firms and government, something which the UK's voluntarist system inhibits employers from doing. Firms in countries with a tradition of joint organization of training and strong social partner involvement (such as Germany) or where the State has made a consistent effort to underwrite high quality training at all levels (the Nordic countries) may be in a better position to overcome these problems. One criticism of the 2020 skills agenda is that it is (possibly deliberately) quite vague on which skills are needed for the knowledge economy and even on what constitutes 'high skills' (Theodoropoulou 2010). This arguably favours national skills systems where training decisions are in the hands of employers rather than central governments, particularly the CMEs of north-west continental Europe.

A further problem with the UK's growth model is that the boundaries of industrial policy may be set too narrowly. Although lip service is paid to shifting the entire UK economy up the value chain, the actual focus of technology policy is on a group of sectors that may contribute heavily to growth in exports and Gross Value Added but, with a few exceptions, will not generate much direct employment (Bentham et al 2013; Keep and

Mayhew 2006; CIPD 2014).[6] Accordingly, some analysts identify a pronounced Science bias to government policy, with intervention geared towards extracting commercialize-able products from scientific research rather than fostering innovation more broadly at the firm level. Prioritising innovation tied to the UK's formidable scientific research base is, of course, an entirely rational basis for industrial policy and a series of government reviews have highlighted the importance, and the means, of developing close links between universities and companies (Sainsbury 2007). The WEF ranks the UK among the top countries in the world in terms of collaboration between universities and industry (itself an objective promoted in the EU's 2020 strategy), which is supported by a Higher Education Innovation Fund.

However, an analysis of industrial strategy for the government carried out by a former industry minister warned that most of the impact on skills demand and employment growth arising from present policy will likely be concentrated at the top of the value chain in markets where the UK is already successful (Heseltine 2012: 125-6). It is unclear how this will improve the performance of other sectors, particularly those connected with labour market segments reliant on workers with intermediate and lower skills, where a larger proportion of the British labor force is employed. Heseltine's analysis reinforced an earlier observation by Keep et al (2006) that UK policy has focused on attending to the science base and developing university-firm institutions for technology transfer while ignoring firm-level issues to do with workplace organization, job design and employment relations.

This stands in contrast to the successful innovation policies followed by Germany and the Nordic countries, which have been able to create broad-based innovation strategies founded upon collaborative workplace arrangements that encourage innovation within the firm (Ramstad 2009). In the UK, however, weak trade unions and a labour management

system prioritising management autonomy (Wood 2001) rule out such strategies and innovation policy has therefore increasingly defaulted to the elite-focused, pure science model, which is further reinforced by the EU's 2020 strategy, and its FP7 research funding streams. On its own, this is not likely to generate a significant, economy-wide, boost to the demand for high skills and may in fact reinforce labour market dualization.

6. Conclusion

This article has discussed the link between the UK's consumption-led growth model and how EU integration has fueled its need for low-wage immigration, enabling price-sensitive sections of industry to remain competitive. As Baccaro and Pontusson (2016) have noted, such growth models tend to be unsustainable in the long-run. Indeed, the 15% devaluation of sterling in the wake of the Brexit vote looks set to deliver a painful reduction in living standards that will have a particularly severe impact on (British) low-wage earners. In response to the political discontent with mass (low skilled) EU immigration, Theresa May's government is determined to end large-scale immigration from the EU during Brexit negotiations. This will again confront policymakers and firms reliant on low wage workers with dilemmas over how to cope with skills shortages. However, as this article has argued, demand for such workers is both the cause and consequence of the inability of cost-sensitive firms to upgrade.

This suggests that the low-wage low skills trap identified in the late 1980s by Finegold and Soskice has not disappeared. Successive UK governments have failed to devise skills policies to persuade low-cost industries to upgrade. Instead, low-wage immigration from EU

countries compensated for Britain's skills gap and suppressed inflation. Hi-tech industrial policies in line with Agenda 2020 prescriptions that have been adopted are helping more innovative high technology sectors of the economy, but these are unlikely to generate a large number of jobs. As with the experience of Ireland, Europe's other LME, this reinforces the suspicion that at least part of the logic of European integration has been to encourage countries to prioritise sections of their economy (the UK's technology and financial services sectors, Ireland's software industry) whose undeniable success does not engender a broader uplift in standards of living. By taking Agenda 2020's "high road" on skills, while allowing free movement of people to flood the "low road" with cheap labour, successive British governments' al la carte approach to European integration exacerbated political tensions in an already polarised labour market, fueling public resentment towards the EU that ultimately underpinned Brexit.

