UCD GEARY INSTITUTE FOR PUBLIC POLICY
DISCUSSION PAPER SERIES

Celtic phoenix or leprechaun economics? The politics of an FDI led growth model in Europe

Aidan Regan
School of Politics and International Relations,
University College Dublin

Samuel Brazys
School of Politics and International Relations and Geary Institute for Public Policy,
University College Dublin

Geary WP2017/01
January 12, 2017

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

Aidan Regan

Samuel Brazys[1]

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 whilst 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 foreign-national workers from the EU and beyond. We suggest that this experience indicates that Ireland's FDI-led model of economic development 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.

[1] Dr. Aidan Regan is Assistant Professor at the School of Politics and International Relations at University College Dublin. Dr. Samuel Brazys is the corresponding author and Assistant Professor of International Political Economy in the School of Politics and International Relations and Geary Institute Fellow at University College Dublin. The authors welcome comments, suggests and critiques sent to samuel.brazys@ucd.ie and aidan.regan@ucd.ie

Introduction

While Ireland was among the worst hit European economies during the 2008 financial crisis, its recovery from the "ashes" has been equally dramatic, leading to a popular rebranding of this former Celtic "Tiger" as the Celtic "Phoenix".[2] 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 & 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[3]" or Dublin's "Silicon Docks".

The prevailing consensus surrounding this FDI-led recovery is that it has been fueled by a low corporate tax rate. Brazys & Regan (2017) problematize 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 whilst 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.

[2] http://www.economist.com/news/finance-and-economics/21678830-ireland-shows-there-economic-life-after-death-celtic-phoenix Accessed 15-07-16.

[3] 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.

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 toward 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. Our analysis suggests that 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 don't have a vote, and whilst 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 dualized labour force.

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 & 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 "tax competition" 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 & Hausermann et al (2015) and recent work by Baccaro & 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 colored Europe's austerity policies may be

suitable for (relatively) labor 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 labor and/or vocationally specific trained labor, 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 & Trampusch 2012).

This observation is particularly important in the context of European integration (Fabbrini 2013; Schimmelfennig 2015). The political and institutional conditions that are favorable 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 & 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 labor costs, whilst retaining core employment (Hassel 2014). This beggar-thy-neighbor 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 Blyth 2013; Hall 2012; Streeck 2014; Storm 2014; Regan 2015; Nölke 2016; Stockhammer 2016; Schmidt 2016 for a critique).

The problem with this analysis, when applied to the "Silicon Docks", is that firms in internationally traded services do not compete on the basis of labor costs and wage restraint. On the contrary, they compete through offering their workers lucrative sales and stock options, social insurance schemes and other favorable working conditions that have traditionally been associated with unionized companies.[4] 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

[4] See Enrico Moretti (2012) for a broader analysis associated with this "new geography of jobs".

flexible labor force, high-tech service sectors benefit from the *clustering effect* of skilled labor, 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 labor market (Combes and Duranton, 2006). These are the "supply side" conditions of high-tech service growth models typically associated 'neoliberal economies' (Ban 2015; Bohle & Greskovits 2012). Crucially, these "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 labor force, tax structures are also disproportionately important for high-value service exporting firms when contrasted with labor-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, Bunyaratavej, & Hahn, 2009). They are interlinked via complex global supply chains. As described by Lipsey (2010: 99) this ambiguity has allowed firms, such as Apple, 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 labor costs. But corporate tax is not the only determinant driving investment in FDI growth regimes. As noted above the motivation comes from the *business 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.

The distributional implications

What Wren et al (2013) and Brazys & Regan (2017), in addition to large parts of the political economy literature, do not fully consider, however, are the political and *electoral consequences* of a high-tech FDI growth model, 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 *enterprise* policy aimed at FDI is more concerned with *activity* specialisation. In this sense, industrial policy is better conceived as "enterprise policy", given that it 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 firms. This implies developing domestic institutions that are favorable to the political and economic interests of multinational corporations.

