ECONOMIC IMPACT ASSESSMENT OF IRELAND'S CORPORATION TAX POLICY:

Summary Research Findings and Policy Conclusions

OCTOBER 2014

An Roinn Airgeadais
Department of Finance

ECONOMIC IMPACT ASSESSMENT OF IRELAND'S CORPORATION TAX POLICY:

Summary Research Findings and Policy Conclusions

Department of Finance
October 2014

Department of Finance
Government Buildings, Upper Merrion Street,
Dublin 2, Ireland
Website: www.finance.gov.ie

An Roinn Airgeadais
Department of Finance

Contents >

1. Introduction and Executive Summary 1

2. Key Findings and Policy Conclusions 4

3. Historical Development and International Context of the Irish Corporate Tax System 6

4. The Economic Impact of the Foreign-Owned sector in Ireland 7

5. Economic Literature on the Importance of Corporation Tax 10

6. The Importance of Corporation Tax on the Location Decisions of Multinational Firms 12

7. Concentration Risks in Ireland's Corporation Tax Receipts 14

8. Ireland's Effective Corporation Tax Rate 16

9. OECD Base Erosion and Profit Shifting in an Irish Context 17

1. Introduction and Executive Summary

Overall Objective

The overall aim of this research has been to provide answers to three fundamental questions:

1. How important is foreign direct investment (FDI) and the foreign-owned sector to the Irish economy?
2. How important internationally is the corporation tax rate to FDI location decisions?
3. What are the current risks and opportunities for Ireland in an international tax policy context?

Background

Ireland's corporation tax policy is frequently cited as a key feature that supports growth in the Irish economy. Since the 1950s, Ireland's corporation tax policy has sought to address the limitations that come with a peripheral geographical location. As part of a wider suite of policies, it has been designed to attract FDI and to encourage domestic enterprise to support employment and growth. It also serves an important function by generating tax revenue which funds public services.

Three main objectives underpin Ireland's corporation tax policy:

- encouraging economic growth;
- supporting jobs; and,
- funding public services.

Internationally, corporate tax issues have moved to the top of the political agenda as a result of the global financial crisis, as increased pressures on domestic budgets has focussed attention on the tax affairs of large corporations. In 2013 the G20 mandated the OECD to examine the taxation of multinational companies, which has resulted in an initiative known as 'BEPS' (Base Erosion and Profit Shifting). This is just one example of the many fora that seek to influence the international rules on corporation tax, and as a result Ireland's domestic tax legislation.

In 2013, the Minister for Finance published Ireland's International Tax Strategy which sets out Ireland's policy position in relation to international corporation tax policy. This strategy noted that Ireland's corporation tax regime is one of the cornerstones for attracting FDI, which in turn is a key factor for employment creation and economic growth. The International Tax Strategy also describes the international policy debate on aggressive tax planning which is driving discussion on changes to long-standing international tax rules.

At a domestic level, the Irish Fiscal Advisory Council, in its November 2013 Fiscal Assessment Report[1] identified potential international tax developments as a risk facing the Irish economy. It recommended that *"given the importance of the multinational sector in Ireland's medium-term growth strategy, it would be desirable to undertake an assessment of the risks were the corporate tax regime, for whatever reason, to be subject to gradual modification over time."*

Research that quantifies the effect of Ireland's corporation tax policy in a global context has been limited to date, and the understanding of Ireland's corporation tax policy has relied largely on incremental analysis. For this reason a decision was taken to carry out a more fundamental stock-take of the rationale for and economic impact of Ireland's corporation tax policy in 2014.

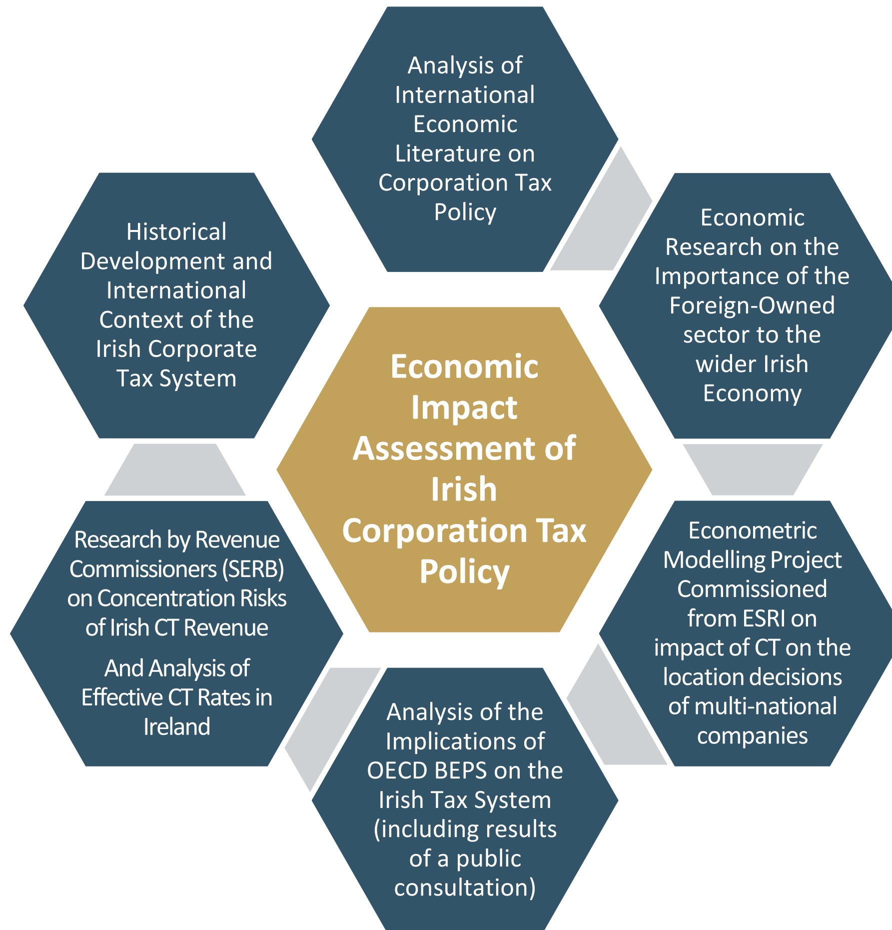
---

[1] http://www.fiscalcouncil.ie/wp-content/uploads/2013/04/FARApr13.pdf

Format of the Report

This paper presents the summary and conclusions of this comprehensive economic impact assessment of Ireland's corporation tax policy, carried out by the Department of Finance over the last year.

