

Ireland's Foreign Direct Investment Sector: the Impact of a hypothetical Irish Euro zone exit

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Abstract

The European sovereign debt crisis that has been playing out since 2008 has led to much questioning over the future of the single currency which, so far, favoured foreign direct investment (FDI) in countries such as Ireland, contributing to their wellbeing and growth. Drawing on data gathered from interviews with individuals involved in different divisions of the FDI sector, namely the services, high-tech and life sciences, this study evaluates the hypothetical consequences for Ireland's FDI sector, following an Irish Euro zone exit. The findings illustrate that the reactions of foreign companies would heavily depend on the ease of transferability in the organisation's operations. Ireland outside the Euro zone would struggle to both maintain and attract new FDI. The resultant consequences for Ireland's economy would include increased unemployment, reduced exchequer returns and export levels, as well as stagnant economic growth.

Keywords: FDI; Sovereign debt crisis; Ireland; Economic recession; Euro exit

Introduction

The onset of the global financial crisis in 2008 facilitated the end of the Celtic Tiger and the collapse of the Irish property sector, with prices of residential properties falling by 47% between their peak in 2007 and 2011 [1]. The resulting collapse in the banking and property sectors led to the Irish economy entering a deep recession in 2008, with real GDP and GNP falling by 6.7% and 11.9% respectively, between 2008 and 2011¹. The subsequent EU/IMF bailout required to prevent the collapse of the Irish banking system, led to general government debt increasing from 25% of GDP in 2007 to 107% GDP in 2011 [2].

Despite Ireland's economic recession officially ending in 2010, the economy faced modest levels of economic growth in 2011, with a contraction of 1.1% in the first quarter of 2012 compared to the previous quarter [3]. The continued implementation of tough EU/IMF Troika austerity measures means that Ireland's 14.4% unemployment levels, the fifth highest in Europe, are likely to remain stagnant for the foreseeable future [2]. In the wake of a bleak and uncertain economic future for Ireland's economy, much attention has been placed on the role that Ireland's membership of the Euro has played in its financial crisis. Ireland's decision to join the Euro in 1999 and its subsequent introduction in 2002 meant that it handed over control of its monetary policy, the main macroeconomic stabilisation tool of the modern economy, to the European Central Bank (hereafter ECB) [4]. Since all Euro zone countries face the same short term nominal interest rates set by the ECB, its monetary policy has proved to be overly tight for countries such as Germany experiencing low inflation levels and exceptionally loose for countries, like Ireland, experiencing high inflation rates [5]. Indeed, the exceedingly low interest rates set by the ECB over the last decade, enabled Irish banking institutions to borrow significant funds from other Euro zone banks, without any exchange rate risk. This indirectly facilitated their reckless lending in the property sector, as well as the subsequent solvency and liquidity crisis in the Irish banking system [1]. The similar economic fates

¹Gross domestic product (GDP) is the value of all goods and services produced in the domestic economy, calculated according to the returns received by the factors of production owned by the residents of Ireland, both Irish and non-Irish. Gross national product (GNP) is the total value of all goods and services produced by national resources in a year. It measures total income earned by domestic citizens regardless of the country in which their factor services were supplied [54].

being faced by other Euro zone periphery economies, including Spain, Portugal, Italy and Greece, combined with the stumbling of Euro zone leaders to agree a comprehensive solution to the sovereign debt crisis has led to questioning over the future of the single currency. Indeed, the restraints that have been placed on Ireland's economic recovery as a result of its Euro zone membership, including the inability to default on its sovereign debt or devalue its currency, and continued EU/IMF enforced harsh austerity measures in the long term, has caused much controversy.

One policy option open to Ireland is to leave the Euro zone, default on its sovereign debt and re-introduce a devalued national currency. Ireland outside the Euro zone would have the ability to control its own monetary policy, adjust interest rates to reflect its present economic conditions, as well as benefiting from increased export levels and reduced import demand as a result of a devalued currency. While much media coverage and academic commentary has been carried out on the theoretical advantages of a Euro zone exit, as well as the likely impact on the country's banking and trade sectors, research has failed to comprehensively address how Ireland's foreign direct investment (hereafter FDI) sector would be impacted by such a decision [6,7]. That is in spite of Ireland being one of the most FDI intensive economies in the world, with foreign affiliates accounting for almost 50% of manufacturing employment, 80% of manufacturing value added, and twice the EU average in services [8]². At the end of 2011, the value of FDI inflows to Ireland stood at \$13bn down from \$26bn in 2010 and 2009, but the value of US FDI amounted to \$188bn, representing an

²The Organisation for Economic Co-operation and Development (OECD) is an international organisation helping governments tackle the economic, social and governance challenges of a globalised economy.

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increase of \$30bn on 2010 [9]. Ireland is currently rated as the second most attractive country globally for inward FDI, after the Netherlands [10].

Why does FDI locate in Ireland?

Over the past six decades Ireland has become one of the leading destinations in Europe for global FDI by establishing a more fiscally and financially welcoming environment than its neighbouring countries [11]. This turnaround was primarily the result of the economic collapse in the late 1950s forcing Irish policy-makers to abandon inward looking protectionist policies designed to promote indigenous industry, including high tariff barriers and prohibitions on foreign ownership of firms operating in Ireland, in favour of outward looking policy focused on systematically cultivating FDI [12].

