THE PLUMPEST OF PIIGS: IRELAND'S POST-RECESSION

ECONOMIC RECOVERY By

MATTHEW BARTLEY

A Thesis Submitted to The Honors College

In Partial Fulfillment of the Bachelors degree
With Honors in

Economics

THE UNIVERSITY OF ARIZONA

D E C 2 0 1 6

Approved by:

Dr. Charity-Joy Acchiardo
Department of Economics

Abstract

Following the 2008 global recession, the acronym PIIGS was used to describe the European nations whose economies were negatively impacted the most. These countries were, Portugal, Italy, Ireland, Greece, and Spain. While the rest of these nations are still stuck in economic stagnation, Ireland has experienced a swift recovery. A combination of austerity measures, foreign direct investment, and effective policy has seen Ireland past this difficult time and transformed the country into a thriving economy. I will describe what Ireland did, and how it was effective relative to the other PIIGS.

The Plumpest of PIIGS: Ireland's Post-recession Economic Recovery

Introduction

The great recession negatively impacted the European economy as a whole as well as its individual nations in the late 2000's. Some countries were affected more than others, and the ones that fared the worst were grouped together through the acronym PIIGS. Portugal, Italy, Ireland, Greece, and Spain all experienced economic contraction as well as negative GDP growth rates in the early years of the recession. Of the PIIGS, Ireland's economic recovery stands out as being the quickest, and in terms of GDP growth, the most successful. In 2010, Ireland's budget deficit was 32.4% of its GDP, the highest in the world at the time (CIA Factbook, 2016). Today, Ireland's budget deficit is 2.4% of its GDP (2016). The factors that lead to Ireland's economic recovery are its debt repayment record, its ability to attract foreign direct investment, and the education level of its young workforce.

Some scholars point to Ireland's debt repayment measures as the primary reason for its post-recession economic recovery (Castle, 2013; Samuelson 2010). Ireland complied with the EU guidelines for cutbacks and repayment which allowed it to keep interest rates on its bailout loans low. Acceptance of these looming measures and weathering the storm surely helped Ireland in the long run. While other countries were hesitant to implement cutbacks and socialize debt, Ireland was willing to roll up its sleeves and endure short-term hardship in order to promote long-term growth at the expense of its citizens' immediate welfare.

In addition to debt repayment measures, economists argue that Ireland's substantial foreign direct investment inflows since the great recession have helped to stimulate the economy and return it to pre-recession growth levels. While there are several reasons as to why Ireland receives so much foreign direct investment, many would agree that the country's 12.5% corporate tax rate is the biggest factor (Stock, 2015). If corporate earnings are taxed at a lower rate, multinational corporations are more likely to set up subsidiaries or re-locate to the country that has such favorable tax conditions. In Ireland's case, American multinational corporations are taking advantage of these low corporate tax rates and are setting up their European headquarters in Dublin as a result (Stock 2015; McDonald 2015; Weckler, 2015). At first glance, the other PIIGS changed their corporate tax rates quite often and their rates never fell as low as Ireland's (OECD, 2015). These relatively high, variable corporate tax rates in the other PIIGS lead to increased investor confidence in Ireland. Increased FDI went on to combine with other policies and institutions to facilitate Ireland's swift economic recovery.

One of these institutions is Ireland's educational system. What makes Ireland's workforce so valuable to firms is the country's tertiary education level among young adults. As of 2013, over half of its citizens aged 25-34 have tertiary education. Incredibly, this is the highest among European OECD countries (OECD, 2016). The combination of a high skilled workforce and policies that multinational corporations regard as favorable, results in Ireland being an excellent place for firms to set up subsidiaries and invest in business enterprises. Multinationals would experience economies of scale by having these two advantages grouped together in one location.

This paper will discuss the circumstances that led to Ireland's return to growth and extend the current research to show that the country's recovery was largely due to a combination of increased net FDI from American multinational tech companies and a specific government agency that gave Ireland extra leverage during offshoring negotiations. These two factors are what the other PIIGS did not have. To begin, I will discuss the debt repayment measures that Ireland abided by, while focusing on how they affected its citizens and economy, as well as the interest rates it received. Next, I will uncover the root of Ireland's FDI inflows. Although the low corporate tax rate plays a big role, other polices have made Ireland a desirable place in which multinationals can invest and conduct business. In light of that, Ireland's relationship with Silicon Valley will be examined in order to identify what factors have allowed this relationship to grow and how it contributed to its recovery. Finally, I will discuss the attractiveness of Ireland's labor force and how it has allowed firms to recruit a steady supply of high skilled workers. Ireland took some specific steps to improving their economic health by being austerity-tolerant, developing relationships with American multinational corporations, and leaning on their Industrial Development Authority (IDA Ireland). Consequently, Ireland's economic growth rates are second to none among PIIGS, and forecasts for future growth are exceptionally optimistic.

Overview of Austerity Measures

In order to combat the adverse effects of the global financial crisis, Ireland chose to implement a number of austerity measures in order to reduce their budget deficit.

- 2010 – Ireland's deficit sits at 32.4% of its GDP and the country unveils a budget plan to reduce it
- 2011 – the deficit falls to 12.6% of GDP as austerity measures start to have an effect on the economy
- 2012 – the deficit decreases to 8% of GDP and Ireland's creditors lower the interest rate on its loans
- 2013 – Ireland exits its bailout program and the deficit declines to 5.7% of GDP
- 2014 – FDI inflows start rapidly increasing and Ireland's deficit falls to 3.8% of GDP
- 2015 – Ireland's deficit drops to 2.3% of GDP

When a country chooses to endure austerity, it generally increases taxes while reducing government spending. There are many short-term negative consequences of weathering a period of austerity. Generally, unemployment will increase, since the public sector has to cut back on spending. As a result, layoffs in the public sector become more common. Additionally, the take home wage for Irish workers decreases with the increase in income tax. This means that government spending and consumption both decrease, negatively affecting the country's GDP. Clearly these measures are not the most popular for working citizens as their immediate finances, and perhaps jobs, are put at risk. That is why these types of measures are politically difficult and usually only introduced when absolutely necessary.

In the wake of the 2008 global recession, Ireland's banks were in need of assistance from the Irish government due to their inability to pay their debts. The country was offered a bailout in 2010 in order to avoid delinquency on its debt from an entity known as the European Troika, consisting of the European Commission, the International Monetary Fund, and the European Central Bank. In order to qualify for bailouts, a country had to adhere to the troika's budget recommendations and implement austerity measures. Ireland's bailout package consisted of roughly 85 billion euros, with 67.5 billion coming from loans from the European Union, the United Kingdom, Denmark, and Sweden (CNN, 2010). The other 17.5 billion came from Ireland's reserves and pensions (2010). This policy was met with public backlash due to the immediate financial harm on individual Irish citizens, particularly public sector workers and citizens who depended on social welfare programs for income. The Irish plan, which aligned with the troika's, was to increase income tax while lowering minimum wage, and decease public spending and employment. In 2010 Ireland put a four year budget plan in place with its goal being to reduce its annual budget deficit to 3% of GDP.