There are six separate but complementary components to the research:



- Research paper commissioned from EY examining the development of the Irish corporation tax regime from the 1800s to date, including reference to the international context for these developments.

- Research by staff in the Economics Division in the Department of Finance on the importance of FDI to the Irish economy, which has consisted of two elements:
    - Economic literature review
    - Analysis of the impact of the foreign-owned sector on the wider economy

- Econometric modelling commissioned from the Economic and Social Research Institute (ESRI) to model the importance of corporation tax for the location decisions of multinational firms

- Analysis by the Statistics & Economic Research Branch (SERB) of the Revenue Commissioners of the component elements of Ireland's corporation tax revenue and the associated concentration risks

- Research by the Department of Finance Tax Policy Division and Seamus Coffey of University College Cork (UCC) on the effective corporation tax rate in Ireland, which was first published as a technical paper in April 2014

- Analysis by Department of Finance Tax Policy Division of the potential impacts for Ireland of the OECD Base Erosion and Profit Shifting Project (including the results from a public consultation process)

A separate but related piece of research into the potential spill-over effects of Ireland's tax system on the economies of developing countries is also being carried out in 2014. The results of this research will be forthcoming at a future date.

Each of these separate research papers are summarised below. Full versions of the research papers are published on the Department's website.

2. Key Findings and Policy Conclusions

Importance of FDI

The foreign-owned sector is very important to jobs and growth in Ireland. However, the wider spill-over benefits to the rest of the (domestic) economy could be greater.

A distinctive feature of the Irish economy is the high share of economic activity accounted for by foreign-owned enterprises. In 2011, a small number of sectors dominated by foreign-owned multinational enterprises (MNEs) accounted for 25 per cent of economy wide gross value added (GVA). Focusing on the somewhat narrower 'business economy', the foreign-owned sector accounted for 57 per cent of GVA in 2011. In terms of employment, foreign-owned enterprises account for 22 per cent of private sector employment and are particularly important in manufacturing, where they account for almost half of employment. The foreign-owned sector was an important source of strength for the economy over the period of the economic crisis, contributing five percentage points to economic growth in Ireland during over the 2008-11. The sector exhibits higher productivity levels which are reflected in higher wage levels than domestic firms. It also performs relatively strongly in terms of research and development and innovation.

The foreign-owned sector has significant impacts on the balance of payments reflecting a combination of a high export intensity and profitability levels, but a comparatively low domestic value added share in exports. This speaks to a wider point, namely that the foreign sector as a whole could be more integrated into the domestic economy. While there is some evidence of spill-over benefits to domestic firms, foreign-dominated sectors have lower output and employment multipliers relative to domestically dominated sectors (reflecting their higher productivity levels and import intensity).

Importance of Corporation Tax

The headline rate of corporation tax is very important for FDI location decisions. If Ireland were to increase the 12.5 per cent corporation tax rate it would significantly reduce FDI flows into the country. Ireland should maintain a competitive corporation tax rate.

The ESRI examined the effects of country characteristics on location decisions, using firm-level data on over 3,000 newly-established multinational subsidiaries across 26 European countries from 2004 to 2012.

The results found a strong negative effect of corporation tax on the locational decision of firms, controlling for a range of other important factors. The implications for Ireland are clear: if Ireland were to increase the 12.5 per cent corporation tax rate it could damage FDI flows into Ireland.

As a policy experiment, the ESRI simulated how FDI flows into Ireland would have changed if Ireland had an alternative corporation tax rate over the period. The authors found:

- *If the Irish tax rate had been 15 per cent over the period in our sample, the number of new foreign affiliates entering the country would have been 22 per cent lower*

- *If the tax rate had been 22.5 per cent (the sample average), the number of new foreign affiliates would have been 50 per cent lower*

Risks and Opportunities

There is a high level of concentration in corporation tax revenue in Ireland

Ireland collects a similar share of corporation tax as a percentage of GDP to the EU average.

However, it is clear that there is a high level of concentration of corporation tax revenue overall relying on a small cohort of large taxpayers.

Recent trends show this has become even more concentrated since 2009, so this risk for the Irish corporation tax yield needs to be managed carefully going forward.

Ireland has a competitive corporation tax rate which is applied to a broad base

The effective corporation tax rate for Ireland since 2003 is between 10.9% and 10.7%. Data from the CSO and Revenue Commissioners provide the best estimate of the effective rate of corporation tax on the total profits that are subject to Irish tax.

The closeness between the effective tax rate and the headline rate supports the statement that Ireland has a low rate that is applied to a broad base, in keeping with the approach recommended by the OECD.

Ireland needs to be competitive in terms of corporation tax in order to attract FDI. In order to maintain strong economic relationships with our international partners, it is important that Ireland continues to play by international tax rules. The OECD BEPS process offers significant opportunities for Ireland as well as challenges.

The BEPS process could bring about considerable changes in the world of international tax. The project is timely in that this multilateral approach should reduce the instances of potentially harmful unilateral action by individual countries against each other.