A low corporate tax regime remains to this day one of the cornerstones of Ireland's inward FDI strategy [13]. From a zero profits-tax rate on manufactured exports in the late 1950s to a 10% rate in 1999 and finally a 12.5% rate across all industries in 2003, Ireland maintains one of the lowest corporate tax rates in the world [14]. Fitz Gerald [14] found that the introduction of the blanket 12.5% rate in 2003 extended the attractiveness of Ireland as not just a location for FDI in the manufacturing sector but mobile firms in the business and financial services sector. The initiative allowed such firms to benefit from the strategic use of tax planning by locating highly profitable activities in the services sector in Ireland through transfer pricing³. Ireland's exceedingly low corporate tax rate has also attracted much criticism from neighbouring EU countries with calls for the harmonisation of corporate tax rates across Europe, as well as new threats by France and Germany to accelerate the development of a pan-European business tax system [15]. Ireland's staunch refusal to tolerate the idea of EU tax harmonisation and repeated declarations that the current 12.5% corporate tax rate will not be changed is an indication of the importance the country places on a competitive tax regime as part of its inward FDI strategy.

Ireland's desire to build a 'Smart economy'⁴ focused on knowledge intensive industries has played a key role in the recent development of further indirect financial incentives in addition to the low corporation tax rate used to attract foreign firms. In an attempt to attract innovative R&D intensive multinationals the tax regime also provides for a 25% R&D tax credit for expenditure above a base year (e.g. 2003) in addition to the normal corporation tax deduction expenses incurred during the course of a trade, thus giving an effective 37.5% rate for R&D expenditure [16]. Financial supports for foreign firms locating in Ireland are also available in the form of employment grants for the number of permanent full-time positions created and capital grants to subsidise expenditure on the purchase of land, buildings, new plants and equipment [16].

Ireland's entry into the European Community in 1973 enhanced its attractiveness to extra-EU FDI and in particular US investors seeking production bases and an export platform within the Common External Tariff area. This attractiveness was further strengthened in the early 1990s with the formation of the Single European Market (hereafter

SEM) [11]. One of the most prominent benefits of the SEM was the eradication of the stultifying regimes of state aids prevalent in Europe in the late 1980s, leading to the creation of a level playing field for all member states regarding incentives and disincentives for inward FDI. For the single market to be viable it also necessitated the abolition of bureaucratic obstacles (non-tariff barriers) which facilitated a decrease in both the cost and delivery times of goods throughout the European Union [17]. Sutherland [18] argues that the SEM programme created the conditions under which Ireland was as good a place as France for selling goods into the French market. A 1999 OECD report on the Irish economy noted that US investment in Ireland tripled from 1991 to 1993, just as the SEM programme was being implemented [19]. Ruane and Buckley [11] argue that during this period Ireland benefited from Vernon's [20] product cycle in becoming a low cost manufacturing base within Europe for maturing US enterprises already exporting products into the growing European market. Despite Ireland's cost competitiveness being eroded over the preceding years, its current competitive tax regime, young English speaking, well educated workforce, and full participation in Europe through the SEM and Euro zone continue to make it an ideally positioned pontoon to link US and other extra-EU MNCs to the European Union [21].

In spite of current fears over the future of the Euro zone Ireland's decision to join the Economic and Monetary Union (hereafter EMU) in 1999 and the subsequent introduction of the Euro in 2002 enabled it and its fellow Euro zone countries to create more stable conditions for firms making long term investment decisions. Indeed, Ireland's membership of the EMU has led to reduced transactions costs for companies located in its FDI sector, for example it (1) removes currency conversion costs; (2) suppresses in-house costs of maintaining separate foreign currency expertise; (3) eases price decisions and the comparison of international costs; (4) irrevocably removes intra-Euro zone exchange rate volatility [22]. De Sousa and Lochard [22] were able to estimate that Euro adoption had increased intra-EMU FDI stocks by around 31% between 1992 and 2005 with the Euro impact varying across EMU members. While the present stability of the Euro zone has been rocked by the sovereign debt crises of Ireland and other Euro zone member countries including Greece, Portugal, Spain and Italy, Ireland's ability to attract FDI is proving to be robust recording an overall 17% increase in the number of investments from Industrial Development Authority (hereafter IDA) client companies in 2011 [9].

Similarly, a young, English speaking, highly skilled and educated work force, along with responsive government policy to the skills needs of MNCs has made Ireland an attractive location for FDI [23]. Since the 1960s substantial improvements in the provision of education have taken place in recognition of the importance of the Irish education system and the existence of a highly skilled labour pool in attracting FDI [24]. Between 1965 and 2005, the number of students enrolled in higher education increased from 21,000 to 137,000, with many of the students benefiting from newly established institutes of technology [25]. Ireland now has one of the highest proportions of the 25-34 year old populations in the OECD with a third level educational qualification, a very high percentage of which has science and engineering degrees, emphasized as areas of growth for inward FDI [26].

Ireland was one of the first countries in the world to adopt an FDI-based development model, with the expertise developed by the IDA acting as a decisive factor in Ireland's success as a leading destination for global FDI. The IDA plays a crucial role in identifying expanding international sectors of industry and targeting niche companies that have the potential to thrive in Ireland, bringing with them employment

³Barry (2005) refers to the practice of transfer pricing as the 'invoicing of a company's purchases from other branches of the parent company at prices lower than would arise in the case of arm's length trades, and the invoicing of its sales to other branches of the parent company at prices higher than would otherwise arise,' (p3).