The plan included the following:

- 2.8 billion euro cut to social welfare programs, with cuts primarily coming from unemployment insurance and child income support policies
- 1 euro minimum wage cut, from 8.65 euros to 7.65 euros
- Increases to university registration fees and public water charges
- Cuts to public sector jobs by 24,750 employees and reduced gross public sector wages by a total of 1.2 billion euros
- A difficult political decision to keep the corporate tax rate at 12.5%, in the face of public dissent
- Capital acquisitions and capital gains tax reform to yield an additional 145 million euros (FinFacts, 2010)

According to the plan, these measures would result in a decrease of 15 billion euros, with 10 billion saved through cuts in spending and 5 billion saved through tax increases (2010). All of these conditions fell in place with the troika’s conditions for its bailout loans. Ireland’s adherence to these measures and short-term hardship is what separated it from the other PIIGS that also implemented austerity measures for bailout loans from the troika.

In order to clarify Ireland’s austerity measures, they can be compared to those in Greece. Ireland has newfound financial sovereignty while Greece is currently still stuck in crisis. In 2010 Greece received a 110 billion euro bailout from the troika. Greece’s austerity measures were much more gradual than Ireland’s sharp cutbacks. Greece unveiled a series of austerity packages in 2010, the same year that Irelands four year budget plan was announced. The first two packages included cuts to Greece’s public sector wages and bonuses, with each package’s cuts growing in severity, increased taxes on petroleum, and increased tariffs on imported automobiles. They combined to save Greece nearly 6 billion of its 3 year target of 40 billion euros (Enet, 2016; CIA Factbook, 2016). Only after realizing that these two austerity packages were failing to allow Greece to avoid default, did the Greek government approach the troika in order to develop a stronger plan. The First Memorandum, as it became known as, was implemented, to the chagrin of the Greek public. Its goal was to save an additional 30 billion euros. (The Guardian, 2010)

The measures of the memorandum included the following:

- 8% cut to public sector allowances
- Limiting biannual bonuses in the public sector to 1,000 euros
- Increasing the retirement age of women to 65
- Basing retirement income off average lifetime income, rather than most recent (highest) pay (The New York Times, 2010)
- Value added tax increases across many levels of production. From 5% to 5.5% (manufacturer), 10% - 11% (retailer), and 21% - 23% (consumer)

Greece’s budget to reduce is deficit was met by much more backlash than Ireland’s was. The Greek public went as far as rioting in the streets and going on strike in order to protest the austerity measures. Although the Irish public was reluctant to tolerate austerity as well, they were far more cooperative with and accepting of their government’s decision than the Greeks. Without the approval of the public, the Greek austerity measures were much more difficult to implement and uphold.

As Ireland continued to put up with the discomforts of austerity and stuck to its four year budget, investor confidence continued to grow in Ireland, even among the troika itself. As a result, the troika sequentially lowered the interest rates on Ireland's loan packages until Ireland was paying 2.6% to the European Commission (0% margin, meaning that Ireland paid the same interest rate on its loans that the European Commission paid on its own loans) (Reilly, 2011). In comparison Portugal paid an average rate of 3.7%. (Kowsmann, 2015) The continuous decrease in interest rates on its loans saved Ireland billions of euros because the interest rates on the loans they already had were refinanced to the new interest rate each time. Seeing that Ireland was able to exit its bailout program so quickly compared to its counterparts, the incentive was there for firms to invest in Ireland's economy. Since Ireland left its bailout program in 2013, its credit rating has been upgraded by Moody's 3 times, going from Ba1 (non-investment grade, speculative) to A3 (upper medium grade) (Moody's, 2016).

2013 was an important year in Ireland's recovery, as Ireland's austerity measures boosted its economic turnaround. This is when Ireland's economic recovery and GDP growth, facilitated by a heavy supply of foreign direct investment inflows, started to pull away from the other PIIGS.

Foreign Direct Investment's Pivotal Role

Ireland has outperformed the other countries of PIIGS substantially when it comes to attracting foreign direct investment.[1] A country can benefit from the jobs that are created and taxes that are paid by foreign firms providing FDI. The host country receives taxes on both the revenue of the foreign firm and the salaries of its employees. Thus, the ability to attract foreign direct

[1] FDI is when a foreign entity makes an investment in the form of controlling ownership in business enterprises located in another country

investment can provide a significant external boost that can help stimulate an economy and drive it towards long term growth.

World Bank data shows European nations' economic indicators from the year 2000 to 2015 and allows for the analysis of foreign direct investment net inflows by country. FDI net inflows include all investment made by non-resident investors in a respective country, including: reinvested earnings, intra-company loans, net repatriation of capital, and repayment of loans. In 2008, when Ireland's bailout was being discussed and the country had its austerity measures set in place FDI was $23.26b. In the same year, Spain's FDI inflow was $79.58b, Portugal's was $7.82b, and Greece's was $5.73b. Meanwhile, Italy had a negative inflow of ($9.5b) (World Bank, 2016).[2]

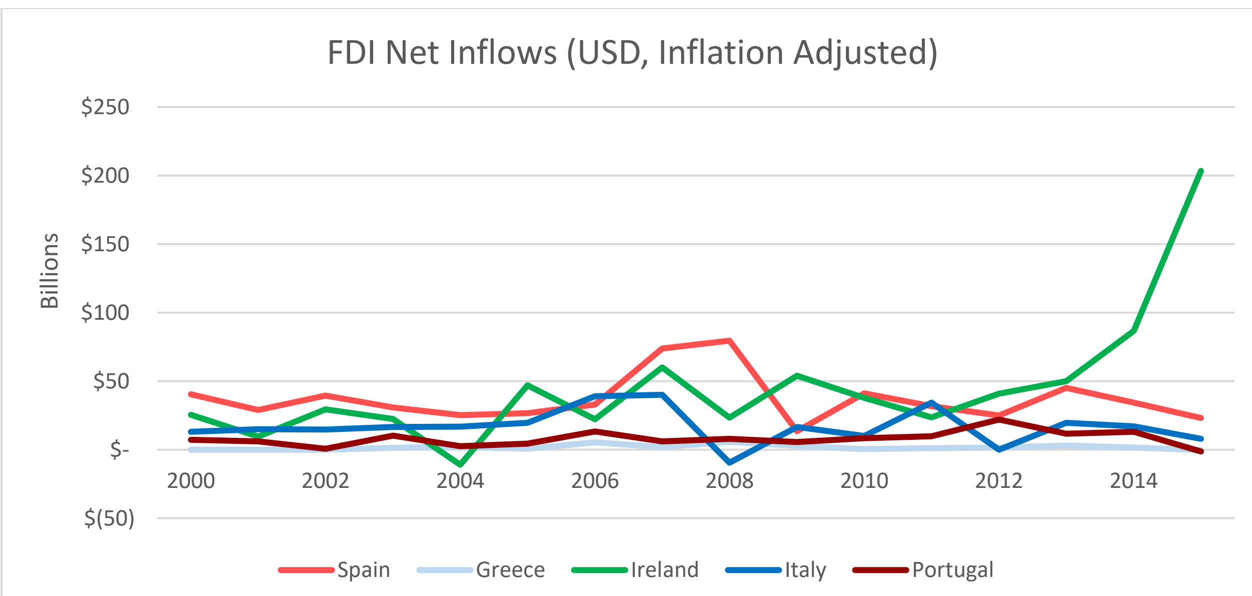

Figure 1. PIIGS FDI Net Inflows 2000 – 2015

[2] For a negative inflow to exist, an investor has to have invest in an economy, and pull out the remainder or a substantial amount of that investment at a later time

Figure 1 shows the PIIGS net FDI inflows in billions of USD. A few details stand out in this graph. Spain's FDI inflows were high relative to its counterparts in 2008, however this did not continue as these countries began coping with the global recession. Since 2012, Ireland has received the most FDI inflows per year. Ireland's 2012 – 2015 period is the only prolonged period of increased investment. If FDI inflow is a predictor of economic success, Ireland appears to be the first country to break out of stagnation. During the 4 years after the recession, the trend seems to show that investor confidence in Ireland has grown significantly. For a full picture of how FDI inflows relate to growth rates, it is necessary to look at GDP growth rates per country.

