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Celtic Phoenix or Leprechaun Economics? The Politics of an FDI-led Growth Model in Europe

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ABSTRACT

In this paper, we argue that Ireland's post-crisis economic recovery in Europe was driven by foreign direct investment (FDI) from Silicon Valley, and while this growth model was made possible by Ireland's low-corporate tax rates, it was also a result of these firms using Ireland to directly access the European labour market. We evidence this contention via sectoral and geographic analyses while simultaneously showing that Irish fiscal policies have not redistributed gains from the recovery to the broader population. As a result, the economic recovery has been most actively felt by those in the FDI sectors, including workers from the EU and beyond. Building on theories from the study of comparative capitalism, we suggest that this experience indicates that Ireland's FDI-led growth model has created clear winners and losers, with significant distributional implications. The FDI growth regime been made possible by inward migration and European integration, but given the unequal distribution of the economic benefits that this generates, it is unlikely to be politically, or electorally, sustainable.

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Introduction

While Ireland was among the worst-hit European economies during the 2008 financial crisis, landing it in the infamous 'PIIGS' grouping (Brazys and Hardiman 2015), its recovery from the 'ashes' has been equally dramatic, leading to a popular rebranding of this former Celtic 'Tiger' as the Celtic 'Phoenix'.¹ However, some of the headline figures behind Ireland's recovery, such as 26.3 per cent GDP growth rate in 2015, are skewed by the vagaries of international corporate tax avoidance strategies (Regan 2016), leading some to describe the Irish political economy as a case of 'Leprechaun Economics' (Krugman 2016). This perception has increased further in the aftermath of the Commission's ruling that Ireland granted the global tech giant, Apple, favourable tax treatment, which broke EU competition law. Yet despite this chicanery, there is significant evidence of a real underlying recovery. Notably, Brazys and Regan (2017) show that the Irish economy was beneficiary of a large uptick in foreign direct investment (FDI) in the computer and information services sector, or what is now colloquially referred to as 'Europe's tech hub'² or Dublin's 'Silicon Docks'.

The prevailing consensus surrounding this FDI-led recovery is that it has been fuelled by a low-corporate tax rate. Brazys and Regan (2017) problematise this assumption by demonstrating that the Irish FDI *growth model* is an outcome of a decades long, forward looking enterprise strategy, coordinated by *business-state elites* in the public sector. In this paper, we develop this argument further, by linking it into broader political dynamics of the EU. We argue that while low corporate taxes were a necessary condition to attract high-tech FDI from Silicon Valley, it is inward migration of skilled labour

from the rest of Europe that has led to the creation of a high-tech *business cluster*. Put simply: it was the free movement of peoples, and the inflow of a multi-lingual workforce from the rest of the EU, which created Dublin's 'Silicon Docks'. Hence, we argue that inward migration, and the cluster effect of skilled labour, associated with the process of European integration, matters much more than low corporate taxes in creating Ireland's FDI export growth regime.

Empirically, we look at the *distributional* effects of Ireland's high-tech export growth model to analyse if it is compatible with further levels of economic integration in the EU. We suggest that while Ireland has been able to carve out a unique growth model under both European and global market constraints, this growth model faces significant pressures both internally and externally. Externally, the growth model is not compatible with the drive towards corporate tax harmonization in the EU, given that corporate tax competition is a core part of the strategic arsenal that state-business elites use to sell 'Ireland Inc.'. However, our central claim is that Ireland's high-tech FDI growth model may come unstuck from within, primarily because it is built on a fragile *electoral coalition*. Ireland's Internet-tech sector is built on the back of inward migration of high-skilled labour from other EU countries. These business-finance professionals do not have a vote, and while Irish workers benefit indirectly from the expansion of domestic demand, these jobs are primarily located in the low-skill, low-wage service sector, leading to an increasingly segmented labour force, with the top quintile earning high and increasing wages in the FDI sectors, and a mass of low-wage to medium-wage workers who have seen limited improvement in their economic situation.

In order to evidence our assertion that Ireland's FDI-led growth model is made possible by the free movement of peoples in the EU, and that this creates winners and losers, we proceed in three parts. We first move beyond Brazys and Regan (2017) by developing a theoretical framework for the political economy of an FDI-led growth model within Europe, looking at the politics of 'labour supply' and distributional consequences both within and beyond the state. We next evaluate our claim by examining the sectoral and geographic make-up of FDI driving the economic recovery in Ireland, showing that while the FDI-led recovery in computer services is real, it has bypassed significant portions of the Irish *demos*. We then conclude with thoughts on the sustainability of this growth model in the face of domestic, EU-level and global political economy pressures.

The political economy of an FDI-led growth model in Europe

Anne Wren's edited volume (2013), Thelen (2014), Beramendi *et al.* (2015) and recent work by Baccaro and Pontusson (2016), describes how internationally traded services are at the leading edge of high-value global production, and built around distinct producer group and electoral coalitions. While the traditional, cost-based, price sensitive export-led growth regime that coloured Europe's austerity policies may be suitable for (relatively) labour intensive, manufactured goods, it is far less relevant for export sectors of high-value services, such as ICT and finance, due to the nature of production and consumption of those services. Whereas low and medium tech manufactured goods in Germany, Eastern and Central Europe may require comparatively low levels of skilled labour and/or vocationally specific trained labour, high-valued services necessitate a general-skilled and university trained work force, where a premium is placed on flexibility, interpersonal and human relational capabilities (Culpepper 2003, Ansell 2008, Busemeyer and Trampusch 2012).

This observation is particularly important in the context of European integration (Fabbrini 2013, Schimmelfennig 2015). The political and institutional conditions that are favourable to the strategies of those firms seeking to *industrialize the services* sector, through the digital economy (such as Google), are fundamentally different to the constraints facing firms in manufacturing-led growth models, such as Germany. It is now broadly accepted that upon joining the Euro currency, Germany instituted a system-wide low inflation regime that gave them significant comparative advantage over their Eurozone trading partners (Johnston and Regan 2016). Central to this was a

coordinated internal devaluation, led by unions and employers in the manufacturing sector, and which was specifically aimed at reducing unit labour costs, whilst retaining core employment (Hassel 2014). This beggar-thy-neighbour strategy of wage repression led to rising inequalities and contributed to the current account surplus of Germany, feeding imbalances within the Eurozone, and broadly informs the EU's labour market response to crisis today (see Hall 2012, Streeck 2014, Storm 2016, Regan 2015, Matthijs and Blyth 2015, Nölke 2015, Stockhammer 2016, Schmidt 2016 for a critique).