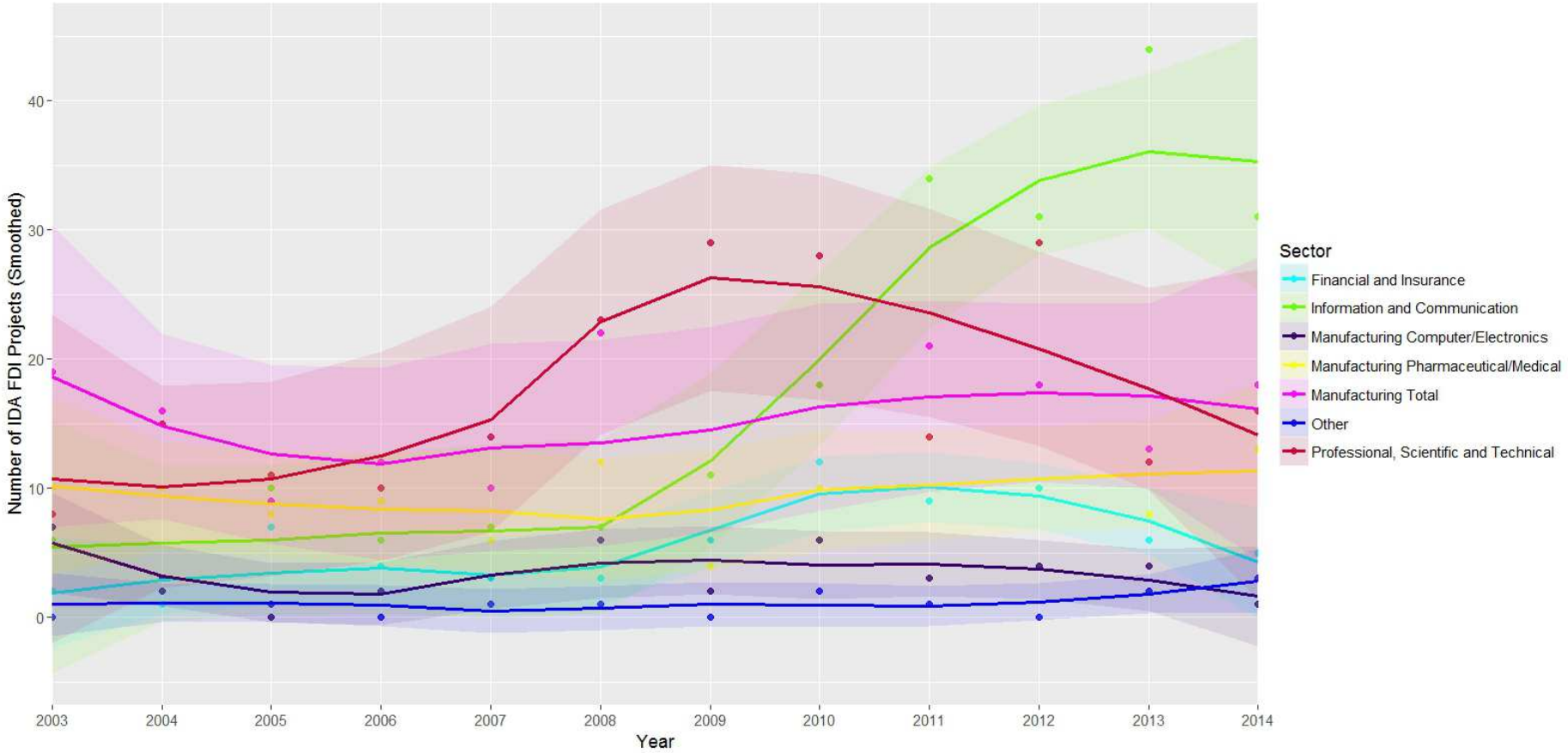
A key component of this is a fluid and open labour market. This leads to two important observations on the politics of labour supply in an FDI-led growth model. First, skilled ICT labour is highly-specialized and, thus, relatively *immobile* across sectors. Accordingly, a hardware engineer may not be 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 o*pen*. In a small open economy, access to the five hundred million strong 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-tech services, 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 tax and spend policies (Dancygier & 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 specialization have not been sufficiently disbursed. For a state pursuing an FDI-services 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 & 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 consequences 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 politics of comparative political economy and European integration.

Figure 1: IDA FDI Projects by Sector



Source: IDA Annual Reports and Authors' Calculations

The Irish FDI growth model: who wins?

We first examine the Irish recovery in the context of a sectoral analysis. Brazys & 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 Dublin's "Silicon Docks". In this paper we consider investment, wage, export and employment data across *all Irish sectors* using descriptive statistics, difference in means tests, 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.

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% of IDA sponsored FDI projects since 2003[5]. A fourth major sector, "financial and insurance" (NACE code "K") brings the total to almost 98% 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% 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% of all IDA FDI project announcements, which largely corroborates the claim that Irelands enterprise policy is focused on attracting investment in high-wage, high-skilled occupations.

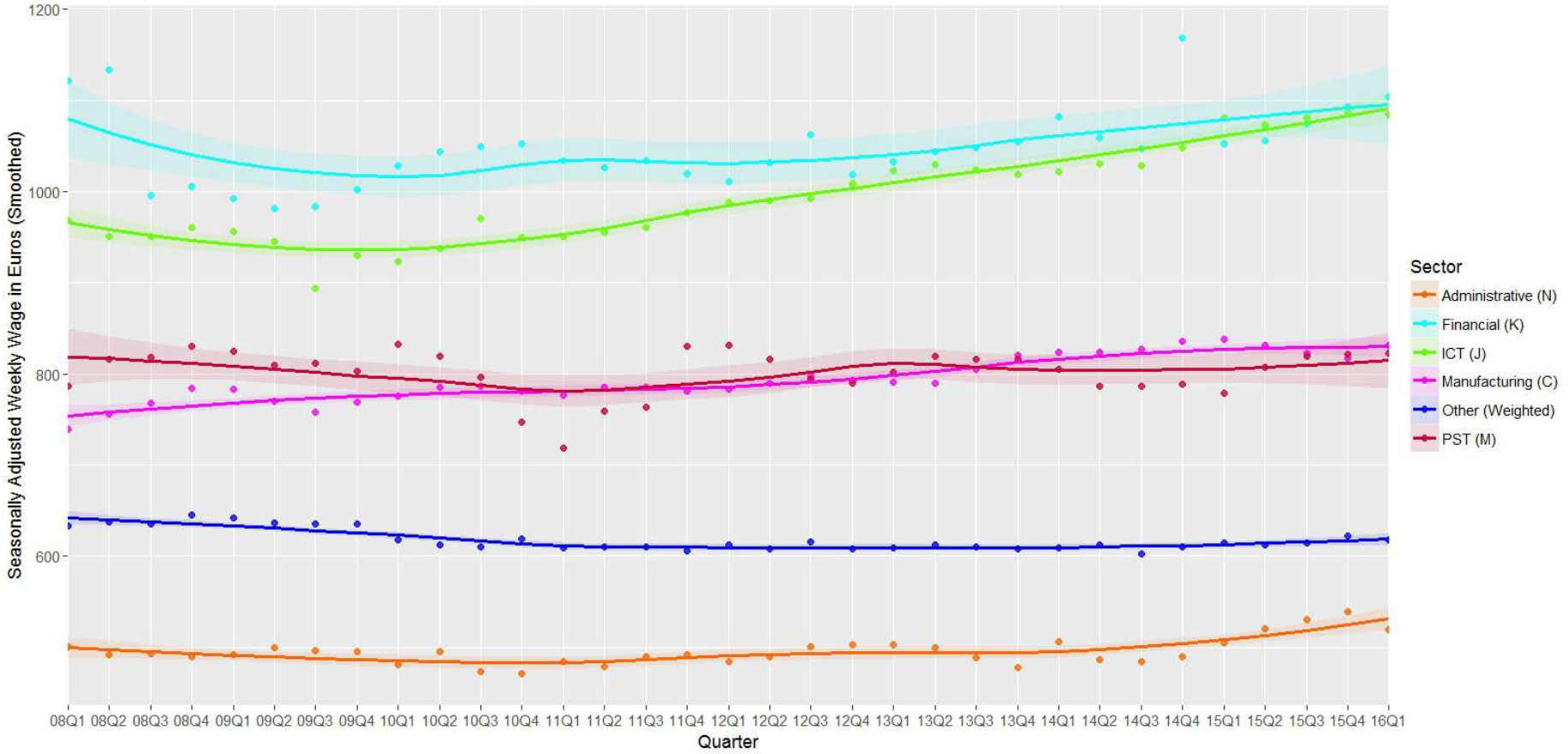
[5] See Table A.1 in Appendix II for a more detailed breakdown of the data.