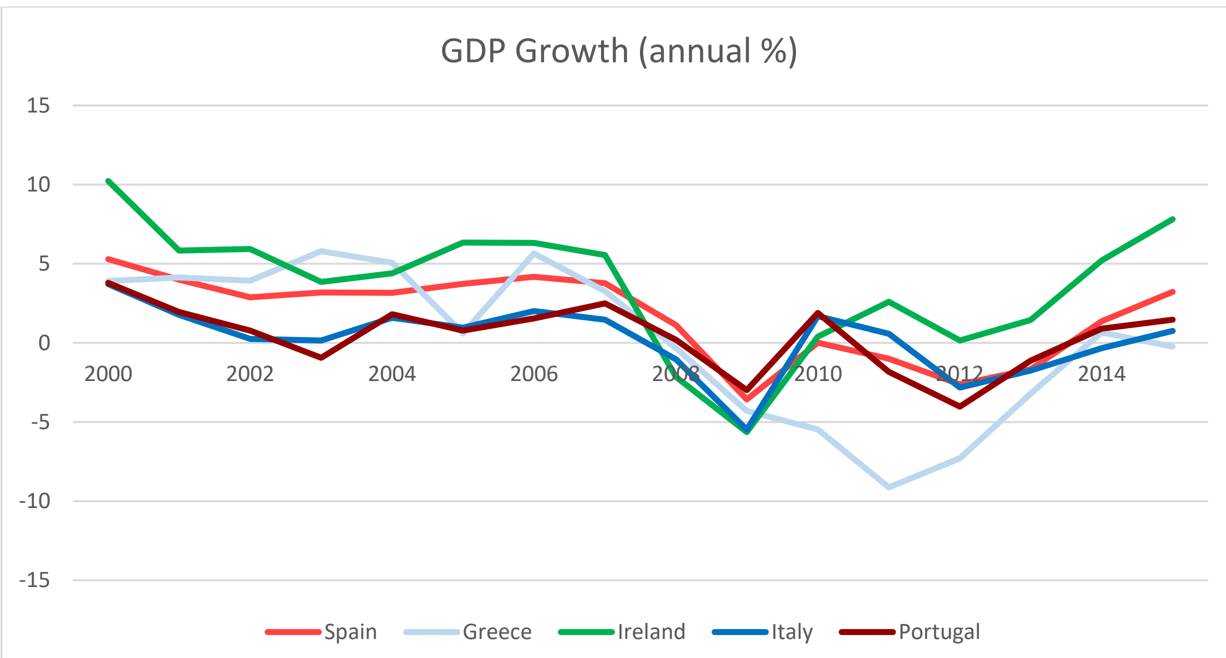

Figure 2. PIIGS Annual GDP Growth Rates 2000 -2015

The graph above shows annual GDP growth rates for the PIIGS. 2012 is a significant year for Ireland, both in its GDP growth rate and FDI inflows. The data suggests that this is the year where Ireland started to experience a substantial period of growth relative to the other PIIGS nations. In 2013 American FDI in Ireland rose by 42%; during the same period, US investment to Europe fell by 19% (McDonald, 2015). This is a significant increase considering the United States' already large FDI stock in Ireland. "As of year-end 2013, the stock of U.S. foreign direct investment in Ireland stood at USD 240 billion, more than the U.S. total for China, India, Russia, Brazil, and South Africa (the BRICS countries) combined" (U.S. Department of State, 2015).

In order for a country to appeal to corporations that can provide foreign direct investment, they must first determine what incentivizes them to do so. The most attractive thing, according to a survey of multinational corporations is a favorable corporate tax rate (Liebscher, 2007). Other incentives include research & development support, access to markets, and expatriation polices that look favorably upon a common language and social setting. Ireland's 12.5% corporate tax rate is by far the lowest out of this group of countries, and is well below the world average of 22.6% (OECD, 2016). It has been at this rate since 2003, when FDI inflows began their steady increase. Since then, the other PIIGS have had inconsistent corporate tax rates.

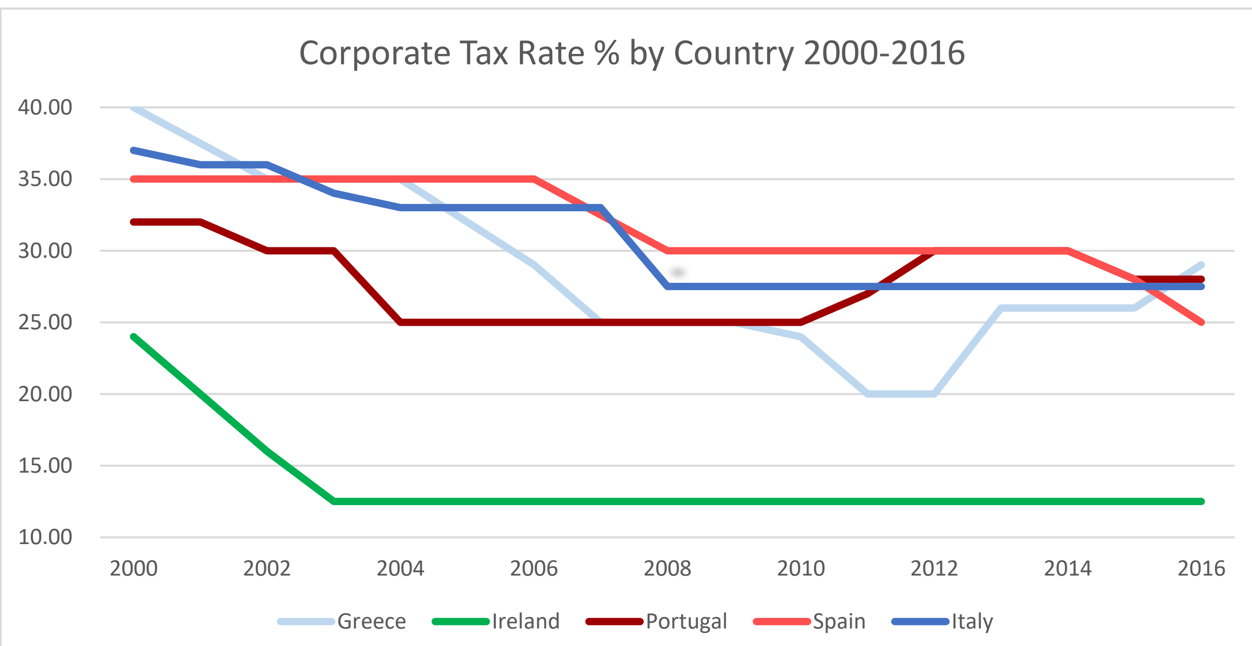

Figure 3. PIIGS Corporate Tax Rates 2000-2016

Figure 3 shows Ireland, Italy, Portugal, Greece, and Spain's corporate tax rates side by side for the period 2000 – 2016. Italy's corporate tax rate was 37% in 2000 and has since been periodically lowered to its current rate of 28%. Greece's rate has varied, both up and down, within the 20% - 40% range but is currently at a post-recession high. Spain's was at 35% in 2000, since then it has gradually dropped to its current rate of 25%. Portugal's rate has increased post-recession and is currently at 28% (OECD, 2016). As each country has experimented with different corporate tax rates, Ireland's 12.5% rate has remained constant since 2003. If a country's corporate tax rate is exclusively responsible for attracting FDI inflows then FDI in the other PIIGS should have increased when they decreased their rates. The graphic above however, tells a different story. Ireland's tax rate is not only unique because of how low it is, its predictability also attracts investors. Firms are more likely to invest in a country that has stable policies in place that will not change on behalf of short-term fluctuations in the global market. The consistency and predictability of Ireland's low corporate tax rate, combined with other factors, make it attractive for multinational corporations to invest in the Irish economy.