One of the key objectives of the OECD BEPS process is to ensure the alignment of taxing rights with economic substance. The alignment of substance with taxing rights has been a central feature of Irish corporation tax policy since the 1950s so should present significant opportunities. For example, the BEPS actions dealing with changes to the transfer pricing guidelines are central to the attempts to align profits with taxing rights and it appears likely that the changes being proposed will bring an end to "cash box" haven locations. Such changes could therefore provide significant opportunities for Ireland to become one of the locations of choice for multinationals in respect of their operations or intellectual property.

3. Historical Development and International Context of the Irish Corporate Tax System

Since the late 1950s, policy in Ireland has consistently sought to open-up the economy to the opportunities afforded by free trade, international capital mobility, EU membership and globalisation. Over the decades, key elements of this strategy have included the expansion of second and third level education from the 1960s onwards, the adoption of the euro in 1999 and the upgrading of transport and other public investment (aided by EU Structural and Cohesion Funds) in the 1990s and 2000s. A particularly longstanding element of this strategy has been a low corporation tax rate, a cornerstone of industrial and enterprise policy aimed at attracting foreign direct investment.

The evolution of Ireland's corporation tax rate and regime, and the historical context of this evolution, is examined in a paper commissioned from EY.

The paper outlines the gradual evolution of the Irish corporate tax system from its origins in the income tax system introduced in 1853. Its main distinctive element, which as noted above is the general low rate of 12.5%, has evolved over time as a response to the end of the policy of self-sufficiency, the need to attract inward investment, and the later impact of EU rules.

Like Ireland, the UK, US, French and German corporate tax systems are also a function of local political, economic and commercial factors unique to each of those countries. For example, despite the common origins of the Irish and UK tax systems, the UK system has evolved in a different way in order to encourage domestic rather than inward investment.

At an international level, since the introduction of income taxes in the 19th and early 20th centuries, global trade and movement of people has given rise to problems of cross-border double taxation and mis-matches between countries' domestic tax legislation.

These problems were the subject of detailed League of Nations work in the 1920s, as part of which multilateral solutions were suggested. Ninety years later, multilateral solutions are again under discussion as part of the OECD BEPS processes.

Taxes are difficult to introduce and difficult to change. Therefore, it should not be surprising that cross-border tax issues are difficult to resolve even where agreement in principle is reached on a solution. This is even more so for corporate tax as there are different schools of thought on how corporate taxes can and should operate.

As a fully integrated member of the global economy, Ireland is constructively engaged with a number of EU and international bodies working on multilateral initiatives to address many of these concerns.

Ireland's domestic and international tax experiences over the past two centuries may also provide useful insights for developing countries today.

4. Economic Impact of the Foreign-Owned Sector in Ireland

Output and Employment

Alongside other complementary policies, a low corporation tax rate – aimed at attracting foreign direct investment - has been an important and longstanding element of enterprise policy and of wider economic policy in Ireland. Reflecting the consistent pursuit of this strategy and an increasingly globalised world economy, a distinctive feature of the Irish economy is the high share of economic activity accounted for by foreign-owned enterprises. In 2011, a small number of sectors dominated by foreign-owned multinational enterprises (MNEs) accounted for 25 percent of total economy-wide gross value added (GVA). Focusing on the somewhat narrower 'business economy', the foreign-owned sector accounted for some €48.9bn or 57.4 per cent of GVA in 2011.

Table: Composition of foreign-owned multinational enterprise dominated sectors and other sectors

Description	NACE Code	Share of 2011 GVA
Chemicals and chemical products, basic pharmaceutical products and pharmaceutical preparations	20-21	10.1%
Software and communications sectors	58-63	10.2%
Other NACE sectors dominated by Foreign-owned MNEs*	18.2, 26, 27, 32.5	5.0%
Total Foreign-owned MNE dominated		**25.3% (€36.3bn)**
"Other" Sectors		**74.7% (€106.9bn)**
Total		**100% (€143.2bn)**

Source: CSO[2]

***** Other NACE sectors refers to: Reproduction of recorded media, Computer, electronic and optical products, Electrical equipment, Medical and dental instruments and supplies

The vast majority (98 per cent) of enterprises in Ireland are Irish-owned. However foreign-owned enterprises are generally larger in size and account for 22 percent of employment in the 'business economy'. They are particularly important in manufacturing, where they account for almost half of employment.

Table: Key characteristics of indigenous and foreign-owned enterprises, Business Economy, 2011

Description	Firms		Persons Engaged		Turnover		Gross Value Added*	
	000s	% of Total	000s	% of Total	€bn	% of Total	€bn	% of Total
Indigenous	152.3	*97.9*	900.7	*78.2*	139.3	*44.1*	36.3	*42.6*
Foreign-owned	3.3	*2.1*	250.4	*21.8*	176.9	*55.9*	48.9	*57.4*
Total	155.6		1,151.1		316.2		85.2	