When considering the sectoral allocation of FDI projects since the 2008 economic crisis the picture becomes even clearer. ICT is the standout sector. In particular, there is a marked *decrease* in FDI from manufacturing, which declined from a share of 37.6% projects for the 2003-2008 period to 20.1% for the 2009-2014 period. This decrease is more than compensated by the increase in the share of ICT projects, which rose from 16.7% in 2003-2008 to 36.2% in 2009-2014. This sector includes both computer programming and online service activities, and given the complexity of these services, and how to code them, they are probably under-represented in the numbers above. The Professional, Scientific and Technical (PST) sector includes "activities of head offices". Of the 74 FDI projects we code under this heading, from 2009-2014, 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 strategies 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.

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: Weekly Wages by Sector (Quarterly)



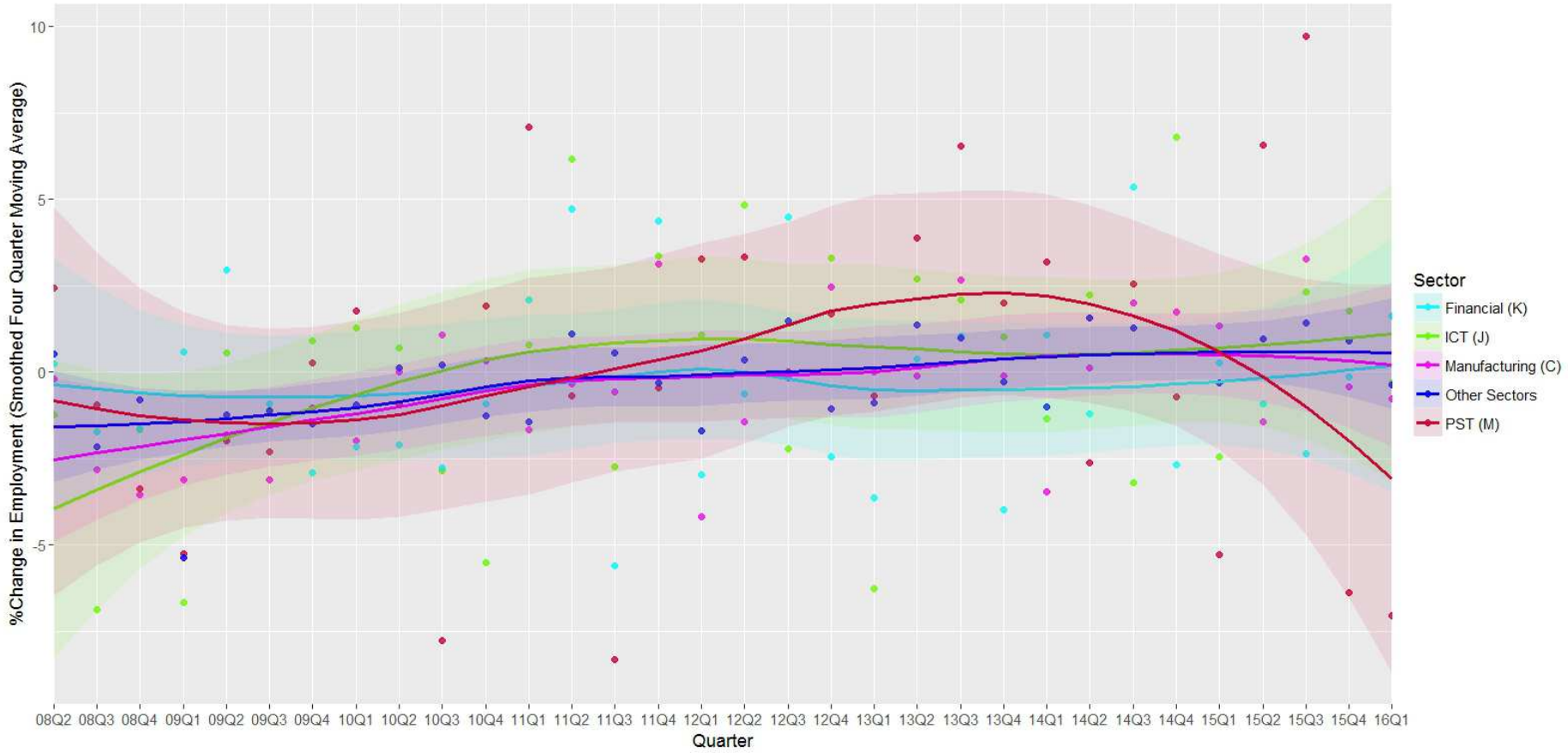
Source: CSO, authors' calculations.