It is important to get a sense of how much FDI each country receives relative to the size of its economy. This can be done by examining FDI inflows as a percentage of a country's GDP and determine how dependent an economy is on FDI inflows. Below we see each PIIGS FDI inflows as a percentage of their GDPs.

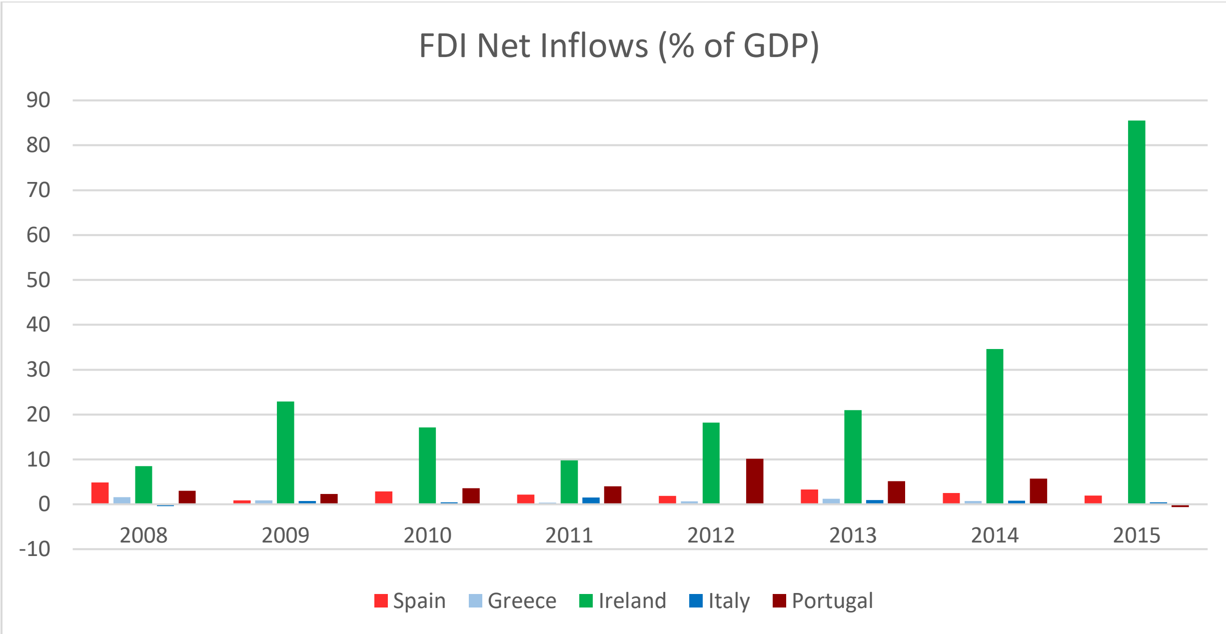

Figure 4. PIIGS FDI Net Inflows (% of GDP) 2008-2015

Clearly, FDI inflows are crucial to the health of the Irish economy, and reinforces the notion that FDI (particularly American FDI) played an integral role in Ireland's economic recovery.

Inward investment in Ireland is almost entirely associated with its services industry. The most recent data collected by the OECD shows that in 2012 Ireland's services industry accounted for just over 94% of their total reported inflows (OECD, 2016).

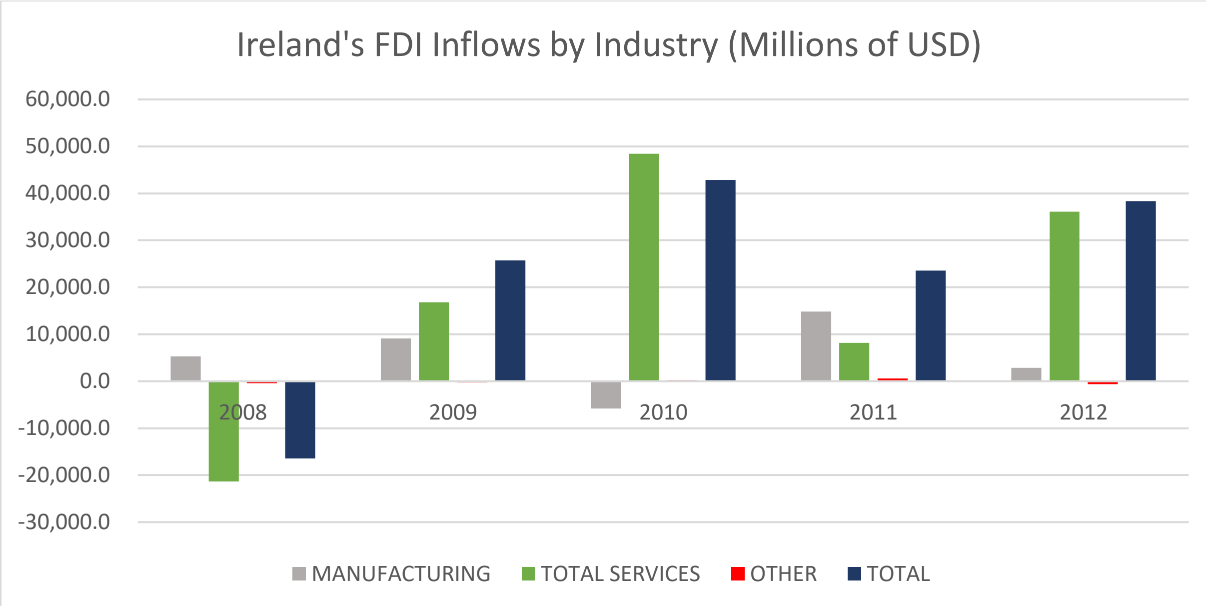

Figure 5. FDI Inflows by Industry in Ireland (Millions of USD) 2008 – 2012

The chart above shows Ireland’s FDI inflows by sector for the period 2008 – 2012.[3] It is important to note that the following industries: Agriculture and Fishing, Mining and Quarrying, Electricity, Gas and Water, and Construction have non-publishable and confidential values, as per OECD, with regards to inward investment. Therefore the data does not paint the whole picture, but it nonetheless provides information about the relationship between Ireland’s manufacturing and service industries. Neither Portugal, Italy, Greece, nor Spain share the same concentrated levels of FDI in their respective service industries.

[3] The category OTHER includes Agriculture and Fishing, Mining and Quarrying, Electricity, Gas and Water, Construction, Unallocated, Primary Sector, and Private Purchases.