⁴'Building Ireland's Smart Economy A Framework for Sustainable Economic Renewal' sets out the framework to address the current economic challenges and to build a thriving enterprise sector, high-quality employment, secure energy supplies, an attractive environment, and first-class infrastructure [55].

and economic growth benefits [27]. Since the 1980s IDA policy has also focused on building sectoral and spatial clusters of MNCs, with particular focus on the high-tech sector, life sciences sector and, later, the knowledge intensive services sector [11]. For example, the IDA placed significant emphasis on enticing leading enterprises in the high-tech sector, including Intel, Dell, Hewlett Packard and IBM, with the expectation of generating a 'contagion' effect whereby other MNCs in the same industry would be encouraged to locate in Ireland with upstream and downstream links to these sector leaders [28,29]. Ruane and Buckley [11] note that the success of winning Microsoft, Intel and Dell was a significant factor in the average share of US FDI in the electronics sector going to Ireland rising 27% between 1994 and 2001, compared with a rate of less than 12% for Irish manufacturing as a whole. In the case of the life sciences sector, including the pharmaceutical, biotechnology and medical device industries, IDA policy has successfully focused on creating a geographic clustering of upstream activities, centred primarily on the creation of a serviced site in Cork, along with promoting the location of pharmaceutical plants in downstream activities more widely distributed throughout Ireland [29]. Ireland's emerging information economy has also enabled it to become a leading global destination for internationally traded services, including insurance, consulting, digital media, and in particular financial services, with the IFSC in Dublin now home to half of the world's top 50 banks [9]. The consistency and success of Irish policy makers and the IDA in their management of the process of clustering since the 1980s means that Ireland is now a significant beneficiary from the clustering that has occurred in the high-tech, life sciences, and services sector, with it contributing to Ireland's comparative advantage over other countries competing to attract global FDI [28,30].

What benefits does Ireland receive from FDI?

FDI plays a vital role in contributing to Ireland's economic growth [31,32]. Between 1987 and the year 2000 Ireland outperformed all other OECD economies with GNP expanding by 140% in comparison to an expansion of 40% for the US and 35% in the EU15 and UK over the same time period. While these dramatic growth levels can be put down to a convergence in income levels with wealthier EU economies, the turnaround of the Irish economy in the late 1980s can be attributed to a number of concurrent developments including, the stabilisation of public finances, associated improvements in cost competitiveness, an increase in structural funding from 1989 onwards, the development of the SEM and, most importantly, a dramatic rise in FDI inflows [33]. FDI has played a vital role in facilitating Ireland's transition from primarily a protectionist economy in the 1950s to a world leading exporter in sectors including, technology, pharmaceuticals and medical devices [11]. Foreign companies are also responsible for one in every seven jobs in Ireland, as well as making important contributions to the Irish economy in the form of corporate tax returns and indirectly through their expenditure on Irish goods and services [9]. Similarly, the Irish labour force is also a significant beneficiary of FDI, with many foreign MNCs making large scale investments in upgrading the skill sets of their employees [12].

Inward FDI brings with it not only new investment that boosts national income but also an inflow of new foreign knowledge and technology. These inflows lead to spillovers to the local economy, resulting in higher productivity and increased national economic growth for Ireland. Such external effects from MNCs to domestic firms are generally referred to as 'productivity spillovers' or 'technology spillovers' [34]. The availability of new foreign knowledge through inward FDI has the potential to benefit domestic firms as these can

learn the technology from the MNCs, allowing them to improve their own production processes and resultantly increase productivity [34]. The opportunity for productivity spillovers arises as MNCs find it difficult to protect their know-how in the host country and other firms may somehow learn about, for example, the production technology or management strategy. Domestic or rival firms of the MNC can then apply the new knowledge, thus allowing them to improve technology and overall productivity levels [34]. When measuring the productivity spillovers for the Irish economy, Ruane and Ugur [35] found robust evidence for horizontal spillovers from foreign MNCs to domestic Irish firms, with the effect varying across industry. In contrast, Gorg and Strobl [36] and Barrios et al. [37] developed an alternative approach to gauging the effect of MNCs on the development of domestic plants in Ireland. They expand on a theoretical approach taken by Markusen and Venables [38], which argues that MNCs by developing backward linkages with domestic firms in supplier industries increase the size of markets for these firms, as well as profits in the short run. This can also lead to a further entry of domestic firms in supplier industries, which in turn drives down the price of supplies, along with increasing the scope for the entry of new domestic firms in final goods industries. In support of this theoretical expectation, Gorg and Strobl [36] and Barrios et al. [37] both using data from the Forfas Employment Survey since 1973, find evidence that the presence of MNCs has a positive effect on the entry rate of domestic firms.

The impact of FDI in promoting the growth of host country exports and linkages to the outside world cannot be understated [12]. In Ireland's case FDI has been responsible for transforming the economy from primarily an exporter of agricultural products to a worldwide leader in the exportation of high tech manufactures. Another of the early consequences of the influx in FDI was that it assisted the decoupling of the Irish economy from almost total dependence on the UK as an export destination. The arrival of FDI in the late 1960s onwards played a key role in allowing Ireland to escape a 'web of dependency' caused by geographical factors, whereby small economies become locked into the growth performance of their surrounding region, which is often dominated by a single large economy, being the United Kingdom (UK) in Ireland's case [39]. Ireland's shift away from the UK as its primary export destination resulted in a fall in exports to the UK from about 90% in the 1960s to fewer than 30% by the late 1990s, with the European market becoming the new main export destination for Ireland. The movement away from the UK as its chief trading partner enabled Ireland to focus on regions with faster growth levels and goods with higher income elasticities, giving a long term boost to the growth rate of Ireland's economy [12]⁵.