Figure 2 shows a clear divergence between wages in the FDI sectors and all other sectors of the Irish economy.[6] The Non-FDI sectors – primarily those that make up large swathes of the domestic economy - experienced stagnant wages over the same period. The first quarter 2016 weekly wage of €617 was only 2.5% higher than its recession low of €603 in the third quarter of 2014, and down over 4% 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 equaled or exceeded their pre-recession peak by the first quarter of 2016. In particular, weekly wages in the ICT sector increased by 21% 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% over the pre-recession peak of €968 in the first quarter of 2008. With wage growth nearly 8 times faster, and a first quarter 2016 wage almost 80% 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 unemployment. As above, we consider the dynamics of employment in the FDI sectors compared to all other sectors. Rather than looking at absolute numbers, we consider a four-quarter moving average of the percent change to smooth seasonal effects.

Figure 3: Employment (4-period Moving Average of % Change)



Source: CSO, Authors' calculations.

Figure 3 is far less stark than figure 2. Both FDI and non-FDI sectors saw steep reductions in employment during the crisis and both saw increasing levels of employment as the recovery took hold. Of note, employment in all sectors was over 3.5% off the pre-recession peak in the first quarter of 2016. These figures are testament to the observation of a "jobless" recovery. However, within these dismal statistics there are important differentials. Employment numbers in high-tech services in ICT and PST performed markedly better than all other sectors. Both were up 20% in the first quarter of 2016 from their recession minimum and both less than 4% off their pre-recession peak. This is compared to a 7.5% recovery in job numbers in the "other" sectors by the first quarter of 2016, down 8.5% from the pre-recession peak in the second quarter of 2008. While manufacturing had a similar percentage recovery to the "other" sectors, the job numbers in the first quarter of 2016 were almost 14% off the pre-recession peak, while job numbers in the "financial and insurance" sector largely fell throughout the period, down 13% in the first quarter of 2016 from the pre-recession peak in the second quarter of 2009.

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. 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. We suspect the latter but we are unable to verify this supposition. One final note is that while certain FDI sectors saw a differential improvement, the overall employment levels in the "other" sectors dwarfs that of the FDI sectors, with employment over three times greater in these "other" sectors.

Geographic concentration

The sectoral analysis above demonstrates significant support for the contention that Ireland's FDI-sectors disproportionally felt the recovery since 2008. In this section we turn to an additional component of enterprise policy: geographic clustering. As

discussed above, and in greater detail in Brazys & 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: FDI Projects and Population by Location (% of Total)

	Manufacturing (Pharma/Electronics)	Information & Communication	Professional, Scientific & Technical	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**

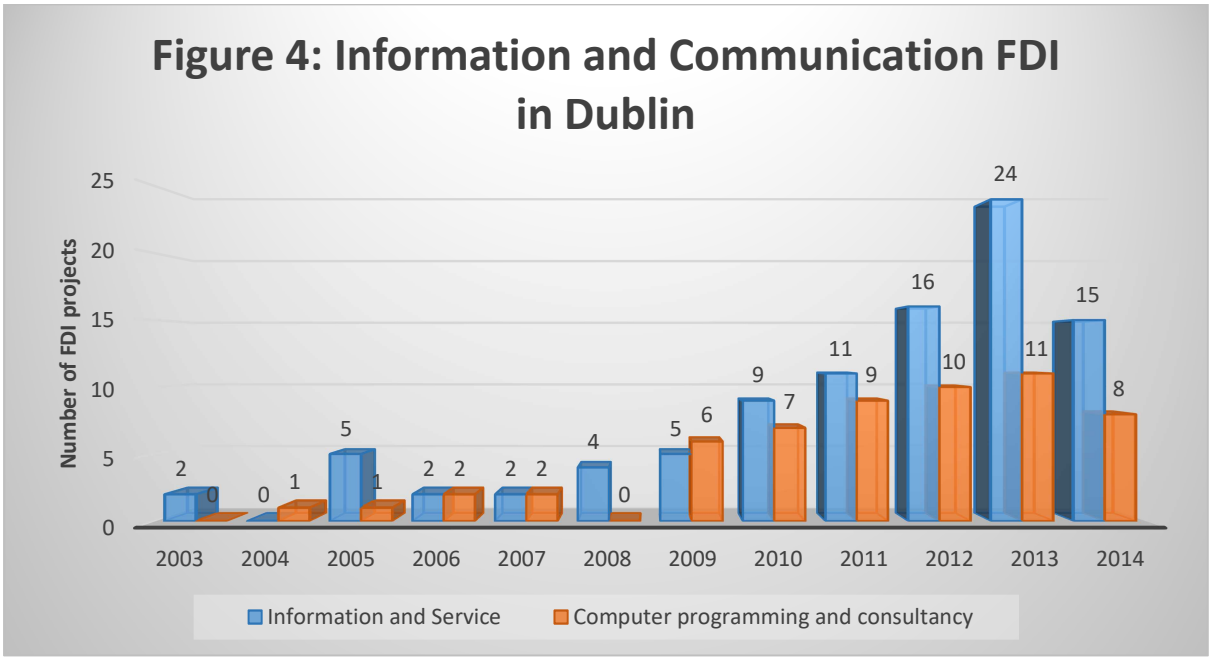
Source: IDA Annual Reports and Authors' calculations.