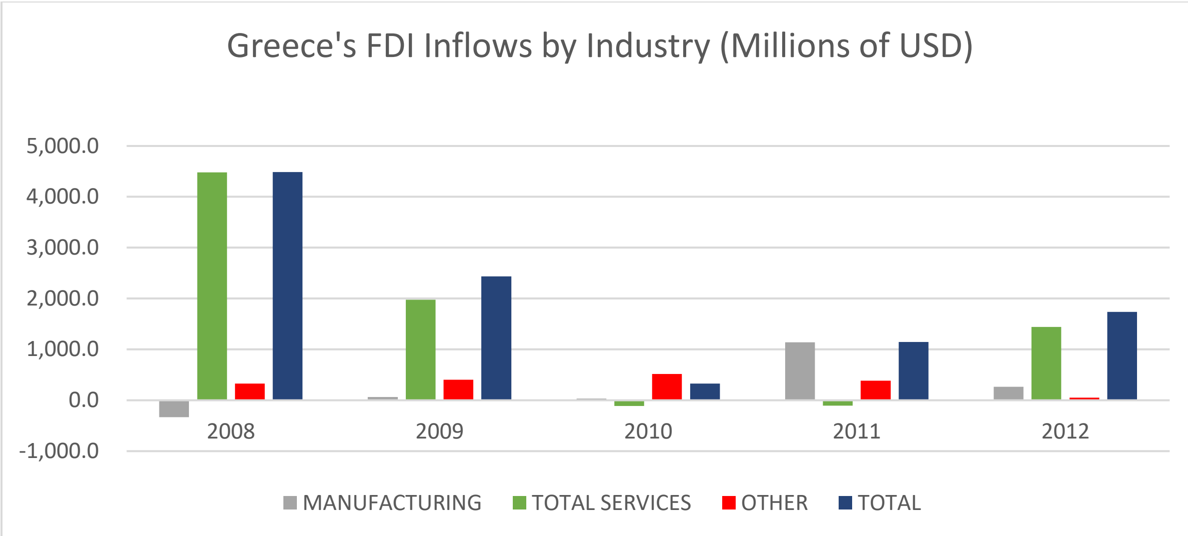

Figure 6. FDI Inflows by Industry in Greece (Millions of USD) 2008 – 2012

Unlike Ireland, all of Greece's values and industries are non-confidential, allowing for more clarity when analyzing the industry breakdown. A few things stick out comparing Ireland's FDI by sector to Greece's. First, Greece's scale maxes out at a value that is about a tenth of Ireland's maximum. Also, although Greece has a large percentage of FDI inflows dedicated to its service industry for 3 of the 5 years shown, its service sector does not have the same consistent investment going into it that Ireland's has. This is shown in the years 2010 and 2011.

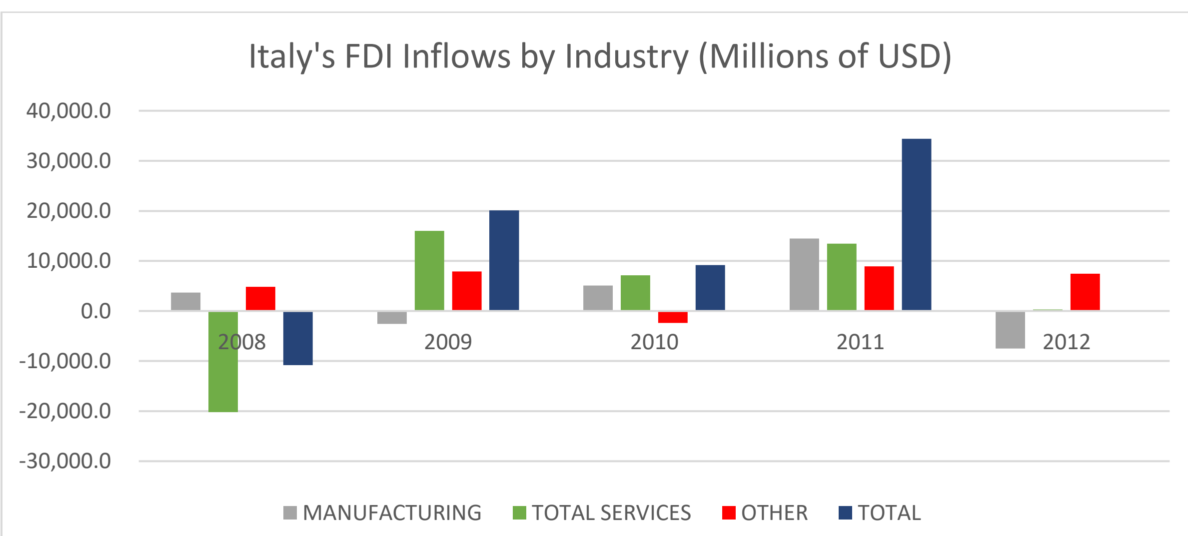

Figure 7. FDI Inflows by Industry in Italy (Millions of USD) 2008 – 2012

The graph above shows Italy's FDI Inflows by Industry for the same time period. Even though Italy's scale is much closer to Ireland's, there is much less consistency when it comes to which industries receive FDI and the total amount of FDI per year. In 2011, Italy's most successful year for attracting FDI shown in this graph, the majority of FDI inflows were put into Italy's manufacturing industry. This is comparable with Greece's FDI inflows for 2011, where manufacturing accounted for nearly all of the country's FDI.

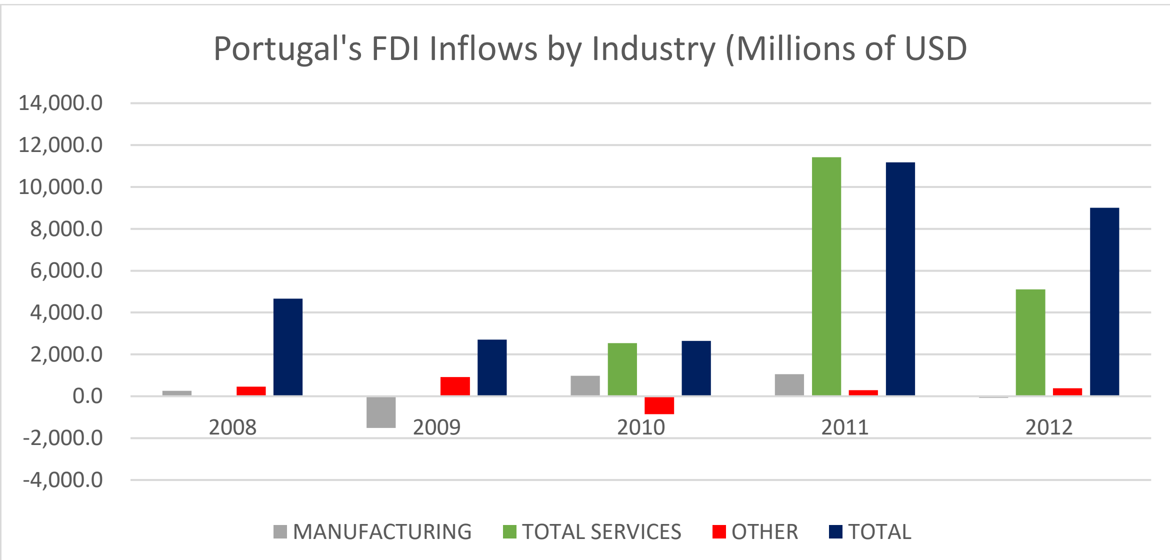

Figure 8. FDI Inflows by Industry in Portugal (Millions of USD) 2008 – 2012

Portugal's inward investment by industry is shown above. Portugal is closer to Ireland when it comes to how much of their FDI inflows are dedicated to their service industry. It is difficult to see what is accounting for total FDI inflows for 2008 -2009, but that is because the amount of FDI that went to Portugal's service industry for this period is non-publishable. Since total service is the only industry that is considered non-publishable for these two years, it is easy to infer that this industry accounts for most of the country's FDI inflows during this time. Also, even though the concentration of FDI inflows in Portugal's service industry is consistently high, like Ireland's, its total year by year FDI inflows are much smaller. However, it still shows how dependent Portugal is on its service sector to attract FDI.