The problem with this analysis is that firms in internationally traded services do not compete on the basis of labour costs and wage restraint. On the contrary, they compete through offering their workers lucrative sales and stock options, social insurance schemes and other favourable working conditions that have traditionally been associated with unionised companies.³ In Ireland and Britain, ICT, finance and legal services are the highest paid sectors of the economy. In terms of the supply side, beyond a pool of a university educated, generalist and a flexible labour force, high-tech service sectors benefit from the *clustering effect* of skilled labour, whether this is computational or multi-lingual. When new companies locate/invest in a city (such as London, Amsterdam or Dublin) with a sectoral cluster, they can effectively recruit their workers directly from this labour market. These are the 'supply side' conditions of high-tech service growth models typically associated with relatively inegalitarian 'neoliberal economies' (Ban 2016, Bohle and Greskovits 2012). Crucially, these economic geographic and 'supply side' considerations are qualitatively distinct from traditional manufacturing, in that their competitiveness is fundamentally dependent upon the *free movement* of peoples, particularly within the EU.

Beyond a flexible and skilled labour force, tax structures are also disproportionately important for high-value service exporting firms when contrasted with labour-intensive manufacturing. As noted in Doh *et al.* (2009: 930), the nature of service exports is ambiguous as the production, and indeed the delivery, of these exports need not occur in the same geographic space (Doh *et al.* 2009). They are interlinked via complex global supply chains. As described by Lipsey (2010: 99), this ambiguity has allowed firms to vastly overstate their value-added in low-tax jurisdictions and that this 'problem ... is probably worse for trade in services than trade in goods'. Thus, the tax term in the profit functions becomes relatively more important for firms that trade in high-value services both absolutely and in comparison to other determinants, including unit labour costs. But corporate tax is not the only determinant driving investment in FDI-led growth regimes. As noted above, the motivation comes from the *cluster effects*, associated with thick labour markets, and which underlines that an FDI growth model in high-tech services is not simply a synonym for a tax haven (Moretti 2012).

The distributional implications

What Baccaro and Pontusson (2016) and Brazys and Regan (2017), in addition to large parts of the comparative political economy literature, do not fully consider, however, are the political and *electoral* consequences of different growth models, especially within the context of an integrated European and global economy. As we evidence in our empirical analysis, Ireland's high-tech FDI growth model has distinct distributional implications. The traditional variant of a state-led industrial policy sought to build on the notion of specialisation and comparative advantage (Hall 1986, Hancké *et al.* 2007). However, rather than pursuing sector or industry-level specialisation, a state-led development model aimed at FDI is more concerned with activity specialisation. In this sense, industrial policy is better conceived as 'enterprise policy', given that it is more about horizontal specialisation than vertical specialisation. In particular, 'enterprise policy' seeks to specialise in high-value activities within the global supply chain of multinational corporations. This implies developing domestic institutions that are adaptable to the changing face of international value-added.

A key component of this flexibility is a fluid and open labour market. As the nature of service based employment changes, so too do labour needs (see Thelen 2014 for a discussion on Scandinavia). As Brazys and Regan (2017) evidence in the Irish case, the 'first wave' of Ireland's industrial policy focused

on a need for skilled hardware engineers, while the 'second wave' switched the focus to software engineers and the 'third wave' moved to labour with high-value service skills including language and interpersonal skills. This leads to two important observations on the politics of labour supply in an FDI-services oriented growth regime. First, skilled ICT labour is highly specialized and, thus, relatively *immobile* across sectors. Accordingly, a hardware engineer may not be able to transition easily to a software engineer, much less to a multi-lingual IT support agent. Second, the labour needs of a service firm within complex supply chains may change more rapidly than the ability of training workers with those skills. Accordingly, 'supply side policies' in the labour market will either need to be sufficiently *deep* or sufficiently *open*. In a small open economy, access to the 500 million EU labour market provides the necessary depth to attract FDI. Hence, it is perhaps no surprise that Ireland and Switzerland are the two countries in Europe (one a member of the EU, the other a member of the EEA) with the highest percentage of 'non-national workers' in their labour force (Afonso 2012).

By pursuing FDI in high-value-added service production, a state-led enterprise policy necessarily advantages high-skilled labour at the detriment of its unskilled counterpart. The political economy of classical specialisation assumes that the gains from the comparative advantaged sector can be used to compensate those in disadvantaged sectors through fiscal redistribution (Dancygier and Walter 2015). However, in practice, the distributional bargain has not always been perceived as just or adequate. Periods of political unrest have emerged when disadvantaged sectors feel as though the gains from trade and specialisation have not been sufficiently disbursed. For a state pursuing a high-tech FDI growth model, the underlying logic is no different, but the situation is complicated when the latter is dependent upon high levels of inward migration.

If and when the gains from high-tech and high-wage employment accrue to small segment of the population, be they nationals or migrants, and not to the broad-based workforce, the likelihood of political discontent increases. In such an instance, the state risks alienating its domestic political legitimacy by promoting an economic growth model that accrues gains more to small segment of high-skilled workers than to the bulk of the electorate. Brexit is clear cut case of a political backlash against this type of growth regime (Goodwin and Heath 2016). Given the structural similarities of their economies, this should perhaps send a warning signal to Irish policymakers.

In the section below, we consider the distributional consequences of Ireland's FDI growth model, which is heavily reliant on free movement and openness to the EU labour market, and its economic recovery since 2008. We analyse the distributional politics of Ireland's state-led FDI-oriented enterprise policy along several dimensions: sectoral, wages, geographic and national origin. Our hypothesis is that Ireland's FDI growth model has resulted in distributional gains to high-skilled workers (from Ireland and the wider EU) in high-value, traded service sectors that are geographically clustered in Dublin, but not elsewhere. We evaluate these claims via descriptive statistics and qualitative evidence. We then relate these observations back to the study of comparative political economy and European integration.

The Irish FDI growth model: who wins?

We first examine the Irish recovery in the context of a sectoral analysis. Brazys and Regan (2017) demonstrate that the Irish recovery vis-à-vis the rest of the Euro periphery is driven by internationally traded service exports, using a detailed case study of FDI into computer and information services, and the role of the IDA and business-state elites in shaping the FDI growth model. In this paper, we consider investment, wage, export and employment data across *all Irish sectors* using descriptive statistics and qualitative evidence.

Sectoral investment

To analyse FDI sectoral investment, we use the annual reports from Ireland's Industrial Development Agency (IDA), which includes a detailed list of companies investing in Ireland in that year, the country

origin of the investment and the sector. We have this data from 2003 to 2014 and present a figure of the number of IDA FDI projects by sector in Figure 1. The data points show the number of FDI projects, by sector and year, while the lines show the growth trends via locally weighted scatterplot smoothing (LOWESS), with shaded areas representing the corresponding 95 per cent confidence intervals.

Figure 1 shows that FDI projects into Ireland since 2003 have been dominated by three sectors: 'information and communication' (ICT)(NACE code 'J'), 'professional, scientific and technical activities' (PST)(NACE code 'M') and 'manufacturing' (NACE code 'C'). These sectors account for nearly 88 per cent of IDA sponsored FDI projects since 2003.⁴ A fourth major sector, 'financial and insurance' (NACE code 'K') brings the total to almost 98 per cent of all FDI activity. Breaking down the manufacturing sector data further, we see that this sector has been dominated by investment in two types of manufacturing activities: pharmaceutical and medical equipment and computers and electrical equipment. Hence, 85 per cent of IDA sponsored FDI projects into manufacturing are dominated by relatively high-tech products.