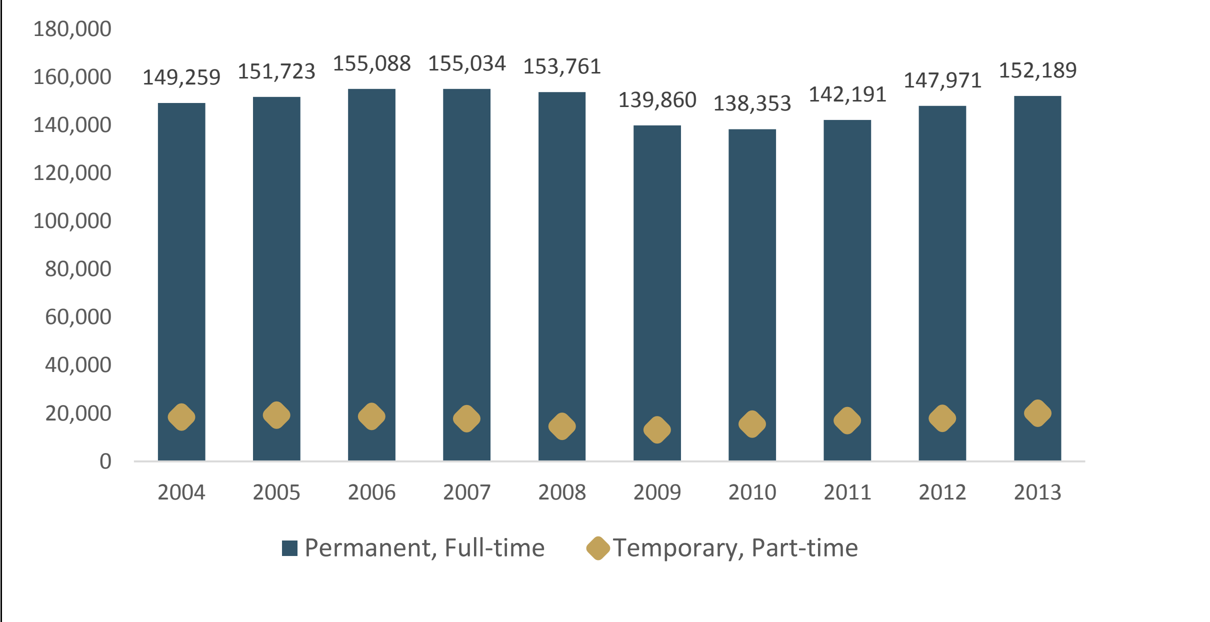
Source: CSO, Department of Finance Analysis

Gross Value Added in this Table relates to the 'business economy'

[2] Gross Value Added for Foreign-Owned Multinational Enterprises and Other Sectors, Annual Results for 2011, CSO, December 2012.

Looking at more up-to-date data, full-time employment in foreign-owned firms assisted by the enterprise agencies amounted to 152,000 in 2013. As noted above, foreign-owned firms are big employers in manufacturing, notwithstanding job losses over the last decade. These losses have been offset by increases in services employment.

Figure: Agency Assisted Foreign-Owned Firms - Employment 2004-2013



Source: Forfás, Annual Employment Survey 2013

Balance of Payments

The stock of inward FDI in Ireland is comparatively large and the profitability of foreign-owned firms in Ireland is invariably greater than the profitability of Irish-owned firms abroad. This leads to large net factor outflows on the balance of payments. The persistently large net factor outflows results in the level of gross domestic product (GDP) being larger than the levels of gross national product (GNP) and of gross national income (GNI).

In recent years, the decision of several large MNCs to relocate their headquarters to Ireland, in a practice known as re-domiciling, has led to the recording of global corporate income as a credit (inflow) on the Irish balance of payments, even though very little economic activity takes place here. The effect is to increase the current account balance by about 4 percentage points of GDP and to increase GNI by about 5 per cent. As GNI is used to calculate EU Budget contributions, there is a knock-on annual budgetary cost to Ireland which, in 2012, was close to €60 million.

Productivity and Wage Levels

Reflecting the sectors in which foreign-owned firms are concentrated and the high value-added nature of their products, productivity levels are higher than in Irish-owned firms. The differential holds across all sectors but is particularly pronounced in manufacturing. As would be expected, these higher productivity levels are reflected in wage levels which are nearly twice as high in foreign-owned firms as compared with indigenous ones.

Spillover and Multiplier Impacts

Of course, the presence of foreign-owned companies in the economy can benefit domestic firms and there is some evidence of spillover benefits in terms of higher productivity and export levels.
When the small group of sectors that are dominated by foreign-owned MNEs are grouped together as a single "foreign" sector, overall output and employment multipliers for the combined "sector" can be estimated. The multiplier impacts of the rest of the economy, considered as a single combined sector, are higher than those of the foreign-dominated sector. This reflects the higher productivity levels and import intensity of the latter.

Table: Type 1 multiplier and employment effect of foreign MNE dominated sectors and rest of economy

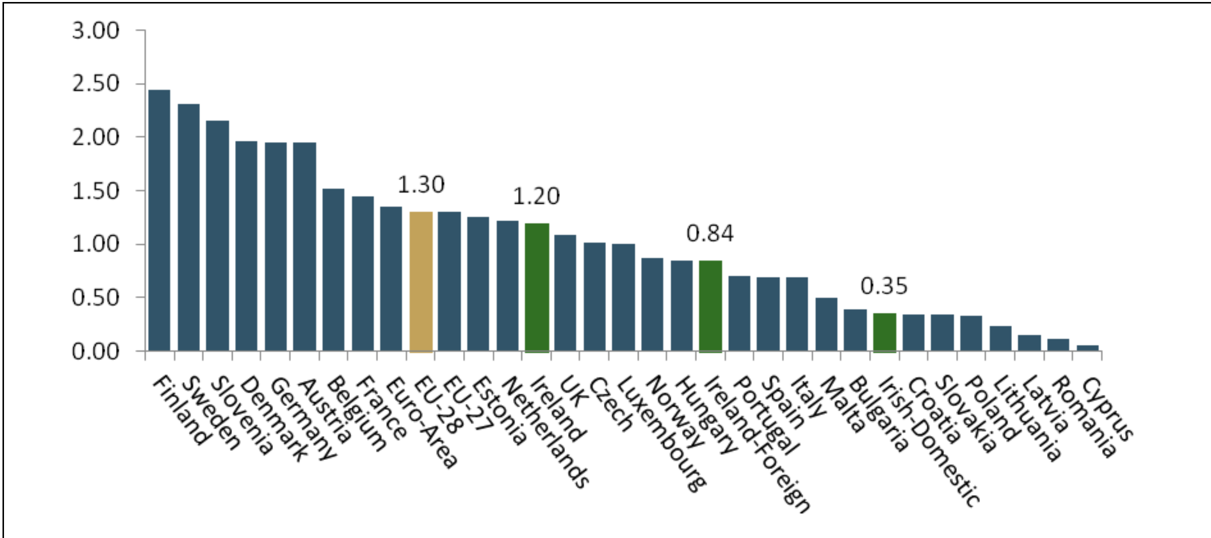
Sector	Output Multiplier	Employment effect
Foreign-dominated	1.2	3
Rest of economy	1.4	10