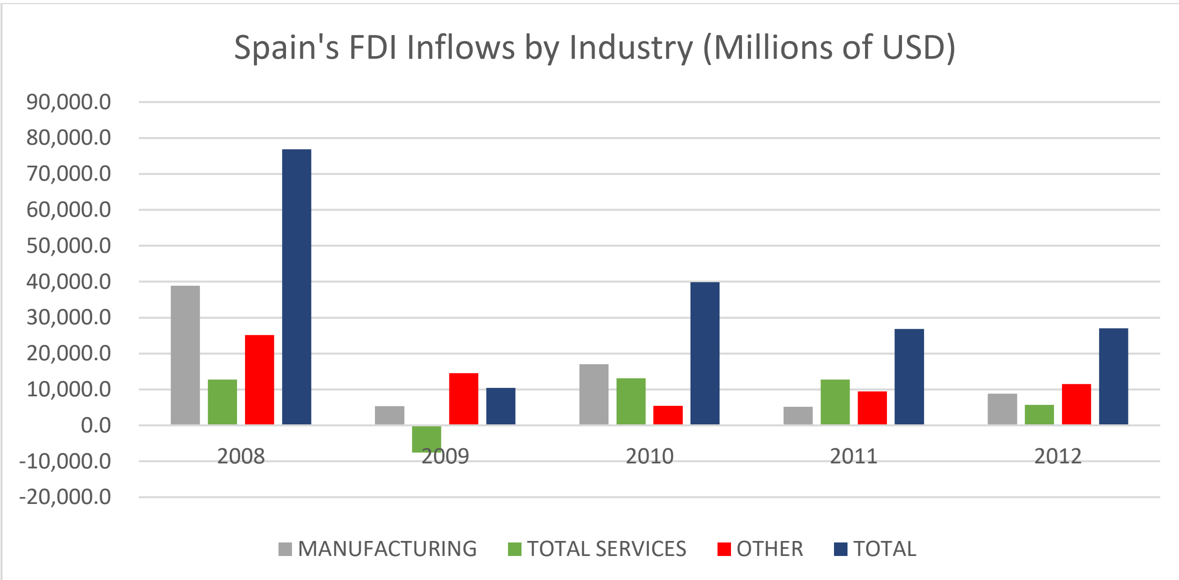

Figure 9. FDI Inflows by Industry in Portugal (Millions of USD) 2008 – 2012

Finally, here is Spain's inward investment by industry. Spain's total FDI inflows from 2009 – 2012 are not near the country's 2008 level. Taking figure 1 into account, when the recession began, Spain's FDI inflows began decreasing significantly. In 2008 the manufacturing industry was hit much harder by the recession than the tech portion of the service industry. Since most of Spain's FDI inflows went into its manufacturing industry, it makes sense that investment in the country as a whole would decrease. Each year it is obvious that a much smaller percentage of Spain's total FDI inflows come from its service industry, in fact, investment in Spain's manufacturing industry has outweighed investment in its service industry in nearly every year shown. This is much different than the type of investment that Ireland receives. Cross-referencing the FDI by industry graphs show that some countries, particularly Ireland and

Portugal, have service industries that world investors are more interested in. Consequently, if tech firms and other subsector firms of the service industry, are less susceptible to economic downturns, then it can argued that the concentration of FDI that is going into this industry has helped Ireland create more recession-proof jobs and harbor more recession-proof firms.

The service industry consists of many subcategories that include a number of Silicon Valley firms who have invested in Ireland in recent years. A few examples of these include, Research and Development, Computer Activities, and Hotels and Restaurants (Airbnb). The technology portion of the service industry plays a considerable role in the industry’s resiliency to economic downturns or events such as the great recession. Tech professionals are considered to be among the most recession proof jobs, due to the increasing demand for IT and financial technology workers in the last decade (Randstad, 2016). These types of workers endured the recession due to tech firms’ high growth rates. Even though the demand for labor decreased as whole during the recession, workers with tech skills were less affected. Since Ireland’s FDI inflows are largely in the service industry, it makes sense that Ireland’s economy would be more resilient and recover faster in response to the recession relative to the other PIIGS.

As previous graphs have shown, most of Ireland’s FDI inflows are being pumped directly into the country’s service sector, therefore the percentage of Ireland’s workforce that is employed in this sector is important. It shows whether or not FDI inflows are contributing to the growth of Ireland’s service sector.

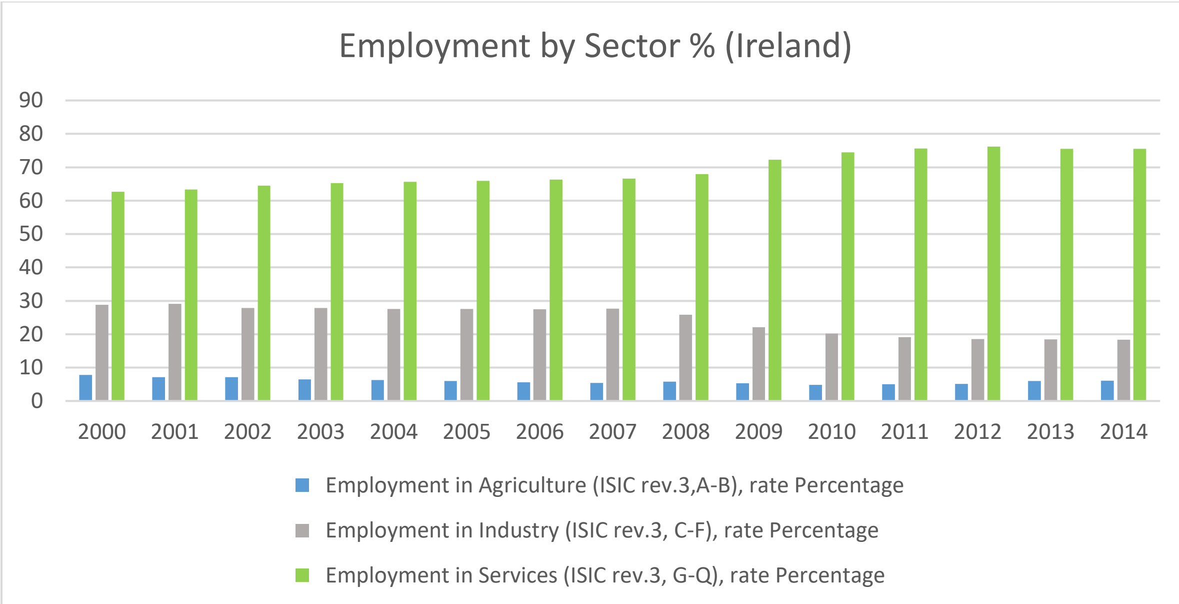

Figure 10. Employment Percentage by Sector in Ireland 2000-2014

Here is a graph depicting Irish employment by sector as a percentage of overall employment (OECD, 2016). The graph shows that Ireland's service industry consistently accounts for about 70 - 75% of all Irish employment since the recession. This percentage is above average within the PIIGS group. Portugal's, Italy's, Greece's, and Spain's percentages as of 2015 were: 68%, 69%, 72%, and 76% respectively. This means that FDI inflows are going into the cornerstone of the Irish economy and have a real impact on employment as a whole. Ireland's unemployment rate hit a post-recession high in 2012 when it accounted for 14.67% of its labor force. Since then, as net FDI inflows and GDP have increased uninterruptedly, Ireland's unemployment rate has decreased by an average of 1.76% annually and hit a post-recession low of 9.4% in 2015.