Combined, these numbers show a clear distribution of FDI projects going to high-tech, high-value sectors. High-tech manufacturing and high-value add services account for nearly 94 per cent of all IDA FDI project announcements, which largely corroborates our claim that Ireland's state-led economic development model is focused on attracting investment in high-wage, high-skilled occupations.

When considering the sectoral allocation of FDI projects since the 2008 economic crisis the picture becomes even clearer. ICT is the standout sector. The absolute numbers of projects, as shown in Figure 1, suggests a marked decrease in the *share* of manufacturing FDI, as those numbers remained relatively flat while the number of FDI projects in ICT markedly increased. Indeed, manufacturing's share of FDI projects decreased, from 37.6 per cent for the 2003–2008 period to 20.1 per cent for the 2009–2014 period. This decrease was more than compensated by the increased share of ICT projects, which rose from 16.7 per cent in 2003–2008 to 36.2 per cent in 2009–2014. This sector includes both computer programming and online service activities, and given the complexity of how to code these services, they are probably under-represented in the numbers above. The PST sector includes 'activities of head offices'. Of the 74 FDI projects we code under this heading, from 2009 to 2014, 26 are coded as either computer programming or online services. This significant uptick in high-value traded services post-2008 was a direct outcome of the IDA shifting their political strategy to focus on the rapidly expanding digital economy. It is these 'born on the internet firms' emerging out of Silicon Valley that is central to explaining Ireland's economic recovery in the aftermath of the financial crisis.

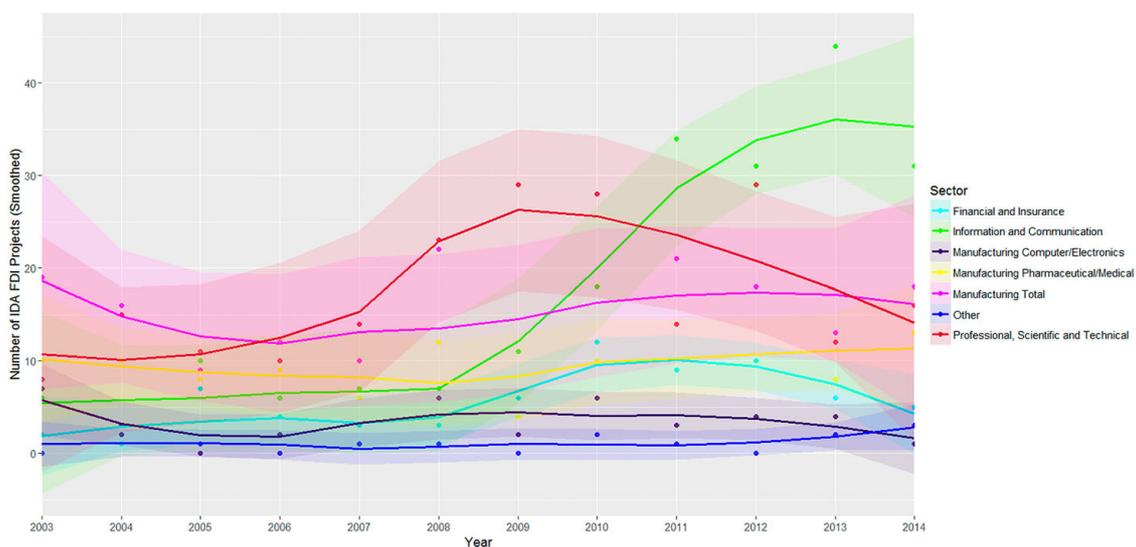


Figure 1. IDA FDI projects by sector. Source: IDA annual reports and authors' calculations.

Sectoral wages

We next consider if the investment trends illustrated above are also reflected in distributional consequence of wages between the sectors. Using quarterly data from the Irish Central Statistics Office (CSO), we consider wages across the high-value NACE sectors discussed above, and compare them to all other sectors. The CSO recalculated its statistics starting in 2008, which is a useful starting point for considering wage dynamics in the context of the post-crisis economic recovery.

Figure 2 shows a clear divergence between wages in the FDI sectors and all other sectors of the Irish economy. The non-FDI sectors – primarily those that make up large swathes of the domestic economy – experienced stagnant wages over the period. The first quarter 2016 weekly wage of €617 was only 2.5 per cent higher than its recession low of €603 in the third quarter of 2014, and down over 4 per cent from its pre-recession peak of €645 in the fourth quarter of 2008. Conversely, all of the FDI sectors recorded double-digit percentage growth in the same period, with the exception of wages in the ‘financial and insurance activities’. Wages in the FDI sectors had equalled or exceeded their pre-recession peak by the first quarter of 2016. In particular, weekly wages in the ICT sector increased by 21 per cent to €1104 in the first quarter of 2016, from the recession low of €894 in the third quarter of 2009, and increased by nearly 12 per cent over the pre-recession peak of €968 in the first quarter of 2008. With wage growth in the ICT sector nearly 8 times faster, and a first quarter 2016 wage level almost 80 per cent higher than the rest of the economy, the distributional consequences are clear. Those working in Ireland’s expanding high-wage FDI-tech sectors are the main beneficiaries of the economic recovery.

Sectoral employment

Closely related to sectoral differences in wages, we also consider sectoral differences in employment. As above, we consider the dynamics of employment in the FDI sectors compared to all other sectors of the Irish labour market.

Figure 3 shows pre-recession employment levels and employment levels from the first quarter of 2016 (Q1 2016) in both the FDI and non-FDI sectors. While all sectors saw employment levels drop by at least 15 per cent during the crisis, there was significant divergence in the employment recoveries. In particular, employment numbers in high-tech services in ICT (J) and PST (M) performed markedly better than all other sectors. Both were up 20 per cent in the first quarter of 2016 from their recession minimum and both were less than 4 per cent off their pre-recession peak. This is compared to a 7.5