FDI in Ireland employs 140,000 people directly and 250,000 indirectly. In 2011 inward FDI was responsible for the creation of 13,000 new jobs up 20% on 2010, the result of expansion by foreign MNCs already located in Ireland, including PayPal, Intel and Boston Scientific, as well as the arrival of 148 new investments across all industry sectors. Similarly, the FDI sector also makes important contributions to the Irish exchequer both directly in the form of €3bn in corporate tax returns, accounting for 65% of total corporate tax returns, as well as indirectly through its €19bn spend on Irish goods and services, including €6.9bn on payroll. Other examples, of FDI indirectly contributing to the Irish exchequer and employment include

⁵Income elasticity of demand refers to the responsiveness of demand for the good to changes in the income of individuals demanding the good. A higher income elasticity of demand for a good is associated with those goods where a rise in income leads to a rise in demand for the good.

Intel's 2011 investment of \$500m in upgrading its manufacturing facility in Co.Kildare, which lead to the temporary creation of 850 jobs in the construction industry [9].

Foreign companies also play a key part in developing the skill sets of their Irish employees, with potential spin-off benefits of FDI including their role as 'incubators' for new entrepreneurs [12]. A study on clustering in indigenous manufacturing, found that, in the indigenous software sector, one third of entrepreneurs had previously worked in foreign firms directly before the start-up of the new firm, and two thirds of entrepreneurs has worked in foreign firms in some stage in their careers [40].

The disadvantages of being an FDI intensive economy

Ireland's FDI intensity, in both manufacturing and services, is one of the defining features of the economy [41]. Since the influx of foreign companies in the 1960s FDI has continued to make important contributions to the Irish economy, however Ireland's over reliance on FDI as a stimulator of economic growth has not been without its drawbacks. The footloose nature of FDI means that foreign multinationals are less linked to the Irish economy than indigenous firms, giving them the opportunity to move elsewhere when changes that have the potential to negatively impact their entity, for example rising wage levels, occur in their host environment [42]. This is based on the nature of MNCs as their production processes are easily transferable between countries and can profitably be located elsewhere. This makes it easier for MNCs to shift production from one host country to another than it is in comparison for the average indigenous firm [43]. The 'footloose' nature of FDI in response to changes in production costs and the emergence of low cost manufacturing countries in the former Eastern block and Pacific Rim Countries has raised serious concern about jobs created by MNCs. Ireland is particularly vulnerable on this aspect as wage levels have dramatically increased over the last decade with Ireland having the fifth highest wage level in the OECD-28 in 2009. Since the turn of the century, large scale MNCs including Proctor and Gamble, Intel, Gateway and NEC Electronics have moved manufacturing jobs from Ireland to China, Eastern Europe and elsewhere in response to the availability of cheaper labour [9]. In particular, the 2008 announcement of US computer manufacturer Dell's decision to cut 1,900 of its 4,300 work force and relocate its European manufacturing operations to Poland was a severe blow to the recession hit Irish economy. This decision was a harsh reminder to the Irish economy of the 'footloose' nature of FDI, especially in light of Dell status as Ireland's second largest corporate employer, largest exporter and annual 5% contribution to GDP figures. The move was justified by Dell on the basis that labour costs in comparison to Ireland were at least two thirds lower in Poland, again a sign that Ireland through dramatic wage inflation had eroded its competitiveness [44]. The departure of MNCs can leave behind mass unemployment, as well as grave economic and social implications for the areas where the MNCs were previously located [45].

Although Ireland's competitive tax regime acts as an important feature for attracting FDI, it also provides foreign MNCs with the opportunity to engage in transfer pricing and extensive profit repatriation. These processes result in the distortion of national income figures, with the health of the Irish economy being overstated [46]. Ireland's policy focus on attracting FDI has also been detrimental for the development of indigenous industry, leaving Ireland's economic growth even more dependent on footloose FDI. Similarly, the process of transfer pricing also enables foreign companies to overstate their

R&D expenditure and misrepresent the actual level of research and innovation activities that are pursued by the company in Ireland [13].

FDI through their R&D expenditure plays a central role in the development of Ireland's information intensive 'Smart economy' and desire to become internationally renowned for the excellence of its research. In 2010 Ireland's FDI sector was responsible for R&D expenditure of €1.2 bn, significantly larger than the €450m R&D spend by indigenous companies. While these figures suggest that Ireland's FDI sector is leading the way in R&D investment, when considered in terms of the total number of firms engaged in research, Irish owned firms make up approximately 82% of the total number of firms engaged in R&D activities [47]. Foley and McAleese [48] point out that a substantial part of foreign MNCs R&D expenditure will represent payments to the parent companies for R&D activities undertaken in the home country. The indigenous sector's continued out performance of foreign owned firms in terms of research intensity would suggest that foreign owned firms are still dependent for their innovation performance on R&D performed in their home countries [13]. Consequently, it can then be questioned whether the recent introduction of the R&D tax credit will encourage foreign companies to engage in a greater level of R&D activities in Ireland, or will act as a further incentive for foreign MNCs to engage in transfer pricing.

It is evident from the review of the relevant literature that Ireland's full participation in the EU through the SEM and single European currency is a significant factor in the country's inward FDI strategy. Additionally, the literature also highlights that the multiple benefits to Ireland's economy from FDI considerably outweighs the disadvantages of being an FDI intensive economy. A decision by Ireland to leave the Euro zone could mean the removal of many of these benefits and stagnant levels of economic growth for Ireland's economy in the long term.