IDA Ireland

IDA Ireland (industrial development authority), is an agency created to persuade multinational corporations to invest in Ireland's economy. The agency can speak to Ireland's favorable tax conditions and their attractive labor force, but the primary reason as why IDA Ireland is able to convince corporations to re-locate to Ireland is the agency's freedom to operate separately from the Irish Government. This characteristic sets IDA Ireland apart from similar agencies representing other countries. IDA Ireland can streamline the negotiation process and make real time adjustments to conditions in investments or prospective inversions without having to first gain approval from its central government. For example, when Dell was considering opening operations in Ireland, IDA Ireland identified several reasons why they should do so. These included, a young, educated workforce, the infrastructure to support growing operations, and the promise of the agency working directly with Dell in order to make sure that the company would have the resources, facilities, and connections to grow in the future (IDA Ireland, 2016). Aiden Regan of Social Europe speaks to IDA's success, "The IDA are successful at attracting US winners not because of a specific administrative state *structure* but because they have the policy autonomy to operate independently from political parties in government" (Regan, 2016). IDA Ireland's specific focus has been attracting American multinational corporations; and, in turn, these firms have provide a large percentage of Ireland's FDI inflows. Investment from American firms provided a whopping 72% of Irish FDI inflows in 2014 (Stock, 2015). From 2008 to present, Ireland trails only the Netherlands of European nations in attracting American FDI on a cumulative basis. It is clear that IDA Ireland has developed a strong relationship with American corporations and the personnel tasked with exploring relocation possibilities for their respective corporations.

Additionally, Ireland has an unmatched relationship with Silicon Valley tech firms relative to its European counterparts. Although a lot of this has to do with IDA Ireland's bargaining tools, the agency also put other foundations in place before Ireland lowered its corporate tax rate to 12.5% in 2003. During the dot com era in Silicon Valley, IDA Ireland and its equivalents from various countries around Europe flocked to the area in order to try and convince tech companies to invest in their countries. In 2000, when the dot com bubble finally burst, most of the European industrial development authorities left Silicon Valley since the potential for finding investment decreased. IDA Ireland however, stuck around and continued to build a relationship with these firms. "At the time, very few people seemed sure of which web companies had potential for growth and which were built on sand. A number of European countries decided to withdraw foreign development offices from Silicon Valley, wary of getting involved with another dot-com-type blowout" (IDA Ireland, 2015). The breakthrough happened in 2002 when IDA Ireland's director of operations in California, Dermot Tuohy, and Gus Jones began negotiations with Google, a company of roughly 500 employees and $40 Million annual revenue at the time, to relocate the company to Dublin (2015). The only competition that IDA Ireland faced for obtaining this inward investment was from Switzerland. This was due in large part to the agency's willingness to have continued faith in the tech sector, particularly the Silicon Valley firms.

Once Ireland was able to attract Google, Dublin became a popular destination for emerging tech companies who were looking to integrate into the European market. Since so many tech and IT firms were establishing themselves in a specific area of Dublin, firms who were considering the move were able to include economies of scale benefits in their decision making process. This process is similar to the circumstances that made Silicon Valley so heavily concentrated with tech firms. When related businesses are grouped together in a particular area, competitors and supporting firms can operate together in a complimentary way. Silicon Valley based tech companies who have followed in Google's footsteps include: Facebook, Amazon, LinkedIn, and Twitter. This inversion rush created a phenomenon described as high-tech clustering. The central location of it has been a Dublin region that is known as Silicon Docks (Weckler, 2014). In the Docks, Facebook employees 550 people, while Google employees 2,500. In its initial annual report, in 2012, LinkedIn announced that it had expanded its international presence and set up operations in Ireland. The same report listed LinkedIn Technology Limited and LinkedIn Ireland Limited as Irish subsidiaries (LinkedIn, 2016). Similarly, Twitter has expressed its intention to continue international expansion in Ireland in each of its last three annual reports (Twitter, 2016). In their 2016 annual report, LinkedIn recognizes Dublin, Ireland as its non-US company headquarters. Harnessing this momentum is clearly working for IDA Ireland, and its origins can be traced back to the foundational relationship that the agency built with Silicon Valley in the early 2000's.

Other Factors Affecting FDI

In addition to the advantages of investing in Ireland outlined above, there are also other factors that play a role in Ireland's ability to attract FDI from American firms. One of these is camaraderie. Dublin and San Jose are sister cities, and have been since 1986. Recently IDA Ireland was in San Jose celebrating St. Patrick's Day and the 30th anniversary of their sisterhood (Yahoo, 2016). This is an example of the fellowship that IDA Ireland and Silicon Valley share. Also, Ireland and the United States share English as their most common language, which makes communication easier.

Along with an attractive corporate tax rate and an autonomous agency (IDA Ireland), Ireland has other strong institutions that make it an attractive country in which to conduct business and invest. One of these is Ireland's post-secondary education system. It consistently produces highly skilled participants of the labor force that can be directly recruited into the types of firms that are attracting FDI inflow to Ireland.

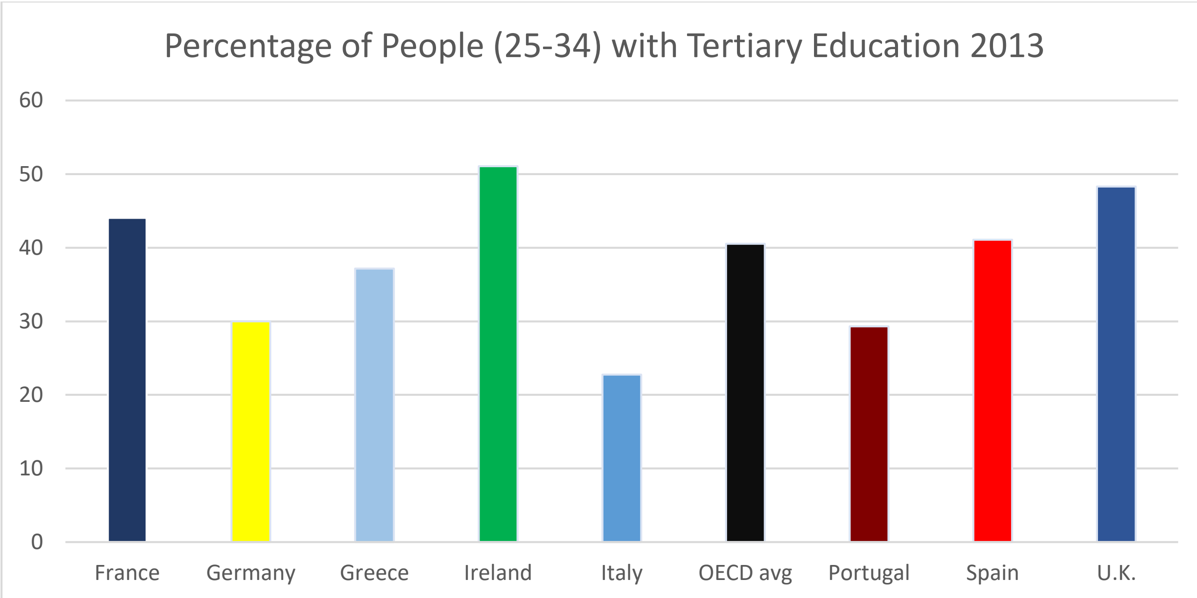

Figure 11. Percentage of 25-34 Year Olds with Tertiary Education in 2013

Figure 11 shows the percentage of people aged 25 – 34 who have tertiary education in Ireland and other European OECD countries. At 51%, Ireland's percentage is the highest among European OECD countries and is well above the OECD average of 41%. Of the other PIIGS, Spain is near the OECD average while the others lag further behind. This graph clearly shows Greece's, Italy's, and Portugal's struggle to produce young skilled workers, who have the education required to be competitive for jobs at the types of tech companies that are investing in Ireland.