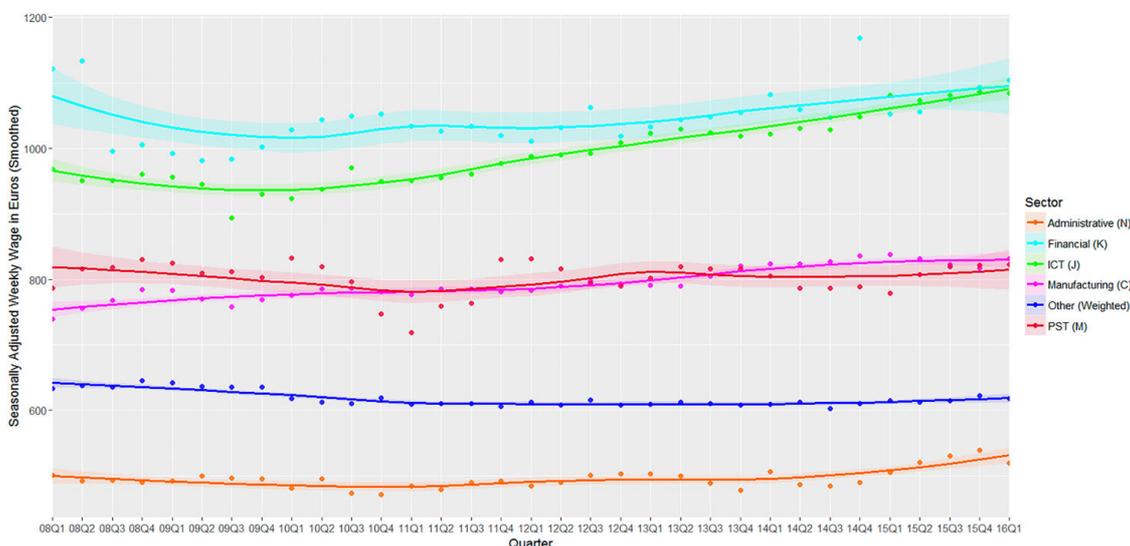


Figure 2. Weekly wages by sector (quarterly). Source: CSO, authors’ calculations.

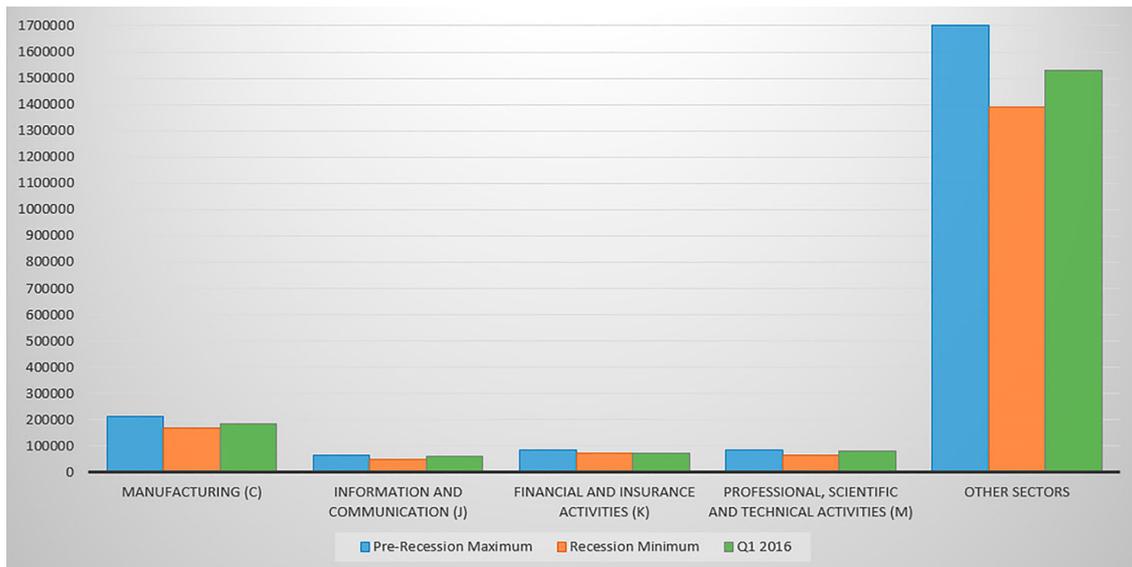


Figure 3. Employment by sector. Source: CSO.

per cent recovery in job numbers in the 'other' sectors by the first quarter of 2016, down 8.5 per cent from the pre-recession peak in the second quarter of 2008.⁵

Thus, while no sector had recovered to its pre-recession employment levels by the first quarter of 2016, the recovery was significantly stronger in the high-tech FDI sectors, especially in ICT. However, **Figure 3** also starkly displays that *overall* employment in these sectors pales in comparison to the non-FDI sector. In the first quarter of 2016, some 400,000 workers were employed in FDI sectors, of which only 62,400 were employed in ICT. This compares to over 1.5 million working in the 'other' sectors of the economy, which is predominately made up of the 'domestic non-traded' sectors. Thus, the wage gains in **Figure 2** that accrued so starkly to the ICT sector were felt by a mere *four per cent* of the workforce. We view all of the data as qualified support for our contention that there are clear winners and losers to the Irish FDI growth model, which is increasingly based around inward investment from Silicon Valley. The FDI sectors saw the best employment and wage dynamics throughout the crisis and recovery.

Geographic concentration

The sectoral analysis above demonstrates significant support for the contention that Ireland's FDI sectors disproportionately felt the recovery since 2008. In this section, we turn to the politics of geographic clustering. As discussed above, and in greater detail in Brazys and Regan (2017), the economic geography of FDI in internationally traded services, such as finance and ICT, will promote a clustering effect. In turn, this is largely driven by the human capital externalities of thick labour markets (Moretti 2012). As such, in the analysis below, we evaluate the extent to which certain economic activities have been spatially related. We look first at the geographic distribution of FDI in all export sectors before focusing in on specific concentrations of enterprise activity.

Table 1 above shows FDI investment is concentrated in Ireland's three most populous counties: Dublin, Cork and Galway. Notably, these counties account for nearly half of all FDI in high-tech manufacturing, over three quarters of investment in PST, and almost 85 per cent of FDI projects in ICT. While these are significant values in themselves, they are also disproportionate, to varying degrees, given the share of the population in these counties. The share of manufacturing, 49.4 per cent, is roughly proportionate to the population share of 44.5 per cent in these cities. This is not the case in PST and ICT investment.

Table 1. FDI projects and population by location (per cent of total).

	Manufacturing (pharma/electronics)	ICT	PST	Population
Dublin	17.8	64.9	46.9	27.7
Cork	21.7	13.9	17.2	11.3
Galway	9.9	5.8	13.4	5.5
Combined	49.4	84.6	77.5	44.5

Source: IDA annual reports and authors' calculations.

The most prominent example of geographic clustering is the concentration of ICT projects in Dublin, where, in particular, we see clustering in 'information and computer services' and 'computer programming and consultancy' activities. Of the 143 FDI projects we code in the ICT category,⁶ 95, or 66 per cent, of them are located in Dublin. This includes global internet giants such as Google, Facebook, LinkedIn, Salesforce, Twitter and Amazon in Dublin's 'Silicon Docks'. But it also includes firms located in larger industrial parks in the county suburbs, such as Microsoft. Likewise, 57 or 60 per cent, of the 'computer programming and consultancy' FDI projects were located in Dublin. As shown in Figure 4, this clustering effect really took off from 2007, and in terms of the Internet-sector, it was largely driven by the human capital externalities associated with the expansion of Google. As detailed by Regan (2016), Google opened their European HQ in Dublin in 2004, and employed less than 50 people. By 2016, they employed over 5500. The 80 additional 'born on the internet' firms from Silicon Valley that directly followed Google directly feed off workers in this labour market. Further, as we show below, these are mainly 'foreign workers' from the wider EU.