This paper aims to contribute to the identified research gap by exploring the consequences for Ireland's FDI sector, if Ireland was to leave the Euro. In recognition of the three main industries in Ireland's FDI sector, the services, high-tech and life sciences, the secondary aim of this study is to compare and contrast the different outcomes for organisations in these three sectors in the event of a Euro zone exit by Ireland. In the absence of quantitative data regarding such hypothesis, qualitative research methods are used to address this research question.

The findings indicate that Ireland outside the Euro zone would be a less attractive destination for FDI, with greater exchange rate volatility and increased transaction costs being among the disadvantages incurred by MNCs located in Ireland. It is also evident from the findings that the uncertain economic future faced by Ireland's economy in the absence of support from key Euro zone financial institutions, would further inhibit its ability to attract FDI.

Methods

Since this paper is based on the hypothetical situation of Ireland leaving the Euro, a qualitative approach is used to gather the necessary data. Indeed, the complexity of this topic and the variety of social actors involved, including the state and multiple foreign companies, means that a qualitative research methodology provides a variety and depth that is required to develop an understanding of this phenomenon.

Three informal face-to-face interviews with individuals operating in Ireland's FDI sector have been carried out. The first interview involves an individual formerly employed by a MNC engaged in high tech manufacturing, the second works in a global pharmaceutical company in the life sciences sector while the third is employed in an

insurance company and fund management organisation that are both subsidiaries of the same MNC.

The five core research questions developed for this topic guide were put together with the overall aim of developing a coherent picture of the likely consequences for and reactions of organisations in Ireland's FDI sector to a decision by Ireland to leave the Euro. In order to create this narrative, it was of significant importance that the first question focused on understanding why the foreign companies the interviewees work for made the decision to locate in Ireland. By doing this it provided us with a basis from which we could ask further questions and reach the overall aim of drawing together the possible outcomes for Ireland's FDI sector if a policy decision was made for Ireland to leave the Euro.

The second question focused on the benefits that foreign companies located in Ireland derive from Ireland's membership of the Euro zone in comparison to locating in either an EU country that is not in the Euro zone or a country outside of the EU. The aim of this question was to determine the importance of Ireland's Euro zone membership as a feature for attracting FDI.

The aim of the third question was to establish the impact that Ireland leaving the Euro zone would have on each of the foreign companies according to the respective interviewees. Leading on from this, the fourth question centred on finding out how the interviewees' companies would be likely to react to these changes in their host country's environment. This question allowed us to derive whether the companies would be likely to remain in Ireland if it was to leave the Euro zone, and resultantly how a decision to leave the Euro zone would affect Ireland's attractiveness as a location for FDI.

After gaining a unique insight into the possible reactions of companies located in Ireland's FDI sector to Ireland leaving the Euro, the final question centred on ascertaining the views of the interviewees as to how the responses of foreign companies, in general, would impact Ireland's economy.

We use the same topic guide for each of the interviews, ascertaining the respondents views as to why their individual companies had located in Ireland, the benefits their organisations reap from Ireland's membership of the Euro zone and the possible consequences for and reactions of their companies to Ireland leaving the Euro currency. In order to reflect the sectoral differences of these three organisations, we modified the topic guide to take into account the distinct features of each of these three industry sectors. For example, in the pharmaceutical sector clustering is a very prominent feature, while in the high-tech sector adequate infrastructure is important and skilled labour is essential to the services sector.

We report all the interviews anonymously as we are aware that the three interviewees are revealing information about their organisations that they may not necessarily want in the public domain. The interviewee employed in the high tech manufacturing sector will be named as 'Interviewee T', the second who works in a global pharmaceutical company will be named as 'Interviewee P' while the third employed in the insurance company and fund management organisation will be named as 'Interviewee S'. We found that all the interviewees were more than happy to engage with the above mentioned questions and consequently were able to provide us with comprehensive answers.

Results and Discussion

In considering the impact of an Irish Euro zone exit on the country's

FDI sector, all the interviewees agreed on three main reasons that made Ireland a preferred location for their respective organisations: the availability of a highly skilled labour force, a competitive tax regime and EU membership.

The three interviewees expressed the view that the availability of a young and well educated workforce, with skills relevant to their sectors, was among the chief reasons for their respective organisations locating in Ireland. This confirms the view of Tansey [24] that greater emphasis on education since the 1960s has led to the development of a highly skilled labour pool playing a significant role in attracting FDI. It was noted by interviewee S that a history of relatively peaceful industrial relations between employers and the labour force had been a prominent factor in the decision of his organisation to locate in Ireland. He pointed out that unlike other European countries where large scale labour force strikes are a regular occurrence, the accepted norm of dialogue and negotiation between employers and employees in Ireland was an appealing feature for foreign organisations. Similar to Gunnigle and McGuire [23], interviewee T representing a company of US origin in the high-tech sector noted that Ireland's English speaking labour force, along with the five hour time difference between the two countries and the use of comparable legal systems were important incentives to locating in Ireland. He also acknowledged that the historical links between Ireland and the USA had played a considerable role in encouraging a number of US MNCs in the tech sector to locate in Ireland.