According to the data, FDI inflows appear to be at least partly responsible for Ireland's swift economic recovery. The FDI inflows are a result of a combination of events and Irish policies. The autonomy of IDA Ireland partnered with the country's low corporate tax rate, made Ireland an attractive place for businesses to invest in. The Irish economy's highly concentrated service sector played a role in attracting service based FDI. And finally, other less-measurable factors such as camaraderie and cultural similarities helped Ireland develop its strong relationship with American firms.

Conclusion

It is clear that austerity measures were important to the Irish economic recovery, but the real benefit came from the utilization of incentives that attract FDI inflows. By putting faith in IDA Ireland and firmly opposing raises to corporate tax rates when many believed it to be logical, Ireland stay on the track to recovery. The country’s commitment to paying its debts, regardless of public backlash, led to favorable interest rates and a quick recovery. IDA Ireland’s allegiance to Silicon Valley, even amongst worldwide skepticism, put Ireland at the forefront of tech executives’ minds when considering establishing a foothold to the European market. Inward investment began to flow and Ireland benefited from the effects of clustering as firms took advantage of the economies of agglomeration principle by establishing enterprises in the Silicon Docks area of Dublin. Additionally, Ireland’s young, highly-educated workforce paired with these other benefits and provided firms with a one-stop shop for talent, attractive tax laws, and location benefits.

Further research is warranted on this topic. Firstly, although Ireland’s service industry represents a large portion of their labor force, the same is true of nearly all developed economies. The paper mentioned how FDI inflows going to Ireland’s service industry were going into the cornerstone of the country’s economy. However, the possibility exists that employment in Ireland’s service sector is slowing increasing due to the FDI that being infused into its economy. Therefore, it is not clear if FDI is going into Ireland’s service industry because of an already high concentration of employment in this industry, or if its FDI inflows themselves are creating a robust service industry. Also, and perhaps most importantly, the possibility of changes in

Ireland’s corporate tax rate and corporate inversion policies exist. This is due to the European Union’s quest for a standardized corporate tax rate and foreign governments’ desires to recoup profits that currently are not being repatriated. The inversion policy changes are discussed in LinkedIn’s annual reports, but will not be implemented until sometime after 2020. Economic growth rates and FDI inflows might plateau eventually, but for the time being, Ireland’s policies should continue to attract FDI from foreign firms and allow the country to experience continued economic progress.

In closing, of the PIIGS, Ireland’s post-recession economic recovery has been the most successful. Many factors went into this recovery, but some played a larger role than others. Thanks to its austerity measures, FDI inflows, and IDA Ireland, the country has boosted its business reputation and given foreign firms reasons to invest in Ireland, propelling them on the path to economic growth.

Bibliography

Barbieri, R. (2010, December 2). EU unveils Irish Bailout. *CNN*.

Bonetti, E. (2014). Attracting R&D Foreign Direct Investment through an Evolutionary Model of Place Marketing. The Case of Ireland. *International Journal of Management Cases*.

Castle, S. (2013, November 15). Ireland to Exit Its Bailout, And Without a Saftey Net. *New York Times*.

CIA. (2016). *Ireland*. Retrieved from The World Factbook: https://www.cia.gov/library/publications/the-world-factbook/geos/ei.html

(2016). *Credit Ratings: Government of Ireland.* Moodys.

Department, S. (2015). *2015 Investment Climate Statement - Ireland.* Department of State. Retrieved from U.S. Department of State.

Devereux, M. (2012). How Would EU Corporate Tax Rate Reform Affect US Investment in Europe. *Tax Policy and the Economy*.

Facebook. (2015). *Annual Report .*

Finfacts. (2010). Four-Year Budget Plan. *FinFacts Ireland*.

Foreign direct investment, net inflows (BoP, current US$). (2016). Retrieved from The World Bank: http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD

Freezing Salaries and Benefits Announced by the Government. (2010). Retrieved from Enet: http://www.enet.gr/?i=news.el.article&id=130472

Ireland Foreign Direct Investment - Net Inflows. (2016). Retrieved from Trading Economics: http://www.tradingeconomics.com/ireland/foreign-direct-investment

Ireland Government Budget. (2016). Retrieved from Trading Economics: http://www.tradingeconomics.com/ireland/government-budget

Ireland, I. (2015). *A Seismic Shift for Dublin: How Google Was Persuaded to Set up Shop in Ireland*. Retrieved from IDA Ireland: http://www.idaireland.com/newsroom/a-seismic-shift-for-dubli/

Kowsmann, P. (2015, January 21). Portugal to Repay IMF Bailout Loans Early. *The Wall Street Journal*.

Liebscher, K. (2007). *Foreign Direct Investment in Europe: A Changing Landscape.* Cheltenham: Elgar.

LinkedIn. (2015). *Annual Report.*

McDonald, H. (2015, March 5). 700 US Companies Now Located in Ireland as Direct Investment Soars. *The Guardian*.

OECD. (2016). *Corporate Income Tax Rates*. Retrieved from OECD Tax Database: http://www.oecd.org/tax/tax-policy/tax-database.htm

OECD. (2016). *Population with Tertiary Education*. Retrieved from OECD: https://data.oecd.org/eduatt/population-with-tertiary-education.htm

Randstad. (2016). *Recession Proof Skills for Your Career*. Retrieved from Randstad: https://www.randstad.co.uk/job-seeker/career-hub/archives/recession-proof-skills-for-your-career_980/

Regan, A. (2016). Why Austerity and Structural Reforms Have Had Little to do With Ireland's Economic Recovery. *Social Europe*.

Reilly, G. (2011, September 14). European Commission Reduces Margin on Irish Bailout to Zero. *The Journal*, p. 1.

Samuelson, R. (2010). Europes Reckoning And Why It Menaces Recovery. *Newsweek*.

Smith, H. (2010). The Greek Spirit of Resistance Turns Its Guns on the IMF. *The Guardian*.

Stock, H. (2015). Return of The Celtic Tiger. *American Lawyer*.

Thomas, L. (2010, July 8). Greece Approves Pension Overhaul Despite Protests. *The New York Times*.

Twitter. (2015). *Annual Report.*

Weckler, A. (2014, May 15). Growing Pains of Dublin's Silicon Docks. *The Irish Independent*.

Yahoo. (2016). IDA Ireland Celebrates Saint Patrick's Day Alongside Silicon Valley Companies Who Have Made Ireland Their European Business Destination. *Yahoo Finance*.