Table 1 above shows FDI investment/firms are concentrated in Ireland's three most populous cities/counties. Notably, these cities 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 cities. The share of manufacturing, 49.4%, is roughly proportionate to the population share of 44.5% in these cities. This is not the case in PST and ICT investment.

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[7], 95, or 66%, 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

[7] 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.

industrial parks in the county suburbs, such as Microsoft. Likewise, 57, or 60%, of the "computer programming and consultancy" FDI projects were located in Dublin. As shown in figure 4 below, 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. Google opened their European HQ in Dublin in 2004, and employed less than 50 people. By 2016, they employed over 5,500. 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 workers are predominately from the wider EU.



Source: IDA Annual Reports and Authors' calculations.

What's 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 these tech-based firms i.e. 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) markets, within the EU and the Middle East. This geographic amalgamation has important distributional consequences. While labour is potentially mobile throughout the state, geographic concentration of economic

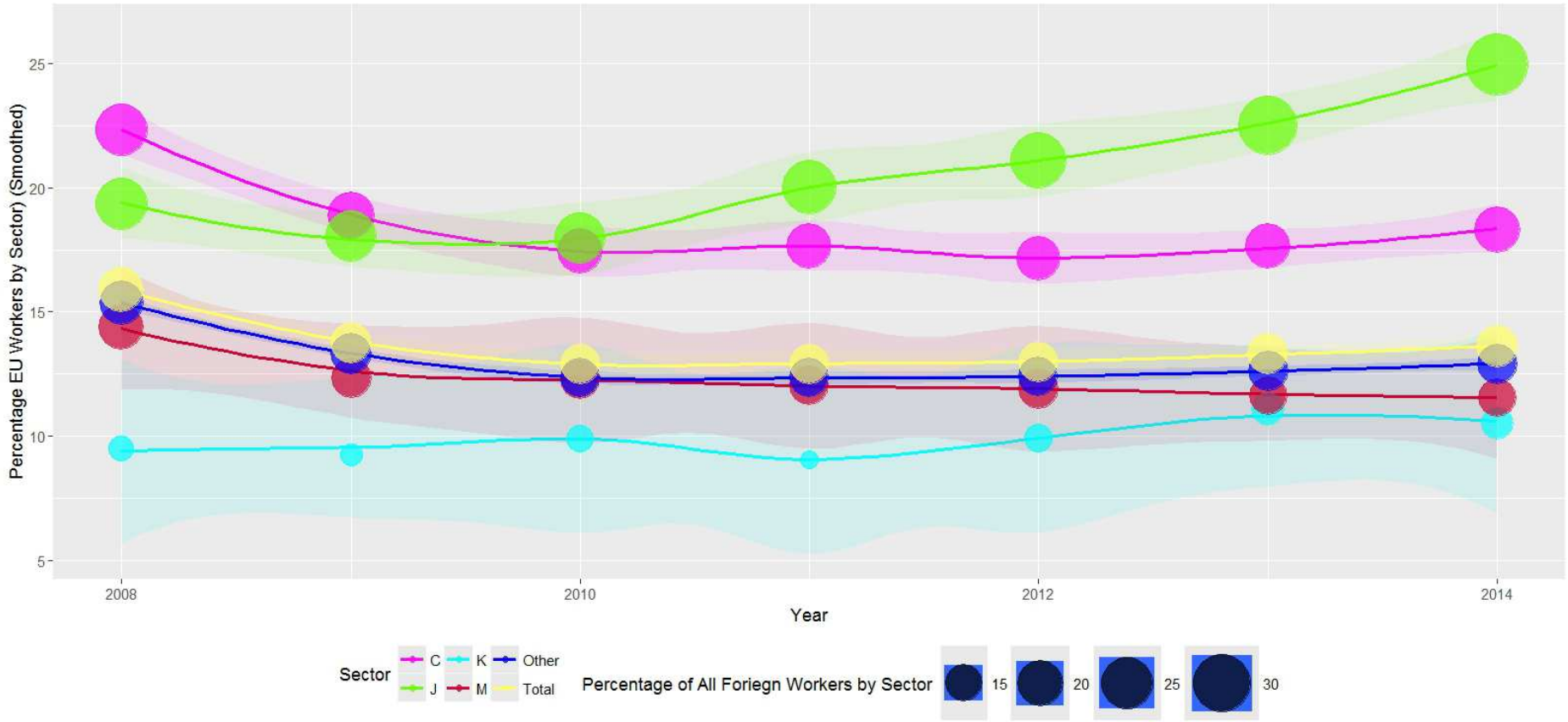
activity will likely lead to greater investment in public infrastructure and services in those areas, leaving other areas comparatively under-served, for example, broadband access. Likewise, the clustering of high-wage workers in Dublin puts huge pressures on local non-tradable prices, in particular housing and rental prices. These price increases can have significant welfare implications for those that are *not* engaged in the high-wage enterprise sectors, given that 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 paper, 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. 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% of the total workforce. Our contention is that foreign employment will be disproportionately represented in both the high-wage and the low-wage sectors. The shares of foreign workers in the high-wage FDI sectors are presented in figure 5 below:

Figure 5: Share of Foreign and EU Employment by Sector



Source: CSO, authors' calculations.

Interestingly, with respect to foreign employment, ICT stands out as clearly anomalous (NACE sector – J). While finance (K), and PST (M) are all below the overall share of foreign workers (captured in the differently sized circles) when compared to other sectors, by 2014, the ICT sector had a share of foreign workers (34.7%), which was almost double the overall proportion (17.6%), and which is likely to have increased during 2015-2016, as inward investment in this sector expanded. Moreover, there was a 45% growth in the share of foreign workers in the ICT sector, expanding from 24% in 2009 (in the middle of the recession) to 34.7% in 2014. In whole numbers, there were 7,413 more foreign workers in ICT in 2014 than in 2009, while total employment in the sector grew by 4,250 over this period. As noted above, this growth is predominately concentrated in Dublin's "Silicon Docks".

