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POLICY PAPER

Aggressive Tax Planning Practices and Inward-FDI Implications for Ireland of the New US Corporate Tax Regime

Frank Barry*
Trinity College Dublin

Abstract: National corporate tax systems interact with each other in complex ways. Interactions with the US tax system are particularly important for Ireland given the significance of the US MNC presence in the Irish economy. The US system changed dramatically with the passage of the Trump administration's *Tax Cuts and Jobs Act* in late 2017. This paper outlines the history of corporate tax policy in the two jurisdictions and how the systems interacted up to the time of the recent changes. It also details the type of aggressive tax planning practices that grew up around the location of intellectual property assets. The likely implications of the new US tax regime for intellectual property location and inward FDI in Ireland are then assessed.

I INTRODUCTION

National corporate tax systems interact with each other in complex ways. The interactions became more complex in the late 1990s as opportunities expanded for aggressive tax planning practices around the transfer of intellectual property (IP) from the US.[1] The nature of the interactions will change as a consequence of the passage of the US *Tax Cuts and Jobs Act* of late 2017. The purpose of this paper is to assess how Ireland might fare in light of these changes.

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* Corresponding author: frank.barry@tcd.ie

[1] Aggressive tax planning refers to the exploitation by multinational corporations of asymmetries between the tax laws of different jurisdictions in order to achieve 'double non-taxation'.

Hines and Rice (1994) outline the basic functioning of the US tax system as it operated up to the time of the recent changes. Unlike most other countries, the US had taxed its corporations on a worldwide rather than a territorial basis, meaning that US corporations owed taxes to the US government on all of their worldwide income. If a low tax rate was paid in Ireland, for example, the corporation remained liable to the US authorities for an amount based on the difference between the Irish and the US rate.

Low-tax jurisdictions remained attractive to US firms for two reasons however. The first related to the operation of the US tax credit system. To avoid subjecting its corporations to double taxation the US provided a foreign tax credit for income taxes paid overseas. If the corporation paid a rate higher than the US rate on its operations in Country H, nothing further was owed to the US, though the corporation was obviously unable to recoup the difference from either government. This left it in what is referred to as an "excess foreign tax credit" position.[2] The US foreign tax credit, however, applies to *aggregated* income taxes paid abroad. Hence, if the corporation had a subsidiary in Ireland in addition to its operation in Country H it could use these excess foreign tax credits to reduce the tax bill owing to the US authorities from the firm's Irish operations. Low-tax jurisdictions therefore allowed US firms to 'blend away' the disadvantage of maintaining operations in high-tax overseas locations (hence, of course, facilitating these latter locations in attracting US investments in spite of their high tax rates).[3]

The second reason why low-tax foreign environments were attractive to US firms was because payment of US tax liabilities on overseas profits could be deferred until the profits were repatriated to the US. *Deferral* was essentially an interest-free loan from the US Exchequer to the corporation in the amount of the deferred tax liabilities. The gains to the corporation from *deferral* were higher in the case of low-tax jurisdictions.

These advantages incentivised the assignment to Irish-incorporated entities of returns on patents derived from R&D that had largely been conducted elsewhere.[4] As Desai *et al.* (2006) point out,

[2] That significant numbers of US firms were in such positions even before the US rate was reduced from 46 to 34 per cent under the US *Tax Reform Act* of 1986 points to the complexity of tax liability calculations (Altshuler and Fulghiere, 1994; Gravelle, 2013).

[3] Desai *et al.* (2006) showed that firms with growing activity in high-tax countries were the ones most likely to initiate operations in low-tax jurisdictions.

[4] Walsh (2011) warns of the significant discrepancy between Irish and US measures of the resulting profits. The US Bureau of Economic Analysis data, he notes, "classify profits of non-resident companies as being located in Ireland, whereas in reality the profits are earned and are taxable elsewhere (wherever the company is tax resident)."

> *OECD governments require firms to use transfer prices that would be paid by unrelated parties, but enforcement is difficult, particularly when pricing issues concern differentiated or proprietary items such as patent rights. Given the looseness of the resulting legal restrictions, it is entirely possible for firms to adjust transfer prices in a tax-sensitive fashion without violating any laws.*

To facilitate understanding of the aggressive tax planning practices that have grown up around the location of intellectual property assets, the next two sections detail in turn the evolution of US tax policy and Ireland's role in the international payments flow. Section IV outlines the 2017 changes to the US corporate tax system while Section V examines the potential implications for Irish inward FDI. A final section summarises the findings and comments on recent reports of a sharp reversal in US FDI inflows to Ireland.

II THE US CORPORATE TAX SYSTEM AND THE EVOLUTION OF AGGRESSIVE TAX PLANNING

Until 1962, the US tax system largely reflected the principle that subsidiaries operating in foreign markets should face the same tax regime as local firms in these markets. US taxation could be avoided as long as foreign profits remained offshore.[5] Concerns about erosion of the tax base grew however as US corporations became increasingly globalised in the post-war period. The Kennedy Administration responded in 1961 with a proposal to switch to a regime based on the principle that the overseas income of US corporations be taxed exactly the same as income earned in the US. The earnings of "controlled foreign corporations" (CFCs) were to be deemed a dividend to US shareholders.