What is important to note here is that the presence of a high-tech *business cluster* creates a labour pool which attracts more FDI, creating what Irish business-political elites call an 'innovative eco-system'. Sales and advertising make up the majority of activities in the Silicon Valley firms located in Dublin, that is, the money/revenue making part of tech firms, and where a premium is placed on recruiting multi-lingual workers with direct knowledge and understanding of their country specific (home) EMEA markets (Europe, Middle East and Africa). This clustering effect in Dublin has important distributional consequences. While labour is potentially mobile throughout the country, geographic concentration of economic activity will likely lead to greater investment in public infrastructure and services in Dublin, leaving other areas comparatively underserved. Likewise, the clustering of high-wage workers in Dublin puts huge pressures on local non-tradable prices, in particular housing and rental prices. These price increases can have significant welfare implications for those that are *not* engaged in the high-wage FDI sectors, given that

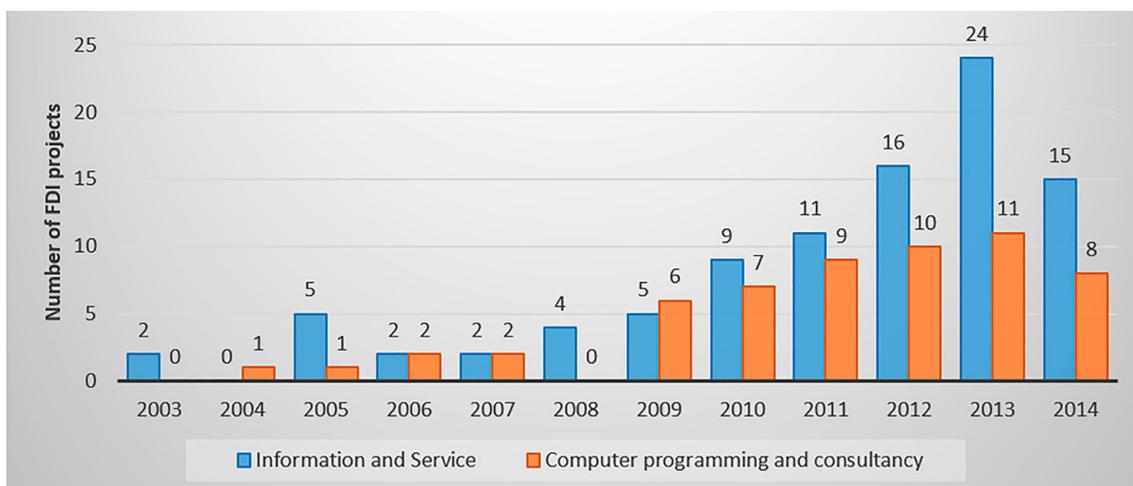


Figure 4. Information and communication FDI in Dublin. Source: IDA annual reports and authors' calculations.

all workers in Dublin have to pay the cost of inflated non-tradeable goods such as rental accommodation.

Labour origin analysis

Finally, and most pertinent to the question of this special issue, we consider the share of *EU workers* in Ireland's high-tech growth sectors. As noted in the theoretical section, the expansion of internationally traded services requires a sufficiently deep or a sufficiently open labour market. As a country of just of 4.5 million people, Ireland is a classic small open economy, with a correspondingly small labour market (much like Switzerland). However, as a member of the EU, Ireland is part of a labour market with a population of 500 million people, all of whom have guaranteed rights of free movement, and indeed was one of the first countries that allowed immediate migration from the new members after the EU expansion in 2004.⁷ Thus, Ireland achieves its labour market depth via its labour market openness as a member of an integrated European Economic Area. This has important implications for the political economy of capitalist development in Ireland. Accordingly, in this section, we document the extent to which those working in the FDI sectors are non-Irish nationals.

Currently, the CSO only has data available for foreign national employment from 2008 to 2014. In those years, an average of roughly 335,000 foreign nationals were in employment in Ireland, accounting for some 17 per cent of the total workforce. Our contention is that foreign employment is disproportionately represented in both the high-wage and the low-wage sectors. The shares of EU and foreign workers in the high-wage FDI sectors are presented in Figure 5, with the share of EU workers represented by the y-axis and the total share of foreign workers represented by the size of the data points.

Interestingly, with respect to foreign employment, ICT stands out as clearly anomalous. While finance and PST are all below the share of foreign workers (as shown by the smaller data-point circles) when compared to other sectors. By 2014, the ICT sector had a share of total foreign workers (34.7 per cent, shown by the larger data-point circle) that was almost double the overall proportion (17.6 per cent shown with the smaller data-point circle). This is likely to have increased during 2015–2016, as inward investment in this sector expanded. Moreover, there was a 45 per cent growth in the share of foreign workers in the ICT sector, expanding from 24 per cent in 2009 (in the middle of the recession) to 34.7 per cent in 2014. In whole numbers, there were 7413 more foreign workers in ICT in 2014 than in 2009, of which 4842 were from the EU-28, while total employment in the sector grew by 4250 over this period. This suggests, remarkably, that employment of *Irish* nationals in the ICT sector appears to have decreased by 3163 jobs, or 7.6 per cent, during the period of the post-crisis

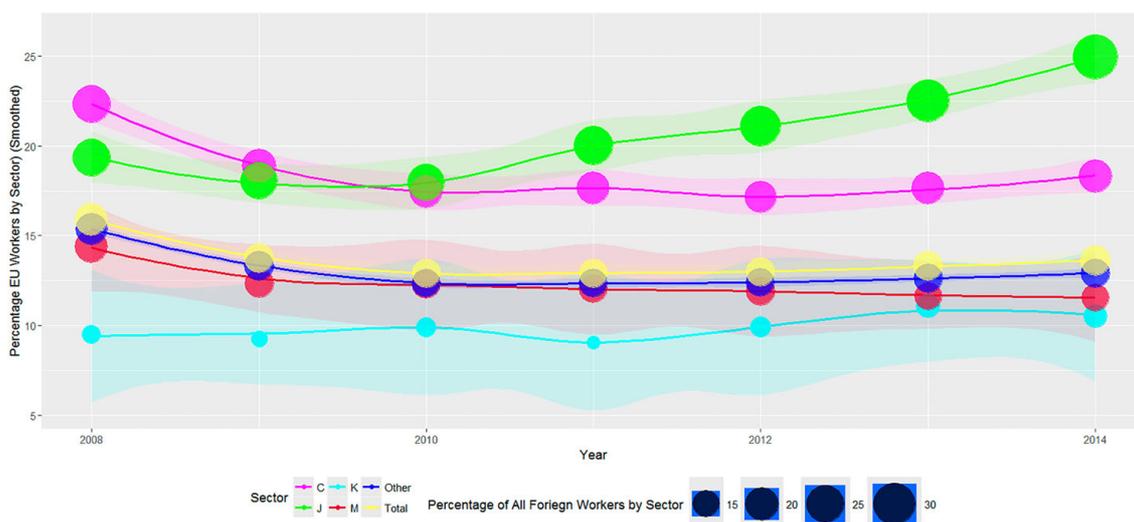


Figure 5. Share of foreign and EU employment by sector. Source: CSO, authors' calculations.

economic 'recovery'. As noted above, this growth is predominately concentrated in Dublin's 'Silicon Docks'. We take this as clear evidence that US investment into Dublin's tech cluster is facilitated by the EU's deep and diversified labour market, rather than aimed at exclusively hiring Irish nationals. As noted above, the ICT sector had the largest percentage growth in employment and wages during the recovery, as well as being the most geographically concentrated. Thus, as shown above, only a small segment of the overall workforce appears to be directly befitting in the recovery, and this recovery is largely in a sector where a disproportionate share of workers is non-Irish. This largely corroborates our claim that Ireland's FDI growth model creates clear winners and losers, and that the winners are increasingly a small proportion of high-skilled workers from other EU countries.