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List of Figures:

Fig. 1

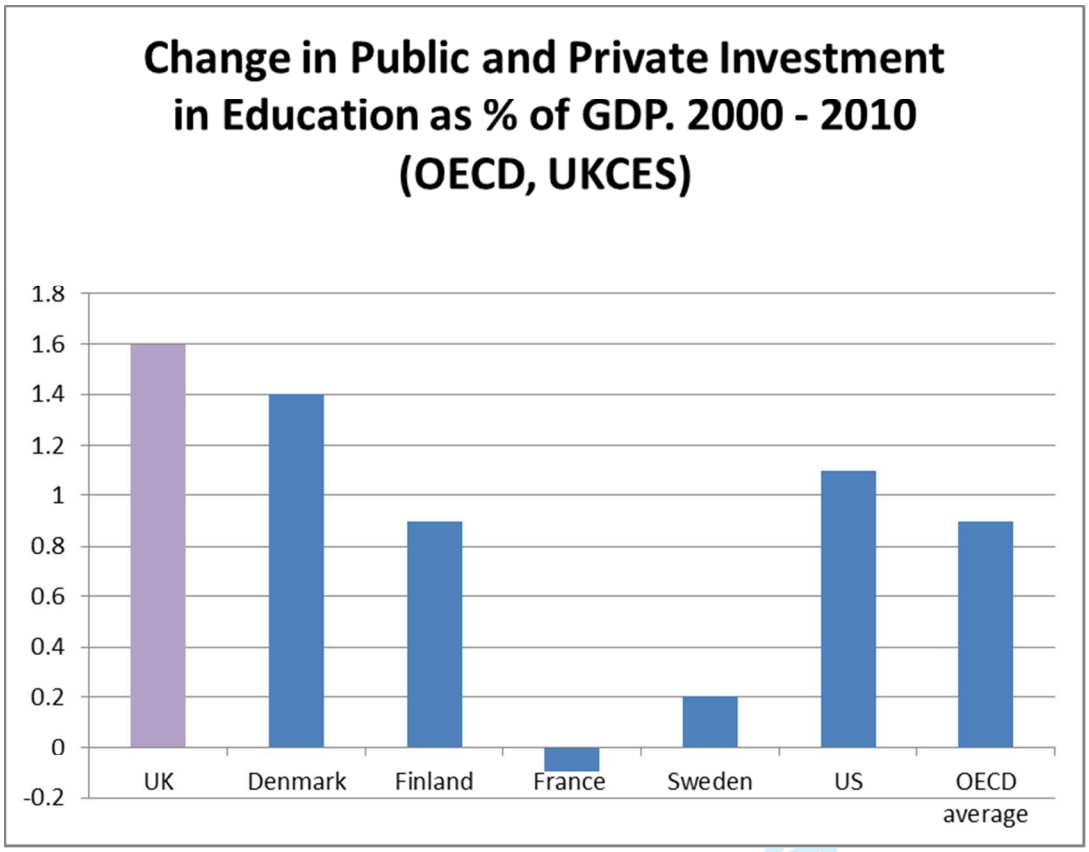
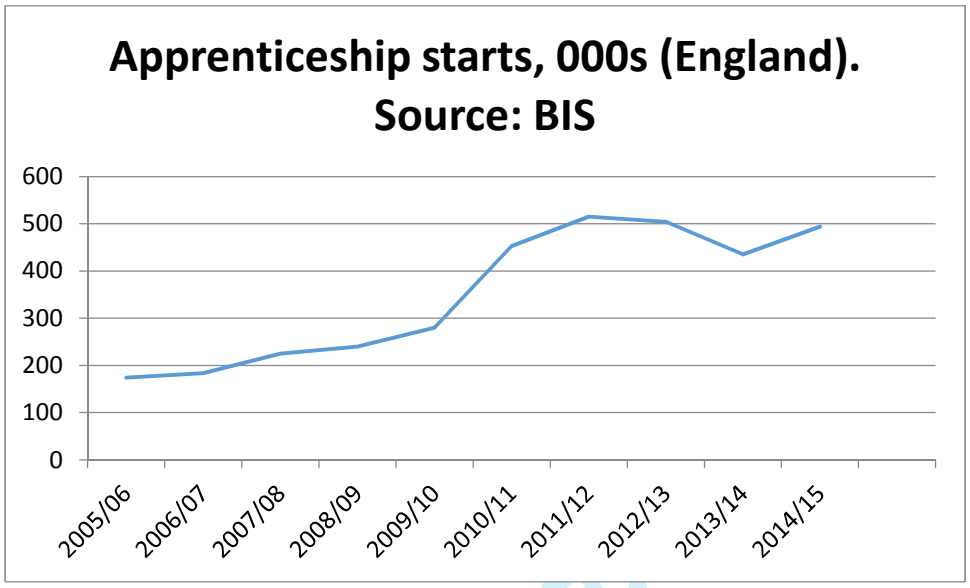


Fig. 2.



[1] The definitons of skill levels used throughout this paper are based on classifications used by the UK Commission on Employment and Skills, which delineates skills by level of educational attainment and/or job role, with 'high' skills being professional, Scientific or managerial jobs requiring a degree; 'medium/intermediate' skills being technical and clerical jobs requiring post-16 education; and 'low' skills being manual, care or hospitality roles requiring only basic schooling.
[2] Theresa May, Peston on Sunday, ITV 3 July 2016.
[3] New coordinating institutions include Technology Strategy Boards, which are explicitly modelled on Germany's Fraunhofer Institutes, and a Business Bank and Green Investment Bank along the lines of Germany's KfW.
[4] 'Mandelson praises eastern Europe workers filling employment vacuum.' Guardian, 9 March 2009.
[5] Mervyn King, speech given at Salts Mill, Bradford, Yorkshire, 13 June 2006.
[6] The main exception to this is the UK automotive industry, which has recovered to become a net exporter in 2012 for the first time since the 1970s and has been a beneficiary of extensive intervention in supply chains.