This suggest, remarkably, that employment of *Irish* nationals in the ICT sector appears to have decreased by 3,163 jobs, or 7.6%, during the period of the post-crisis economic "recovery". Finally, of the foreign workers in the ICT sector, nearly 75% are from EU-28 member states. We take this as clear evidence that US investment into Dublin's tech cluster is aimed at accessing the *EU's* deep and diversified labour market, rather than aimed at 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. By 2014, 25% of workers in this sector are from the wider EU, and a figure that has likely grown since. This largely corroborates our claim that Ireland's FDI growth model creates clear winners and losers, and that the winners are increasingly 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 (2016). The former is the lowest-wage sector in Ireland, with an average weekly wage of €320 per week in 2014, while the latter isn't 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).

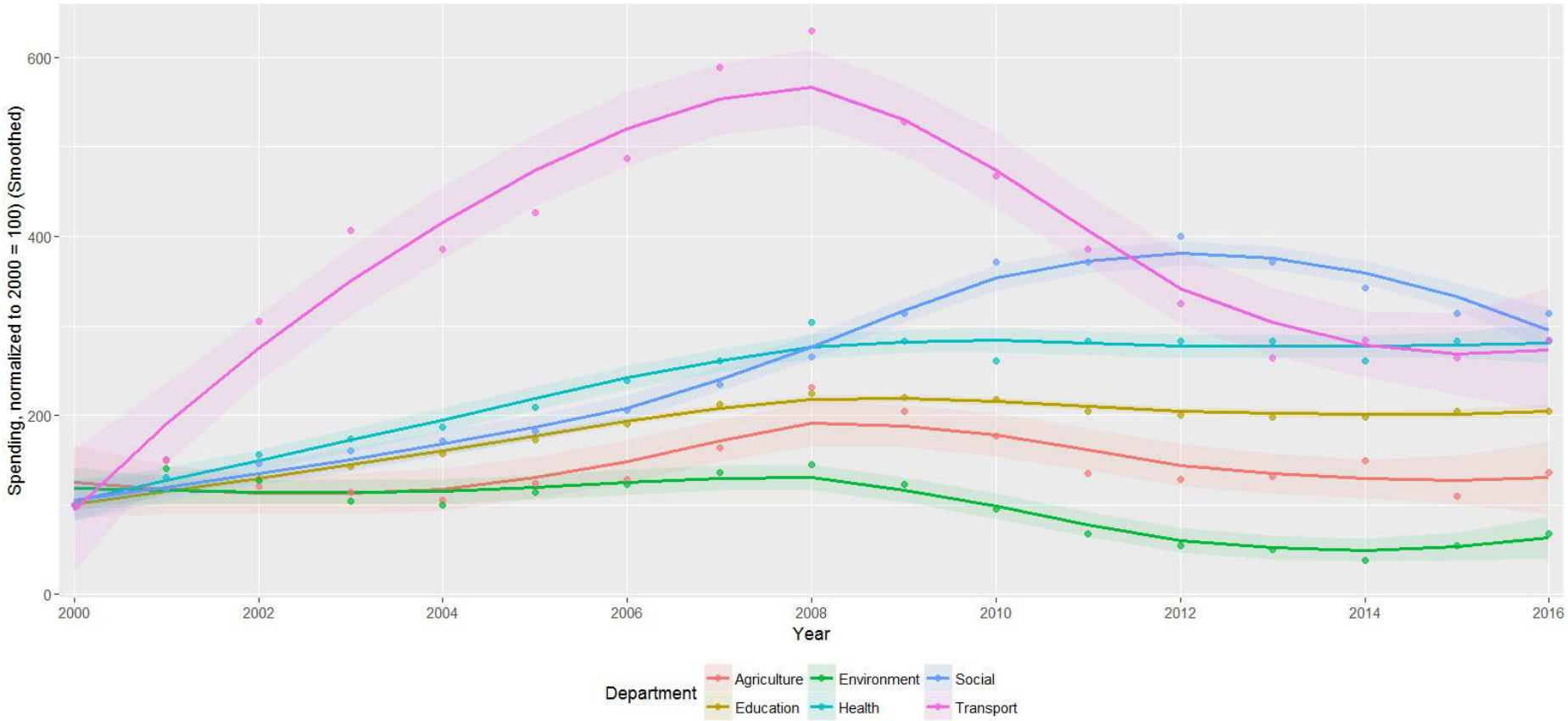
The Irish FDI growth model: who loses?

The descriptive statistics and analysis above clearly illustrate how the Irish recovery has been dominated by Ireland's FDI growth model, in particular, the tech sector. Moreover, the recovery activity in the ICT 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. While EU citizens are fully entitled to work in Ireland, they are not enfranchised to vote in national elections and, as such, are relatively marginalized 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 political 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% 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 that the FDI recovery has not resulted in redistribution through government spending holds, as overall government expenditure fell by nearly 15% from 2008 to 2014, and was still down 12% 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 standardized 2000 base (= 100), are shown in Figure below:

[8] Source: PER.

Figure 6: Departmental Expenditure Levels (2000 = 100)



Source: PER, Authors' Calculations

Figure 6 clearly 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% from 2000 to 2008, also saw the largest percentage cutback of nearly 55% from the pre-recession peak in 2008, equating to an overall annual expenditure reduction of €1.7 billion in 2016 compared to that year. Other Departments experienced similarly dramatic cuts from 2008 to 2016 with Arts down 57%, Environment down 53%, Agriculture down 41%, Foreign Affairs down 33% and Defence down 20%. 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%, 7% and up 18%, respectively. The latter is almost certainly indicative of Ireland's counter-cyclical automatic stabilizers at work. Social spending on unemployment benefits rose by €4.7 billion from 2008 to 2012, an increase of over 50%.