As an interesting aside, two other sectors showed an even greater proportion of foreign nationals in employment than information and communication. The 'accommodation and food service' and 'administrative and support service' sectors had average foreign national shares of 46.2 and 58.8 per cent, respectively, from 2008 to 2014. This is largely in line with the analysis of Dancygier and Walter (2015). The former is the lowest-wage sector in Ireland, with an average weekly wage of €320 per week in 2014, while the latter is not far behind at €492 (compared to €1032 for the information and communication sector in the same year). Foreign employment in this sector, much like in Britain, was largely shaped by EU enlargement, and inward migration from central and eastern Europe, in addition to non-EU foreign employment (See Dancygier 2010, for an excellent overview of immigration trends in Europe).

The Irish FDI growth model: who loses?

The descriptive statistics and analysis above illustrate how the Irish recovery has been dominated by Ireland's FDI growth model particularly via the tech sector. Moreover, the recovery in that sector has involved a disproportionate number of non-Irish workers, mainly from other EU member states. In this regard, European integration has been a core determinant of Ireland's economic recovery. However, while EU citizens are fully entitled to work in Ireland, they are not enfranchised to vote in national elections and, as such, are relatively marginalised in the domestic political/electoral process. Accordingly, in this section, we consider the extent to which the Irish government has engaged in distributional spending in order to secure the support of constituents in the domestic and non-FDI sectors of the economy, given that almost four times as many workers are employed in these sectors compared to the FDI growth sectors.

We first consider Irish public expenditure, by sector, from 2000 to 2016. Irish government expenditure saw massive increases, raising over 140 per cent during the Celtic Tiger years, from 2000 to 2008.⁸ However, the onset of the crisis and the advent of the EU-Troika bailout package saw similarly substantial cuts across a wide range of government ministries. At the broadest level, our suspicion holds that the FDI recovery has not resulted in redistribution through government spending, as overall government expenditure fell by nearly 15 per cent from 2008 to 2014, and was still down 12 per cent from 2008 levels in 2016. Yet, in order to get a more nuanced view of the redistributive effects of government spending, we consider changes in departmental expenditure, from a standardised 2000 base (=100), as shown in Figure 6.

Figure 6 shows a cycle of boom and bust, with expenditures rising across all government departments in the run up to 2008, and falling sharply after that. However, Figure 6 also reveals that cuts were not uniform. Indeed, the transport group, which had seen the largest increases during the boom, up over 600 per cent from 2000 to 2008, also saw the largest percentage cutback of nearly 55 per cent from the pre-recession peak in 2008, equating to an overall annual expenditure reduction of €1.7 billion in 2016 compared to that year.⁹ Other departments experienced similarly dramatic cuts from 2008 to 2016 with Arts down 57 per cent, Environment down 53 per cent, Agriculture down 41 per cent, Foreign Affairs down 33 per cent and Defense down 20 per cent. Interestingly for our hypothesis and analytic argument, the core social spending sectors; Education, Health, and Social Protection, were the three least impacted in the crisis, down 9 per cent, 7 per cent and up 18 per

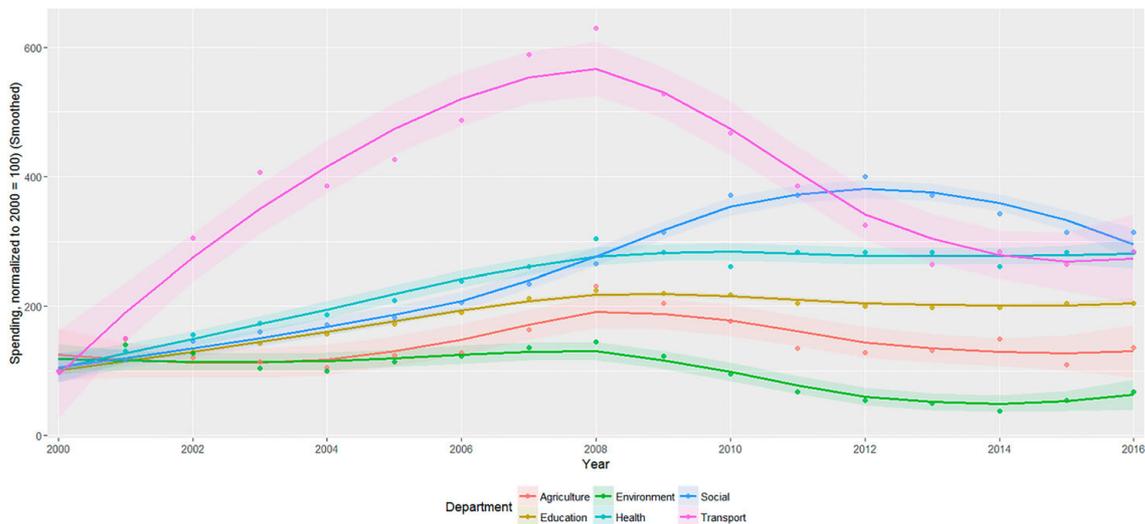


Figure 6. Departmental expenditure levels (2000 = 100). Source: PER, authors' calculations.

cent, respectively. The latter is almost certainly indicative of Ireland's counter-cyclical automatic stabilisers at work (income replacement). Social spending on unemployment benefits rose by €4.7 billion from 2008 to 2012, an increase of over 50 per cent.

The increased expenditure on unemployment benefit (called 'jobseekers allowance' in Ireland) accounted for nearly half of this increase, rising from €1.15 billion in 2008 to €3.05 billion in 2012. While Social Protection expenditure has fallen from 2012, it remains almost €2 billion higher in 2016 compared to 2008. These numbers suggest that social protection spending was largely protected during the crisis. The question then is – on who did the costs of the crisis fall? That is, who carried the burden in terms of EU-Troika austerity and adjustment? Looking deeper into the expenditure numbers reveals an important difference between consumption and investment trends (in line with Beramendi *et al.* 2015). The most drastic cuts were on *capital expenditure*. Further, one of the major current expenditure cuts was to the 'child benefit', which is a universal payment to mothers of children under 17 designed to compensate for childcare costs. Expenditure on this payment was cut from almost €2.5 billion in 2009 to €1.9 billion in 2014. This amounted to an average annual decrease in benefit of roughly €735 per household with children.