Source: Department of Finance Analysis
Note: The multiplier effect is the marginal whole-economy impact on *output* of an increase in final demand for either sector's products
The employment effect is the marginal economy-wide impact on *employment* of a €1m increase in demand in a sector

R&D and Innovation

R&D and innovation are important for improving productivity levels and long-term economic growth. In terms of business expenditure on R&D (BERD), Ireland's performance has improved over the last decade and, at 1.2 per cent of GDP, is close to the EU average. The main contributor is the foreign-owned sector which accounts for 70 per cent of BERD.

Figure: BERD as share of GDP



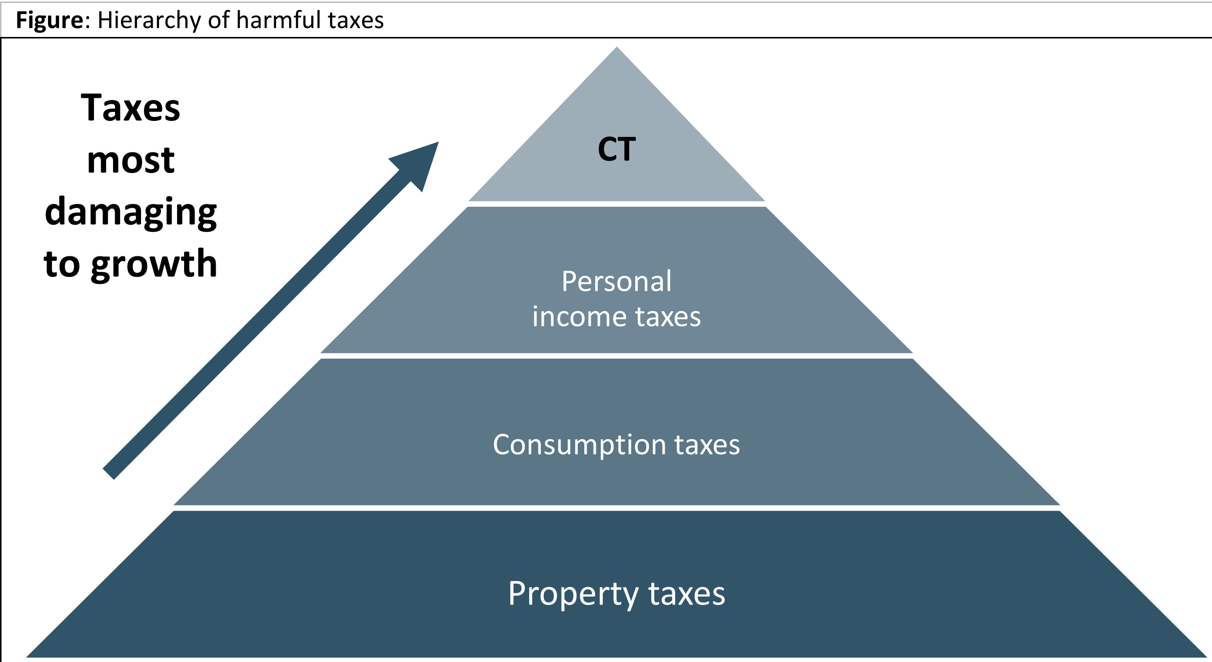
Source: CSO, Eurostat

A similar pattern holds in respect of the somewhat wider measure of "enterprise innovation expenditure" where, without the innovation expenditure of the foreign-owned sector, Ireland would have been the lowest overall performer in the EU as a share of GDP.

5. Economic Literature on the Importance of Corporation Tax

The OECD Tax and Economic Growth study established a hierarchy of taxation where taxes are ranked in terms of their impacts on economic growth with corporate income tax ranked as the most growth-damaging form of tax.[3] This OECD research has proven especially useful in guiding corporate tax policy in Ireland in recent years.

Figure: Hierarchy of harmful taxes



Source: OECD

To build on the evidence base, the Department of Finance Economics Division undertook a review of the economic literature on corporation tax policy. The review synthesised the theoretical and empirical literature from international and domestic research on corporation tax focusing on a number of key questions:

- Where does the incidence of corporation tax fall? In other words, who actually bears the burden of corporation tax – companies or employees?
- How do capital investment and foreign direct investment respond to corporation tax?
- What impact does corporation tax have on productivity and innovation, the key drivers of sustainable long run growth?
- What is the overall impact of corporation tax on economic growth?

The extent to which the corporation tax burden falls on firms or employees is largely dependent on the relative mobility of capital and labour. Where capital is more mobile than labour the incidence of taxation tends to fall on wages and employment. Empirical estimates suggest that a 1 euro increase in corporation tax reduces wages by between 44 and 77 cent.

Capital accumulation is affected by tax through changes in the incentive to invest. Theoretical and empirical evidence suggests that capital accumulation can respond to tax rates, depreciation and debt interest allowances, which all interact to change the optimal investment in capital by firms. The effect of tax on capital differs across assets with evidence indicating that the burden of taxation falls most heavily on investment in information and communication technology.

[3] Arnold, J. (2008), "Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence from a Panel of OECD Countries.

The role of corporate tax in influencing foreign direct investment flows is well established. Research by the OECD suggests that a 1 per cent rise in corporation tax results in a fall in foreign direct investment of 3.7 per cent. The recent research completed by the ESRI for the Department confirms these results with the finding that corporation tax negatively affects the probability of locating in a particular jurisdiction. Empirical results indicate that the type of taxation system of the home country i.e. credit or exemption system does not affect the size of the elasticity.