In terms of Ireland's cost competitiveness, interviewee S noted that costs became very visible during the Celtic Tiger and more specifically they incurred difficulty in recruiting employees with suitable skills. However, post Celtic Tiger interviewee S did acknowledge that higher levels of unemployment meant they no longer experienced problems in recruiting individuals with the required skill sets. In regards to the high tech and pharmaceutical sectors, both interviewee T and interviewee P echoed similar views that in spite of rising labour costs during the Celtic Tiger those costs were small when examined in light of the profit margins on the output of both industry sectors. The two interviewees also expressed the view that both industries required specific skill sets that are not readily available in other host countries and thus are traditionally well paid given their specificity. The views of interviewee T and interviewee P back up the point made by Moxon-Brown [25] that irrelevant of Ireland's failure to remain cost competitive, the quality and specialisations of Ireland's graduates still acts as an important feature in attracting global FDI. Furthermore, it was noted by interviewee T that the end of the Celtic Tiger and resultant increases in unemployment levels had led to higher productivity and commitment levels among employees.

Finally, the IDA policy focused on developing clusters of MNCs, in particular in the life sciences, high tech and services sectors, since the 1980s has proved to be an important feature in attracting FDI. The three interviewees acknowledged that the 'contagion effect' had influenced the decisions of their respective organisations to locate in Ireland, whereby they were enticed by the fact industry leaders in their sectors had already located in Ireland [28,29]. Interviewee S noted that his company had benefited from the cluster of fund management companies that developed in the IFSC, leading to the cultivation of a highly skilled labour pool that remain in the jurisdiction and move between the various companies as they can see multiple opportunities to move up the ranks of the assorted companies in the cluster. Similar to this, interviewee T felt an important advantage of clustering in the high tech sector was the opportunity to link up with IT colleges, and thus

stream graduates to have the required skill sets for the tech sector, for example in areas such as engineering or computer sciences. Interviewee P acknowledged that the geographical concentration of pharmaceutical plants in the Cork area had led to a number of research linkages with University College Cork and the Institute of Technology Cork, as well as support from a range of other business services, including plant design, construction and recruitment services. For example, interviewee P noted that the Science Foundation Ireland had invested significant funds in developing research, development and innovation collaborations between the major pharmaceutical companies, local colleges and research centres. Interviewee T and P both referred to improvement in infrastructure and the ease of access to the European market as being a major attraction to locating in Ireland. Interviewee T also recognized the 'accommodating nature' of the Irish work force, for example, goods required to reach a certain market by Monday morning were if necessary packaged and shipped outside normal working hours, whereas in other European cultures the transporters would not feel obliged to work outside their allotted work schedule. This experience reflects the view of Ruane and Buckley [11] that the pro-business attitude of the Irish and determination to develop a more attractive business environment compared to neighbouring countries contributed to Ireland becoming a leading destination for global FDI. Barry [27] made the point that the IDA have played an important role in targeting niche companies and expanding industry sectors to locate in Ireland. Interviewee S backed up this view, as he acknowledged that the IDA, along with the Central Bank and Minister for Finance had all been very pro-active in getting his respective organisations to locate here, ensuring they had their relevant licences and fulfilled their agreements to generate a certain number of local jobs.

There was unanimous agreement among the three interviewees that Ireland's competitive tax regime had played a major role in their decisions to locate in Ireland. Interviewee S let it be known that the fund management group was operating under the Dutch taxation system. However, interviewee S also noted that the most prominent reason behind the insurance entity's location in Ireland in the mid 1990s was the exceedingly low corporation tax rate, which at the time and still today remains one of the lowest in Europe and indeed the world. These sentiments confirm the viewpoint of Barry [13] that Ireland's low corporate tax rate remains the foundation of Ireland's inward FDI strategy. Interviewee P noted that the life sciences and in particular the pharmaceutical sector had been significant beneficiaries of the R&D tax credits established in 2004 and the later introduction of capital allowances for the acquisition of IP. Given the importance the three interviewees placed on the competitive tax regime as a reason for locating in Ireland, it is not unexpected that the three individuals also supported Ireland standing firm to calls from EU counterparts to engage in the harmonisation of tax rates. While interviewee S reiterated that the fund management group was subject to the Dutch tax system and resultantly would not be affected by any negative change in Ireland's tax regime, he did suggest that the insurance entity would consider moving elsewhere if Ireland's corporate tax rate was to significantly increase. O'Connor [46] noted that Ireland's competitive tax regime allows MNCs to engage in an extensive level of transfer pricing and profit repatriation. These features have attracted substantial criticism from US representatives, with interviewee T being of the opinion that a clamp down by US authorities on these activities by US MNCs in Ireland is more likely than EU tax harmonisation in the near future. However, all three interviewees did acknowledge that EU tax harmonisation would be inevitable and that when it did happen it would most likely stimulate

their respective organisations to reconsider the benefits they gain from locating in Ireland relative to other potential host countries.

Along with the availability of skilled labour and a competitive tax regime, both interviewee T and interviewee P expressed the view that Ireland's membership of the European Union was among the prominent reasons for locating in Ireland, as it provided both organisations with an export platform into the vast European market. These findings corroborate the opinion of both Ruane and Buckley [11] that Ireland's entry into the European community enhanced its attractiveness to foreign investors outside of the EU. All three interviewees acknowledged that while their respective organisations had located in Ireland prior to its decision to join the Euro zone in 1999 and the subsequent introduction of the Euro in 2002, their organisations had reaped considerable benefits as a result of that decision. Similar to the view of Petroulas [49], the three interviewees noted that the main advantages of Euro zone membership were the elimination of currency exchange risk with other Euro zone countries and a reduction in transaction costs. This elimination of exchange rate uncertainty within the Euro area, according to interviewee S, allowed for greater focus on interest rates rather than the risk associated with borrowing or lending across national borders. The three interviewees noted that reduced transaction costs were the result of having fewer currencies to exchange when dealing with cross border activity, and only one currency to deal with when trading with fellow Euro zone countries. Interviewee T was of the view that this feature had made treasury management simpler for his company. Also greater ease in the translation of tax liabilities and the comparison of costs such as salaries and rent was another important benefit for interviewee S. In contrast to the opinion of both De Sousa and Lochard [22], interviewee S did not find that Ireland's Euro zone membership resulted in a suppression of in-house costs of maintaining foreign currency expertise, noting that this would only be one of many activities carried out by his staff.