However, to fully appreciate the *distributional politics* of the Irish growth model we need to look beyond expenditure to revenue. Irish tax receipts fell over 20 per cent from €40.7 billion in 2008 to €31.7 billion in 2010. This dramatic collapse in tax revenue, in addition to the bank bailout, was the major contributing factor that forced Ireland into an EU-Troika bailout. Yet, once again, the dynamics of receipts from different tax sources differ wildly. As noted by Whelan (2014), and Kinsella (2012), a significant reduction in Irish revenue came from the collapse in Stamp Duty from the sale of property, with Stamp Duty revenues falling from a high of €3.7 billion in 2006 to €930 million by 2009, a decline of nearly 75 per cent. However, the largest fall in absolute terms was in VAT revenue with receipts €4.75 billion lower in 2011 compared to the zenith in 2007. Business-related revenues also saw dramatic decreases, with corporate tax receipts down 73 per cent from €6.4 billion in 2007 to €3.5 billion in 2011. Likewise, capital gains tax revenue fell from €3.1 billion in 2007 to just under €350 million in 2010, a massive 88.8 per cent decline. Corporate tax, however, has since shot back up, given the wind-fall gains of new FDI investment.

The only tax heading to buck this trend was labour *income tax*. After a 17 per cent fall in 2008 from its 2007 peak, income tax receipts *increased* by 22 per cent in 2011 to €13.8 billion, higher than the 2007 receipts. Income tax receipts have increased every year since 2008, to €18.4 billion in 2015, 35 per cent higher than the pre-recession peak. As suggested above, these increased tax receipts have come from fewer and fewer workers.¹⁰ Whereas each worker paid an average of €6,034 in income tax in 2009, this jumped to €8,964 by 2014, an increase of almost 50 per cent, contrasted against a fall in

average earnings of almost 3 per cent in the same period. As most workers are *not* in the wage-increasing FDI sectors, this suggests that the bulk of increased revenues in the austerity period came from the working and middle classes in the non-FDI sectors. The major jump occurred in 2011 with the advent of the 'Universal Social Charge', a progressive tax on gross income of up to 8 per cent for top income brackets. Furthermore, as part of the EU-Troika adjustment the government agreed to introduce a new property and water tax. The latter, in particular, was perceived as an arbitrary tax, imposed by the EU, and a contributing factor behind the collapse of the centre-right coalition of Fine Gael and Labour in 2016.

Considering all of the analysis above, it is clear that there are winners and losers to Ireland's high-tech growth model. Those who have carried the burden of adjustment are workers in the low to middle income classes of the social distribution (Whelan, Nolan and Maitre 2016). These workers saw their services from the state decrease while at that same time seeing an increase in their tax burden. The average working family with both parents in employment have seen their income taxes increase by €6,000, a 3 per cent reduction in their wages, and declining public infrastructure. These are also the same workers with the largest vote share. Thus, while Ireland's FDI growth model has driven a 'headline recovery', this rebound has not been felt by the mass of the voting population. Importantly, unlike the UK, this has not led to an electoral backlash against the EU or the free movement of workers, rather it is directed at the established political parties. According to Farrell and Suiter (2016), the electorate has never been more volatile, nor the party system more fragmented. In 2016, the three main centrist parties received their lowest ever vote share in the history of the state, while a loose collection of independent populists won their largest ever share of the vote. Our argument is that this is hardly surprising if one considers that the Irish political economy is almost entirely dependent upon US FDI. But increasingly, given the growth of the Silicon Valley sectors, those who work in these firms do not have a vote, as that they are primarily disenfranchised EU citizens. Hence, the Irish export oriented growth model is comparable to the FDI-dependent growth regimes of Eastern and Central Europe (see Bohle 2017).

Discussion: Ireland's FDI growth model and European integration

As evidenced above, Ireland's FDI-led growth model, which is coordinated by state elites, and the outcome of a decades-long forward looking enterprise policy, has had significantly asymmetric distributional consequences. While we argue that this poses a political economy problem for the domestic sustainability of Ireland's growth model, we also argue that it has consequences for the politics of European integration. Domestically, Ireland's FDI-led growth regime is likely to lead to increased polarisation between high-skilled and low-skilled workers. This tension will be exacerbated by the fact that these high-skilled and high-wage workers are increasingly less likely to be Irish citizens, and more likely to be citizens from other member-states of the EU.

This has not yet become a politicised issue in Ireland, given the absence of an anti-migrant and anti-EU political party, in addition to the near absence of an anti-EU media (i.e. there is no equivalent to UKIP or the anti-EU tabloid press in Ireland). However, this cannot be taken for granted, particularly in a context whereby high-wage FDI workers in Dublin are contributing toward rising house prices, and rental-housing price inflation. Furthermore, when Brexit occurs, the only remaining English speaking, common law, liberal market economy, with an open flexible labour market, left in the EU, is Ireland. Brexit therefore, potentially, turns Ireland into the last remaining 'offshore open labour market' in Europe (Thompson 2016) and may receive a further influx of EU workers from firms transferring their British operations to Ireland. Once again, many of these workers will not have a vote with which to support government economic policies that facilitate the openness that makes Ireland attractive to their firms. Hence, we contend that whilst the Irish growth model is not yet politicised, it is not electorally sustainable, given that most Irish voters are not business-finance professionals.

What has become politicised in Ireland, and is a direct affront to the preferences of the business-state elites, is the recent interventions of the EU Commission into Ireland's corporate tax affairs. The political clash between the Irish state and the EU Commission over corporate tax setting can be traced back to the financial crisis, and Ireland's request for a non-market loan from the Troika in 2010. While it is not officially documented, Irish state elites have been keen to point out that the 'EU' tried to compel Ireland to increase its corporate tax rate, and that Ireland's refusal to accept this intervention was a 'win' for the Irish negotiating strategy. The issue emerged again in 2012, when the newly elected centre-right Fine Gael/Labour coalition attempted to re-negotiate the Troika deal. According to the then Minister of Public Expenditure and Reform, Brendan Howlin, the French President, Nicolas Sarkozy, refused to enter into such a discussion, unless Ireland was willing to discuss corporate tax.¹¹ For Irish business-state elites, this was a red line issue that they were unwilling to cross because it would undermine the Irish governments 'credible commitment' to a stable corporate tax rate, which is central to Ireland's enterprise strategy of attracting FDI.

From the European Commission's perspective, however, it is not possible to continue on a path of increased European monetary integration in the absence of some variant of corporate tax harmonisation, a view largely shared by the French and German governments. Those member-states that actively engage in corporate tax competition are perceived as undermining the tax base of the entire Union, and engaging in beggar-thy-neighbour strategies of economic development. As Piketty (2014) has been keen to point out, the final outcome of allowing member-states to compete with each other to attract mobile investment and capital, through reduced corporate taxes, is a Union of European States with an effective corporate tax rate of zero per cent.