The increased expenditure on unemployment benefit (what's 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 (which can be considered a form of income replacement rather than social investment) 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 austerity and adjustment? Looking deeper into the expenditure numbers reveals an important difference between consumption and investment trends (in line with Beramendi et al 2016). 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% 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), a significant collapse in Irish revenue came from the collapse in Stamp Duty from the sale of property, with Stamp Duty revenues falling by from a high of €3.7 billion in 2006 to €930 million by 2009, a decline of nearly 75%. 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% 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% decline. Corporate tax, however, has since shot back up, given the windfall gains of new FDI investment.

The only tax heading to buck this trend was *income tax*. After a 17% fall from its 2007 peak, income tax receipts *increased* by 22% 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% higher than the pre-recession peak. As suggested above, these increased tax receipts have come from fewer and fewer workers. 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%, contrasted against a fall in average earnings of almost 3% 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" (USC), a progressive tax on gross income of up to 8% for top income brackets. Further, 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 center-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 & Maître 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% 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 recovery 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 & Suiter (2016), the electorate has never been more volatile, and the party system more fragmented. In 2016 the three main centrist parties received their lowest ever vote share in the history of the state, whilst a loose collection of independent populists won their largest ever share of the vote. Our argument is that this is hardly surprising when one examines the winners and losers of the Irish FDI-growth regime. Further, given the growth of the Internet sectors, those who work in these firms don't have a vote, as they are primarily disenfranchised EU citizens.

Discussion: Ireland's FDI Growth Model and European Integration

As evidenced above, Ireland's FDI-led growth regime, which is coordinated by business-state elites, and the outcome of a decades-long forward looking enterprise policy, has had significantly asymmetric distributional consequences in Ireland across sectors, geographic region and citizenship. 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 polarization 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 near 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. Further, if and 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). Further, these workers, who are predominately business-finance professionals, don't have a vote, and therefore the government cannot electorally rely on them to support their economic policies. Hence, we contend that whilst the Irish growth model is not yet politicised, it is not electorally sustainable.

What has become politicised in Ireland, and a direct affront to the preferences of the business-state elite that shape Ireland's FDI growth model, 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. Whilst it is not officially documented, Irish policymaking elites, involved in the negotiations, have been keen to point out that "Europe" 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 FDI growth regime. 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[9]. 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, which is largely shared by the French and German government, it is not possible to continue on a path of increased European integration in the absence of some variant of corporate tax harmonisation. Those member-states that actively engage in corporate tax competition are perceived as undermining the tax base of the entire EU, and engaging in beggar thy neighbour strategies of economic development. As Thomas Piketty (2014) has been keen to point out, the logical end point of member states competing with each other - to attract mobile investment and capital - through reduced corporate taxes, is a Union of states

[9] Discussed on RTE's documentary "the Making of Enda" – aired 31-116'.

with an effective corporate tax rate of zero percent. This might sound slightly hyperbolic but it is precisely what the EU Commission claimed 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 non-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 and Apple Inc. 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.

This paper is not engaged in a critique of either the Irish government's or EU Commission's position, nor is it a technical analysis of how large MNC firms engage in strategies of international corporate tax avoidance. The general point is that there is a clear political clash between Irish state-business elites and the European Commission that speaks directly to the core dilemma facing the EU: can diverse models of growth, built around qualitatively distinct political economies, continue to co-exist within the constraints of increased European integration? Further, does the EU contribute toward or undermine the national growth regimes of its member-states? 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 (CCTB) is likely to be met with fierce resistance from Ireland, and other small EU states such as the Netherlands and Luxembourg. But absent the UK veto (which is now gone, in the aftermath of Brexit), Ireland is not likely to have any bargaining power, and can be effectively ignored. 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 labour force of 500 million people in the EU, it is highly questionable whether Irish business-state elites would have been able to generate the conditions and attract the FDI that has built the high-tech business cluster behind Ireland's recovery.

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 constant threat of the EU Commission intervening in their sovereign tax and spend policies. In terms of the latter, it is perhaps worth noting that one of the reasons why the centre-right Irish government collapsed in 2016 was popular resistance to the attempted imposition of a water tax, a policy which originated in the Troika agreements, and which the Commission continues to insist must be implemented. This far-reaching oversight into domestic economic policies is only likely to increase popular reaction against European integration. Whilst it is unlikely that Britain will secure EEA status in its Brexit negotiations, other member-states, such as Ireland, will be watching closely to see what type of deal does emerge, not least 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. This is, of course, conjecture, but it does shine a light on the core problem afflicting business-state elites in the British-Irish model of capitalist development: how to sustain a high-tech economic 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 EU and immigration?

References

Afonso, A., 2012. Employer strategies, cross-class coalitions and the free movement of labour in the enlarged European Union. *Socio-Economic Review*, *10*(4), pp.705-730.

Ansell, B.W., 2008. University challenges: Explaining institutional change in higher education. *World Politics*, 60(02), pp.189-230.

Baccaro, L. and Pontusson, J., 2016. Rethinking Comparative Political Economy: The Growth Model Perspective. *Politics & Society*, *44*(2), pp.175-207.

Beramendi, P., Häusermann, S., Kitschelt, H. and Kriesi, H. eds., 2015. *The Politics of Advanced Capitalism*. Cambridge University Press.