Tax is generally seen to act on innovative activity, by reducing the return available to firms from introducing innovations to their product lines and production processes or through reduced investment in new capital assets which embody technological progress. Evidence from the OECD and European Commission links the effects of corporation tax to total factor productivity (TFP) at both the aggregate country level and at the firm level.

Evidence based on a wide number of countries indicates that a 10 per cent reduction in corporation tax could have anywhere between a 0.6% and 1.8% effect on economic growth rates. In Ireland, the effect of lowering the corporate tax rate in the business and services sector was shown to have significantly increased GNP in the years following the change to the 12.5 per cent rate.

The findings in respect of growth are clear and unambiguous and complement both the tax and growth research of the OECD and the study on locational decisions by the ESRI. Corporate taxes lower economic growth by reducing the return for firms and people who invest in capital and innovative activity such as research and development.

6. The Importance of Corporation Tax on the Location Decisions of Multinational Firms

In order to build on the useful results captured in the literature review, the Department commissioned the ESRI to drive deeper into firm level decisions on FDI locations. This was to help address a critical research question regarding the importance of corporation tax on the location of FDI, controlling for a range of factors suggested in the literature as also being important for FDI, such as market size, education, infrastructure etc.

Using firm level data on 3,238 newly established multinational subsidiaries across 26 European countries from 2005 to 2012, the ESRI study examined the effects of country characteristics, including a range of different estimates of statutory and effective average tax rates (EATR),[4] on location decisions.

The results found a strong negative effect of corporation tax on the locational decision of firms controlling for a range of other important factors. In other words, when the impact of other factors is taken into account, tax still has a negative impact on the probability of locating a new subsidiary in a given location. The results also showed that the impact of tax declines in importance at higher rates, meaning that tax is more important for a country like Ireland with a low rate relative to a country with a high rate.

The main summary finding from their research is that the EATR has a 'marginal impact' of 1.15 percent on the locational choice of FDI controlling for other factors. Thus a 1 percent increase in the EATR would lead to a reduction in the likelihood of choosing a destination by 1.15 percent, described in the table below as a 'marginal effect'.

Financial sector firms are most sensitive to changes in corporation tax rates, with an estimated marginal effect more than double those of the other sectors. This is likely to be a reflection of the more footloose nature of these firms, and has important implications for the potential effect of a tax change in Ireland, given the weight of the financial sector in foreign investment in this country. For manufacturing firms, the effect is similar to the overall result but for service firms the effect is noticeably smaller. Services firms may be more likely to make location decisions based on the need to be close to their identified customer base and if so this would reduce their sensitivity to tax rates.

Table: Marginal Effects of Corporation Tax Rates on Locational Decision

	Policy Rate	**EATR**
Main model	-0.68	**-1.15**
Manufacturing	-0.63	-0.94
Services	-0.31	-0.75
Financial Sector	-1.36	-2.58

Source: ESRI

One of the most interesting aspects of the research was the finding that corporation tax had the single largest marginal effect of all relevant factors. This means that on average, across Europe, corporation tax has the largest impact on the decision of where to locate FDI. The natural resource dependence is the second highest marginal effect (0.332) while motorway density (0.288) is the third largest, though both of these are substantially lower than the marginal effect for corporation tax (1.152). From a policy

[4] The use of the EATR picks up variation across countries in taxes due to differences in allowances and exemptions along with the direct effect of the headline tax rate.

perspective, the finding that multinationals are sensitive to both the taxation environment and quality of infrastructure when deciding where to locate affiliates is revealing given these are both instruments that are amenable to government influence.

Table: Marginal Effects of Corporation Tax Rates on Locational Decision

	Policy Rate	**EATR**
Market Potential	0.126	0.145
GDP Growth	0.132	0.130
Distance	0.040	-0.042
Motorway Density	0.309	0.288
Common Language	0.013	0.015
Contiguity (Common Border)	0.015	0.013
Colonial Relationship	0.012	0.013
Natural Resource Dependence	0.372	0.332
EU 15	0.036	0.031
Corporation tax	**-0.689**	**-1.152**

Source: ESRI

When all of the effects of tax and country characteristics are accounted for, Ireland had a 3.1 percent probability of being chosen as a location for the newly established subsidiaries over the period investigated. This is the 'predicted' or 'fitted' value of the model. For context, Irish GDP is 1.4 percent of the EU-26 total, so this demonstrates the attractiveness of the country as a destination for foreign investment well in excess of its size.

As a policy experiment, the ESRI simulated how the 'predicted probability' of 3.1 percent for Ireland would have changed if Ireland had an alternative corporation tax rate over the period. The authors found:

- *If the Irish tax rate had been 15 per cent over the period in our sample, the number of new foreign affiliates entering the country would have been 22 per cent lower*
- *If the tax rate had been 22.5 per cent (the sample average), the number of new foreign affiliates would have been 50 per cent lower*

The results are summarised in the table below and demonstrate the negative impact that would have been caused to FDI flows into Ireland had the policy rate changed in recent years.