This might sound slightly hyperbolic but it is precisely what the EU Commission found when they examined Apple's tax affairs in Ireland. In 2016, Margarethe Vestager, the EU Commissioner for Competition, ruled that the Irish government provided Apple with a special tax ruling that enabled them to create a tax-free offshore subsidiary, which was not a tax resident anywhere. Apple transferred the profits that accrued from sales in other EU member-states into this subsidiary, and thereby avoided paying any taxes on these sales in other EU member-states. The Commission cannot do anything about these legal practices given that they cannot interfere in the tax-setting sovereignty of its' member-states. However, the Commission ruled that this was a form of 'illegal state aid' and broke EU 'competition law', with the implication that the Irish government are now compelled to collect \$14 billion in unpaid taxes. The Irish government are presently challenging this in the European courts, claiming that it is an illegal EU intervention into Ireland's sovereign right to set its own tax policies.

The general point is that there is an emergent political clash between Irish state-business elites and the European Commission. It begs the question whether heterogeneous political economies can continue to co-exist within the constraints of increased European integration? Our analysis suggests that European integration, in this respect, is a double edged sword for the Irish FDI growth model. On the one hand, Ireland's active promotion of corporate tax competition is not compatible with increased EU integration. Pierre Moscovici's – the European Commissioner for Economics and Financial Affairs – recent proposal to develop a Union Directive to legislate for a Common Consolidated Corporate Tax Base is likely to be met with fierce resistance from Ireland. But absent the UK veto (which is now gone, in the aftermath of Brexit), Ireland is not likely to have any bargaining power.¹² On the other hand, the free movement of peoples within the EU is a core determinant behind the recent wave of investment into Ireland, and the development of Dublin's high-tech business cluster, the 'Silicon Docks'. Absent direct access to the EU single market, and direct access to the labour force of 500 million people in the EU, it is highly questionable whether the IDA would have been able to attract this investment from Silicon Valley.

Our core inference from this observation is that European integration is an indispensable part of Ireland's FDI regime. But this does not mean that it is integration at any cost. Switzerland and Norway reap the rewards of free movement in the EEA without the constraints of the single currency, or the threat of the EU Commission intervening in their sovereign fiscal policies. In terms of the latter, it is perhaps worth noting that one of the reasons why the FG/Lab government failed to get re-elected in

2016 was popular resistance to the attempted imposition of a water tax, a policy which originated in the Troika agreements. This far-reaching oversight into domestic economic policies is only likely to increase popular reaction against European integration. While it is highly unlikely that there will ever be an 'Irexit', given that public opinion is so overwhelmingly supportive of EU membership, political-business elites will be watching closely to see whether Britain is capable of negotiating sectoral specific deals, which may allow for the free movement of peoples within certain sectors, such as finance and ICT. The Brexit vote shines a light on the core problem afflicting policymakers in the Irish FDI-dependent growth model of capitalist development: how to sustain a high-tech FDI growth engine that is based on the free movement of peoples, in a context of rising inequalities and increased job polarisation, without generating an electoral backlash against the business-state elites, the EU and immigration?

Notes

1. <http://www.economist.com/news/finance-and-economics/21678830-ireland-shows-ther-economic-life-after-death-celtic-phoenix> [accessed 15 July 2016].
2. This is perhaps largely inaccurate given that most of the activities of these Internet firms in Dublin are related to sales and advertising, which requires high-skilled multi-lingual business-finance professionals.
3. See Moretti (2012) for a broader analysis associated with this 'new geography of jobs'.
4. See Table A.1 in Appendix 2 for a more detailed breakdown of the data.
5. Unfortunately, our employment data in manufacturing is not disaggregated by activity. Thus, we are unable to asses if the poor employment performance in manufacturing is due to falling job numbers in the foreign FDI sectors of manufacturing (medical and electronics) or in Irish-domestic manufacturing activity.
6. Either as a primary code 'J63' in the NACE codes, or as the sector of a firm establishing its headquarters, which is coded as 'M70' in the NACE codes.
7. We thank the editor for bringing our attention to this fact.
8. Source: PER.
9. Given this substantial fall in transport spending, it is perhaps no surprise that the semi-state transport networks have seen significant industrial unrest during and after the crisis.
10. While one might think that, given the trends in employment above, the recovery might be a case of foreign workers "subsidizing" Irish citizens via the payment of their income. However, while foreign workers form a disproportionate share of ICT workers, as the *overall* number of workers in this sector is quite small, these workers are not subsidizing Irish citizens to any great amount (and this is even discounting the fact that many of these workers would also enjoy and have access to goods provided by the Irish state, including things like the universal child payment).
11. Discussed on RTE's documentary 'the Making of Enda' – aired 31-116'.
12. It is more likely that Ireland will build a coalition with other FDI growth models in Eastern and Central Europe, in addition to more liberal small open economies such as the Netherlands and Luxembourg, who also use aggressive corporate tax avoidance strategies to attract FDI.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Appendices

Appendix 1. Data Sources

Data on FDI by sector was compiled from annual projects announcements available from: <http://www.idaireland.com/about-ida/annual-reports/> [accessed 2 November 2016]. Projects were coded using NACE Rev2 sector codes (available from: <http://www.cso.ie/px/u/NACECoder/NACEItems/searchnace.asp>). Projects were coded at the NACE 2 digit level, sector (A-U) and activity (1-99). In the instance of M70 classifications ("Professional, Scientific and Technical Activities" (M) "Activities of Head Offices; Management Consultant Activities" (70)), secondary classification was made, where possible, based on identification of firm activity. Usage of these secondary classifications are noted in the text.

Data on Wages and Employment (foreign and national) is from the Irish Central Statistics Office (CSO), available from: <http://www.cso.ie/en/index.html> [accessed 2 November 2016].

Data on government expenditure and revenue was from the Irish Department of Public Expenditure and Reform (PER) available from: <http://www.per.gov.ie/en/open-data/> [accessed 2 November 2016].

Appendix 2. Data Tables

Table A.1. IDA-facilitated Investment by Sector and Year.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	%
Manufacturing Total	19	16	9	12	10	22	6	18	21	18	13	18	26.7
Manufacturing Pharmaceutical/Medical	10	10	8	9	6	12	4	10	14	10	8	13	
Manufacturing Computer/Electronics	7	2	0	2	3	6	2	6	3	4	4	1	
Information and Communication	6	3	10	6	7	7	11	18	34	31	44	31	30.5
Professional, Scientific and Technical	8	15	11	10	14	23	29	28	14	29	12	16	30.7
Financial and Insurance	2	1	7	4	3	3	6	12	9	10	6	5	10.0
Other	0	3	1	0	1	1	0	2	1	0	2	3	2.1

Source: IDA, Authors' Calculations.