While all three interviewees conceded that their organisations, sectors and indeed FDI industry as a whole would be negatively impacted by Ireland leaving the Euro zone, each interviewee cited different consequences for their organisations that would result from such a decision. Interviewee S could only foresee Ireland leaving the Euro in the event of a total Euro area break up, with the main impact on his organisation being the resultant exchange rate risk of Ireland's standalone currency and increased transaction costs. This view reflects that of Belke [50] who purported that an exchange rate risk premium would be attached to foreign lending in Ireland, leading to increased domestic interest rates for commercial borrowing. It was also noted by interviewee S that higher transaction costs, for example greater levels of currency conversion when paying tax liabilities, would be incurred by his organisation, if Ireland was outside the Euro zone. Although it was contended by Foley [6] that Irish exporters, both foreign owned and indigenous organisations, would benefit from a devalued local currency if Ireland left the Euro, interviewee S was steadfast in his view that these gains would be outweighed by the impact of a destabilization in the Irish economy on his organisation.

It was noted by interviewee T that if Ireland was to leave the Euro and default on its sovereign debt, it would most likely be unable to access the capital bond markets for a period of up to ten years. The resultant consequence, according to interviewee T, being that Ireland would be unable to borrow funds needed to invest in infrastructure that is of significant importance to his own organisation and indeed the high tech sector as a whole, as most organisations in this industry use Ireland as an export platform into the European market. Interviewee

P expressed similar sentiments in that continued investments in infrastructure, educational institutions and research programmes by the government around the cluster of pharmaceutical plants in the Cork area was of crucial importance to their continued presence in the vicinity. This view echoes that of both Cruces and Trebesch [51] who posit that sovereign debt default hinders national governments ability to access capital in the long term.

Similar to interviewee S, interviewee T could only contemplate a total break up of the Euro rather than Ireland making the sole decision to leave the Euro. The view of interviewee T were similar to that of Eichengreen's [52] in that in the event of a Euro area break up he could foresee various countries enforcing trade barriers and engaging in large scale protectionism, resultantly stifling economic activity in not just the high tech but all industry sectors. In line with the stance taken by Lucey [7], interviewee P noted that the increase in import prices resulting from a devalued currency would lead to a dramatic rise in the price of petroleum based products given Ireland's dependence on imported oil for satisfying its energy requirements. Interviewee P took the view that such dramatic price rises would result in increased energy costs in Ireland, as there are few alternative sources of energy. Since pharmaceutical plants have large energy supply requirements, particularly given the unique nature of their production processes and output, interviewee P noted that increased energy prices would have a significant impact on the costs of doing business in Ireland.

It was noted by Barry O'Leary [53] (CEO of IDA) that foreign investors tend to associate Ireland's membership of the Euro zone with the country's long term economic stability [15]. This view was reflected in the explanations expressed by the interviewees as to the possible reactions of their organisations to Ireland leaving the Euro. Interviewee S felt that the lack of certainty surrounding Ireland's long term economic future as a result of leaving the Euro, would force the insurance organisation to leave Ireland and locate elsewhere. In the immediate aftermath of Ireland leaving the Euro, interviewee S pointed out that the organisations activities would be transferred back to head office. It was also noted by interviewee S that the fund management group would not necessarily leave Ireland if it was outside the Euro zone, but he did note that this was due to the uniqueness of the organisation in being subject to the Dutch tax system. In the event of Ireland leaving the Euro, interviewee T felt that his organisation as well as many others in the high-tech sector would leave Ireland, sighting the 'footloose nature' of organisations in this sector as a feature that would enable them to easily relocate. Interviewee P differed from the other two interviewees; in that he would not give a definitive answer as to whether his organisation would leave Ireland if it was no longer in the Euro zone. Interviewee P did note that the reaction of his organisation would to some extent be linked to the responses of other organisations located in the same industry cluster, however interviewee P did point out that his organisation would most likely not make further investments in Ireland if it was to leave the Euro zone. The possible threat of civil disobedience in the short term and the inability to call on outside financial support from the Euro zone in the long term, were two features that interviewee P felt would make Ireland a less appealing destination for global FDI if it was to leave the Euro currency. Consequently, it can be deduced that the ease of transferability in the operations of individual organisations would play an important role in determining their reactions to Ireland leaving the Euro.

All three interviewees agreed that the reactions of the FDI sector to Ireland leaving the Euro zone would be disastrous for the long term

health of the economy. Interviewee T expressed the opinion that the greatest benefit FDI provides Ireland with is 'quality jobs,' being well paid and skill specific, for its labour force. However, all three interviewees purported that the exodus of foreign companies that would occur if Ireland was to leave the Euro zone would be accompanied by a rapid rise in unemployment levels. Resultantly, interviewee T noted that mass emigration would be the most likely result of rising unemployment in Ireland's economy. While Foley [6] argued that a devalued local currency would increase Irish exports, interviewee P took the view that since FDI counts for a significant proportion of Ireland's exports, the departure of multiple export intensive foreign companies from Ireland in the wake of a Euro exit would leave export levels either unchanged or worse off. Interviewee S expressed the view that Ireland without the stability that the Euro zone provides would be a significantly less appealing destination for FDI, as well as highlighting that Ireland's small economy on the periphery of Europe would struggle to compete with and in the world's major economies.