Table: Policy Experiment of impact on FDI of alternative policy rates

Alternative Policy Rate	12.5%	15%	17.5%	20%	22.5%
Probability of locating in Ireland	3.12%	2.44%	1.98%	1.65%	1.43%
Change in percent of new affiliates opened in Ireland	0%	-22%	-37%	-47%	-54%

Source: ESRI

7. Concentration Risks in Ireland's Corporation Tax Receipts

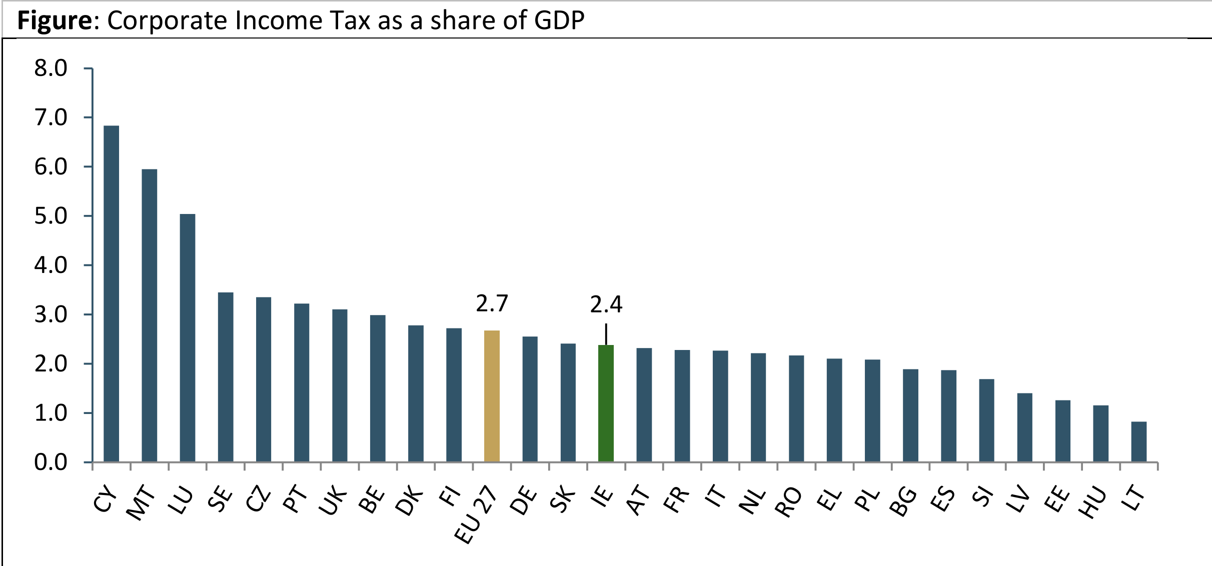
The work of the ESRI and the Department's Economics Division demonstrate the importance of corporation tax on the location choices of FDI and the macroeconomic importance of FDI to Irish economy. However the foreign-owned sector is also very important in terms of its contribution to Exchequer revenues.

Research by the Revenue Commissioners has quantified the fiscal contribution of the sector in terms of corporation tax receipts. The research has also identified risks to the Exchequer arising from the concentrated nature of receipts from the foreign-owned sector both at a firm and sectoral level.

Corporation tax revenue is the fourth largest tax revenue source in Ireland accounting for €4.2 billion (12 percent of the total for 2012), or one euro in every eight collected in 2012. As a share of the tax base this was relatively high in the European context with Ireland ranking in the top ten of the EU-27 that year.[5] A similar amount was collected in 2013 reflecting a recovery in yield from this source following a low of €3.5 billion in 2011, the lowest level collected since the 1990s.

As a share of GDP Ireland's corporation tax yield was marginally below the EU-27 average in 2011:

Figure: Corporate Income Tax as a share of GDP



Source: Taxation Trends in the EU, European Commission, 2013 and author's calculations

A sectoral analysis shows that the yield from corporate profits is highly concentrated in a small number of sectors, indicating a relative riskiness underlying the relatively healthy aggregate yield. The top five sectors in terms of total corporation tax paid in the period 2008 to 2012 account for over 68 per cent of total corporation tax paid in the period, with the top 10 sectors accounting for over 87 per cent of total corporation tax paid.

[5] Source: Taxation Trends in the European Union, European Commission, 2014

Table: Corporation tax paid by top five Sectors (€ billion)		
NACE Sector	2008-2012 Amount	Share of Total
Financial & insurance activities	€5,445	27%
Manufacturing of pharmaceuticals	€3,515	17%
Information & communication	€2,285	11%
Wholesale trade	€1,655	8%
Manufacturing of wood, paper products & printing	€1,065	5%
Top five total	€13,965	68%
Total CT yield	€20,457	100%

Source: Revenue Commissioners

In terms of the impact of the foreign-owned sector, a new Revenue marker, which is still under development, has enabled foreign-owned multinational companies to be separately identified from other corporate tax payers. It is estimated that these multinationals in total account for almost three quarters of corporation tax paid between 2008 and 2012 (over €15bn of the €20.5bn collected). These companies match fairly closely with Revenue's Large Cases Division (LCD) case base, suggesting that foreign multinationals and Ireland's largest tax paying companies overlap closely. This is a particularly crucial point given that an analysis of LCD case files indicates that the top 10 companies in terms of corporation tax payments account for almost one quarter of corporation tax payments over the period 2008-2012, with the top 50 companies accounting for over 46 per cent of corporation tax over the same period.

Table: Corporation tax paid by top 10, 20 and 50 companies, 2008-2012	
Total corporation tax (€,m)	€20,457
Payments by top 10 companies (€,m)	€4,874
Share of total corporation tax yield	24%
Payments by top 20 companies (€,m)	€6,621
Share of total corporation tax yield	32%
Payments by top 50 companies (€,m)	€9,456
Share of total corporation tax yield	46%

Source: Revenue Commissioners

The analysis confirms that corporation tax payments are heavily concentrated among large companies, mainly multi-nationals. This concentration has increased over recent years, reflecting that the multinational and export-focused sector has performed better than the domestic sector and SMEs generally.

The concentrated level of corporation tax receipts in general and the large contribution from the foreign-owned sector creates a significant policy challenge. Independent of the overall performance of the Irish economy, company specific factors could have large implications for the overall corporation tax yield.