Ban, C., 2016. *Ruling Ideas: How Global Neoliberalism Goes Local*. Oxford University Press.

Blyth, M., 2013. *Austerity: The history of a dangerous idea*. Oxford University Press.

Bohle, D. and Greskovits, B., 2012. *Capitalist diversity on Europe's periphery*. Cornell University Press.

Brazys, S., & Regan, A., 2017. The Politics of Capitalist Diversity in Europe: Explaining Irelands Divergent Recovery from Crisis. *Perspectives on Politics*. Forthcoming.

Busemeyer, M.R. and Trampusch, C., 2012. *The political economy of collective skill formation*. Oxford University Press.

Culpepper, P.D., 2003. *Creating cooperation: How states develop human capital in Europe*. Cornell University Press.

Dancygier, R.M., 2010. *Immigration and conflict in Europe*. Cambridge University Press.

Dancygier, R.M. and Walter, S., 2015. Globalization, labor market risks, and class cleavages. In Beramendi, P., Häusermann, S., Kitschelt, H. and Kriesi, H. eds., 2015. *The Politics of Advanced Capitalism*. Cambridge University Press.

Dellepiane-Avellaneda, S. and Hardiman, N., 2015. Fiscal politics in time: pathways to fiscal consolidation in Ireland, Greece, Britain, and Spain, 1980–2012. *European Political Science Review*, *7*(02), pp.189-219.

Doh, J.P., Bunyaratavej, K. and Hahn, E.D., 2009. Separable but not equal: The location determinants of discrete services offshoring activities. *Journal of International Business Studies*, pp.926-943.

Fabbrini, S., 2013. Intergovernmentalism and its limits assessing the European Union's answer to the Euro crisis. *Comparative Political Studies*, p.0010414013489502.

Farrell, D.M. and Suiter, J., 2016. The Election in Context. In *How Ireland Voted 2016* (pp. 277-292). Springer International Publishing.

Goodwin, M.J. and Heath, O., 2016. The 2016 Referendum, Brexit and the Left Behind: An Aggregate-level Analysis of the Result. *The Political Quarterly*, *87*(3), pp.323-332.

Hall, Peter A. 1986. "Governing the economy: The politics of state intervention in Britain and France." Oxford University Press.

Hall, P.A., 2012. The economics and politics of the euro crisis. *German Politics*, *21*(4), pp.355-371.

Hancké, B., Rhodes, M. and Thatcher, M., 2007. *Beyond varieties of capitalism: Conflict, contradictions, and complementarities in the European economy*. Oxford University Press.

Hassel, A., 2014. The paradox of liberalization—understanding dualism and the recovery of the German political economy. *British Journal of Industrial Relations*, *52*(1), pp.57-81.

Johnston, A. and Regan, A., 2016. European monetary integration and the incompatibility of national varieties of capitalism. *JCMS: Journal of Common Market Studies*, *54*(2), pp.318-336.

Kinsella, S., 2012. Is Ireland really the role model for austerity?. *Cambridge Journal of Economics*, *36*(1), pp.223-235.

Krugman (2016) – see quote in http://www.irishtimes.com/business/economy/leprechaun-economics-eu-mission-to-audit-26-gdp-rise-1.2761097

Lipsey, R. E., 2010. Measuring the location of production in a world of intangible productive assets, FDI, and intrafirm trade. *Review of Income and Wealth*, *56*(s1), S99-S110.

Matthijs, M. and Blyth, M. eds., 2015. *The Future of the Euro*. Oxford University Press.

Moretti, E., 2012. *The new geography of jobs*. Houghton Mifflin Harcourt.

Nölke, A., 2015. Economic causes of the Eurozone crisis: the analytical contribution of Comparative Capitalism. *Socio-Economic Review*, advanced online access.

Piketty, T., 2014. Capital in the 21st Century. *Cambridge: Harvard University Press*.

Regan, A., 2015. The imbalance of capitalisms in the Eurozone: Can the north and south of Europe converge? *Comparative European Politics*. Advance online access.

Regan, A. 2016. Did Ireland's economy really grow by 26.3 percent? Only on paper. Here's the real story. *Washington Post*, the Monkey Cage.

Schimmelfennig, F., 2015. Liberal intergovernmentalism and the euro area crisis. *Journal of European Public Policy*, *22*(2), pp.177-195.

Schmidt, V.A., 2016. Reinterpreting the rules 'by stealth' in times of crisis: a discursive institutionalist analysis of the European Central Bank and the European Commission. *West European Politics*, *39*(5), pp.1032-1052.

Streeck, W., 2014. *Buying time: The delayed crisis of democratic capitalism*. Verso Books.

Storm, S., 2016. German Wage Moderation and the Eurozone Crisis: A Critical Analysis. *Institute for New Economic Thinking.*

Thelen, K., 2014. *Varieties of liberalization and the new politics of social solidarity*. Cambridge University Press.

Thompson, H., 2016. Between Scylla and Charybdis: Brexit as fate and trap. *Juncture*, *23*(2), pp.111-115.

Whelan, K., 2014. Ireland's economic crisis: The good, the bad and the ugly. *Journal of Macroeconomics*, *39*, pp.424-440.

Whelan, C.T., Nolan, B. and Maitre, B., 2016. The Great Recession and the Changing Distribution of Economic Stress across Income Classes and the Life Course in Ireland: A Comparative Perspective.

Wren, Anne (ed.), 2013. *The Political Economy of the Service Transition*. Oxford: Oxford University Press.

Wren, Anne and Rehm, Philipp, 2013. 'Service Expansion, International Exposure, and Political Preferences'. In Anne Wren (ed.), *The Political Economy of the Service Transition*, 248–281. Oxford: Oxford University Press.