Conclusions

While much attention has been given to the theoretical benefits Ireland's economy could gain from a Euro zone exit, little consideration has been given to the impact of such a decision on the country's substantial FDI sector. Ireland outside the Euro would face an uncertain economic future, with greater exchange rate volatility, rapid inflation and higher interest rates. These resultant features would not be conducive to an open economy so reliant on FDI for employment, exchequer returns and economic growth.

By assessing the consequences for Ireland's FDI sector, if Ireland was to leave the Euro, this paper has both highlighted the lack of literature in this topic area, as well as making an important contribution to this research gap. Indeed, the findings illustrate that Ireland outside the Euro zone would be a less attractive destination for FDI. Many of the benefits that the FDI sector currently reaps as a result of Ireland's Euro zone membership, including exchange rate stability and reduced transactions costs, would be irrevocably removed as a result of a Euro zone departure. Each of the interviewees highlighted different consequences for their organisations if Ireland was to leave the Euro zone. Such consequences are reflective of the sectoral differences in their respective industries. However, all three interviewees agreed that the most significant impact on the country's FDI sector would be the chaos that would ensue in the immediate aftermath of a departure from the single currency, as well the considerable uncertainty over the future health of the Irish economy in the long term. Ireland's inability to guarantee its long term financial stability outside the Euro zone in the absence of external support from key Euro zone financial institutions would make it a decidedly less attractive destination for foreign investors eager to partner with countries committed to the future stability of their economies. Consequently, Ireland without membership of the single currency would struggle to both maintain its current levels and attract new FDI.

The reactions of the FDI sector to Ireland leaving the Euro zone would be both widespread and negative for the Irish economy as a whole. A mass exodus of FDI in the aftermath of a Euro exit by Ireland would lead to a surge in national unemployment figures, as well as reduced exchequer returns and export levels. FDI has played an important role in Ireland's economic growth over the preceding decades. The future development of Ireland's information intensive 'Smart Economy' is even more dependent on FDI that is high value added, requiring high skill levels, and mainly innovation rather than product oriented. It is

only economic activities with these characteristics that can justify high wage levels and enable Ireland to attain stable levels of economic growth in the long term. Given the overall dependence of the Irish economy on FDI for economic growth, the exodus of a substantial proportion of FDI in the event of a Euro exit by Ireland would have considerable ramifications for the long term health of the Irish economy.

While this study has allowed for data to be gathered on an important topic that is relatively under researched, there are a number of limitations to this study. It is imperative to note that the 'sample' used may not be representative of the views of the FDI industry on a Euro zone exit by Ireland as a whole, or indeed the services, high tech and life sciences divisions within the FDI sector. A larger sample size would be needed to give greater weight to the data collected and the subsequent implications that arose from the findings. Since the idea of Ireland leaving the Euro zone is a hypothetical situation, we did find that, while the interviewees could competently answer the questions, they did see this situation as an unlikely occurrence and had not considered in an in-depth manner how their organisations would be affected by such an event. It is thus probable that the quality of the data collected was hindered by the likelihood each interviewee or the organisation being represented by the interviewee had attached to the possibility of Ireland leaving the Euro. Similar to this, it must also be pointed out that the reluctance of two of the interviewees to tolerate the idea of Ireland leaving the Euro off its own accord as opposed to a total or partial break up of the Euro zone would have influenced the findings. While the consequences of an individual policy decision by Ireland to leave the Euro are not dissimilar to those that would occur in the event of a total or partial Euro area break-up, they can be distinguished. These differences could potentially have impacted the findings as the reactions of Ireland's FDI sector could differ depending on whether Ireland was to make the independent decision to leave the Euro or a more comprehensive break up of the Euro zone was to occur.

The findings from this paper develop a number of ideas for future studies in this area. It was noted by all three of the interviewees that the harmonisation of business tax rates across Europe, while not an imminent event, will most likely occur in the long term. Given that Ireland's exceedingly low 12.5% corporate tax rate is an integral part of its inward FDI strategy, the future harmonisation of business tax rates across the EU has the potential to severely impact the country's FDI sector. A study assessing how this will affect the country's FDI sector and whether foreign owned entities will reconsider their decision to locate in Ireland in light of the harmonisation of business tax rates across Europe would be a valuable contribution to literature based on Ireland's FDI sector. Along similar lines, a study exploring the impact of a possible clamp down by US authorities on American MNCs engaging in large scale transfer pricing and profit repatriation through the use of the Irish taxation system was another idea that arose from the findings. It was also evident from carrying out the literature review that Ireland is just one of many countries competing to attract global flows of FDI. Since MNCs considering investment options must compare and contrast the advantages and disadvantages of locating in various countries, the idea of a comprehensive guide, independent of national agencies, assessing the key features of each country's inward FDI strategies would be a significant contribution to research in this topic area. An important subset of this study could also be based on emerging economies, for example in the Pacific Rim and Africa, which are using FDI based development models to stimulate economic growth, as well as the type of FDI they are trying to attract whether it be manufacturing or information intensive activities.

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