8. Ireland's Effective Corporation Tax Rate

To address the question of what level of corporation tax companies are paying in Ireland, in April 2014, the Department of Finance published a technical paper on effective rates of corporation tax, which considered calculations for an effective tax rate on corporate profits in Ireland.

This was done under three broad headings: using model companies; using official national statistics; and using company financial reports. Between these, eight approaches for calculating the effective tax rate on company profits were identified. The paper found that each of these different approaches is relevant depending on the nature of the question being addressed.

An effective tax rate is simply the tax burden as a proportion of the tax base. For companies this is corporate income tax as a proportion of corporate profits. Although relatively simple in theory, the eight approaches considered in the technical paper resulted in a wide range of estimates for Ireland ranging from 2.2 per cent to 15.5 per cent using the most recent data available.

In attempting to assess the effective corporate tax rate that is applied to the total of company profits in Ireland, the paper concluded that the approach based on national aggregate statistics is the most suitable.

That approach seeks to determine "*what is the total amount of corporation tax paid by companies in Ireland*" and "*what is the total amount of profit that those companies made*". The tax paid is then divided by the profits made in order to estimate the 'effective rate' of corporation tax paid on those profits.

That approach produces two different figures based on two different measures of company profit based on data from the Central Statistics Office and the Revenue Commissioners respectively (labelled approaches numbers 3 and 5 in the paper).

This found that since 2003, the effective corporation tax rates on the CSO measure of profit (Net Operating Surplus) and the Revenue measure of profit (Taxable Income) have averaged 10.9 per cent and 10.7 per cent respectively.

In more recent years, there are differences between the two figures – CSO measure is 8.4 per cent in 2011, Revenue measure is 10.4 per cent - this is due to the existence of large corporate losses in the system which can be offset against profits for tax purposes but are not captured in the CSO figures.

On the basis of this detailed research, the analysis confirms that the effective rate of corporation tax in Ireland is close to the statutory rate and that companies in Ireland are paying the appropriate rate of corporate tax on profits generated by those companies in Ireland.

9. OECD Base Erosion and Profit Shifting Project in an Irish Context

There is general consensus among international policy makers that there is a need for multilateral action to counter aggressive tax planning by large multinational companies. The OECD's Base Erosion and Profit Shifting (BEPS) project represents a co-ordinated international effort by the G20 and OECD member countries to tackle the issue of the amounts of corporation tax being paid by multinational corporations.

It is important to stress that the BEPS project is not focussed on any jurisdiction's tax rate, including that in Ireland. The Irish 12.5 per cent rate will not change and is not under discussion.

Through BEPS, the OECD is considering how international rules, which countries rely on for international trade, can be amended to ensure fair levels of taxation. The Department is engaged on an on-going basis on issues of international taxation at a variety of fora – including the OECD and Ireland is therefore very engaged in the BEPS project.

In 2014, in the context of this particular process and mindful of the desire to remain competitive, the Department opened a public consultation on BEPS to consider options for how Ireland's tax system could respond to a changing international tax environment. A report containing the results of this consultation and analysis of the potential impacts for Ireland from this project was prepared in 2014 and is summarised as follows.

The results of the BEPS project will have ramifications for all developed economies, including Ireland. However, it is worth considering what the likely alternatives to an effective BEPS process might be. Without this process, due to economic, political and public pressures it is likely that measures would be taken by certain jurisdictions unilaterally against each other in a way that could negatively impact those countries against whom the measures were addressed. This is one of the many reasons that explain why Ireland particularly welcomed the BEPS process.

On the public consultation, the level of engagement on this issue was very positive, from a variety of groups including individual citizens, industry groups, advisers and political parties. The input received from submissions was reflected in a number of decisions taken in Budget 2015, and will continue to feed into the Irish engagement at BEPS.

In terms of the impact of particular BEPS Action Points on Ireland the finalisation of the 2014 BEPS reports have given food for thought in relation to the impact that the recommendations stemming from these and the 2015 reports could have on Ireland's tax regime.

In the area of transfer pricing, the actions which have focused on value creation (actions 8, 9 & 10) are likely to result in changes internationally. It is clear that certain structures, with little substance, are in their winter. As a result, there are opportunities for Ireland to become a location of choice for groups who wish to bring their intangible assets onshore together with the relevant substance.

The digital economy report found that it is not possible to separate the digital economy from the economy as a whole, a result that is welcomed by Ireland. This conclusion aligns with the principles of the Irish taxation regime: a fair, open and transparent regime offering similar terms to all industry groups.

Ireland is not mentioned in the interim report on harmful tax practices (Action 5) and on that level there should not be an immediate impact on Ireland from this report. However the general outcomes and recommendations could have an impact on how the Irish tax regime is shaped in the medium term. A large portion of the final report is expected to focus on preferential IP regimes.

As the 2015 actions approach finalisation next year a very important consideration will be the interaction between the various actions. It is clear that some of the actions have significant overlap and as such a co-ordinated approach towards implementation will be of utmost importance. Ireland will therefore continue to be actively involved at OECD level.

In particular, the actions dealing with changes to the transfer pricing guidelines are central to the attempts to align profits with taxing rights and these changes may bring an end to “cash box” tax structures. Companies will therefore be looking to move certain operations or intellectual property from zero tax jurisdictions. Ireland should continue to monitor change in this particular area, as a competitive tax rate could become highly relevant in that regard.

As to the broader impact of BEPS, the project is built upon two key pillars which are to align profits with substance and to address double non-taxation. It is therefore clear that BEPS will continue to result in changes being made to the international taxation rulebook which countries rely on for international trade. Ireland has always played by these rules and “played to win” as is evidenced by a successful track record for attracting FDI.

This will not change in the post-BEPS environment, and as companies seek to better align the amount of tax that they pay with their substantive operations, will result in opportunities for Ireland as the alignment of substance with a competitive rate of tax has been the cornerstone of Ireland’s CT policy since the 1950s.