Deferral, the Kennedy administration argued, had led to the "unjustifiable use of tax havens" for practices that included "artificial arrangements between parent and subsidiary regarding intercompany pricing, the transfer of patent licensing rights and the shifting of management fees".[6] The Kennedy initiative was blocked by Congressional Republicans who argued that it would damage the international competitiveness of US corporations, who would be forced – since the US tax rate was among the highest in the world – to pay higher taxes than competitors from elsewhere. "The political battle thus pitted global tax neutrality against international competitiveness" (Sweitzer, 2005). A compromise was reached with the enactment in 1962 of what is known as the Subpart F ('taxation anti-deferral') regime. US taxation on overseas profits could continue to be deferred other than in the case of

[5] This synopsis of US corporate tax history draws largely on Sweitzer (2005) and Avi-Yonah (2005-2006).
[6] Message from the President of the United States to Congress, April 20, 1961, the relevant section of which appears as Appendix A of Joint Committee on Internal Revenue Taxation (1961).

'Subpart F income', the income derived from inherently mobile 'passive investments' that produced only royalties or interest or dividend payments.

Until 1984, US firms were permitted to transfer intellectual property developed in the US to foreign affiliates without triggering US tax liability as long as the goods produced by the intangibles were sold outside the United States. The *Deficit Reduction Act* of 1984 rescinded this exemption. Much effort has since been devoted by MNCs to devising tax-efficient methods to effect this transfer. A foreign low-tax affiliate can acquire the rights to the intellectual property by engaging in an R&D cost-sharing agreement with the parent company. The terms of these cost-sharing agreements are controversial (Kleinbard, 2011). A former US Treasury International Tax Counsel has remarked for example that "it would be interesting to know what percentage of related party cost sharing agreements involve one or more unsuccessful products compared with arm's length agreements" (Shay, 2008).

A second element of the strategies adopted emerged as a consequence of the introduction by the US Internal Revenue Service (IRS) in 1997 of simplifying 'check-the-box' (CTB) procedures in response to the growth in complexity of Subpart F provisions. Under this new system a range of foreign entities within the overall company structure could check-the-box to allow themselves to be disregarded (or essentially treated as branches rather than separate subsidiaries) for tax purposes. The CTB regime paved the way for creative tax-avoidance options involving the creation of 'hybrid entities' (Mutti and Grubert, 2009).[7]

IMF (2013, p.47) provides as an example a US corporation that sets up a holding company which in turn holds a controlling share in an operating company. In the absence of check-the-box, any interest, royalty, or dividend income paid by the operating company to the holding company could create a current US tax liability. Under the new rules ('if properly arranged') the operating company could be disregarded and the monies received by the holding company treated as active rather than passive income, thereby thwarting the application of Subpart F. The 'double Irish' tax planning structure discussed in the next section provides an example of the use of such hybrid entities.

The US Treasury and the IRS attempted to reverse position as early as 1998 when the tax planning benefits offered by check-the-box became clear. They were faced with opposition on a number of fronts however (Sweitzer, 2005, fn. 58). One influential argument was that foreign rivals were also using low-tax jurisdictions or tax havens to reduce their tax burdens (Engel, 2001). The interest-group pressures against reversal proved victorious: the regulations issued by the Treasury Department in 1997 were enshrined in legislation by the US Congress as the Look-Through-Rule in 2006.[8] As US Senators Levin and Coburn (2012, p.13) note, "this

[7] A hybrid is defined as an "entity with a single owner that is treated as a separate entity under the relevant tax laws of a foreign country and as a branch of a CFC [controlled foreign corporation] that is its sole owner for US tax purposes" (Joint Committee on Taxation, 2010, p. 48).

[8] This has been renewed on several occasions since then, most recently being extended out to 2021.

section was enacted without significant debate as part of a larger tax bill". Check-the-box, they recognise, "further facilitated the increase in offshore profit shifting, which has gained significant momentum over the last 15 years" (Levin and Coburn, 2012, p.11).[9]

What of the deferral of taxation on non-Subpart F overseas profits? Accounting standards permit US MNCs to defer recognition of tax liability on foreign earnings if it is asserted that these earnings are permanently or indefinitely reinvested abroad. In 2011 more than 1,000 US MNCs made such a declaration on [a stock of] more than $1.5 trillion of overseas profits (Levin and Coburn, 2012, p.15). By 2018 this sum had risen to between $2 and $3 trillion (Desai, 2017; Dharmapala, 2018), much of it held by leading pharmaceutical and technology firms (UNCTAD, 2018a).

Senators Levin and Coburn (2012, p.16) note that "because corporate management can easily change corporate investment plans, auditors may encounter difficulties in evaluating management claims." It can be difficult, they continue, to disprove an intent to reinvest these earnings. Evidence that significant amounts of nominally 'reinvested earnings' have been held as liquid assets in low-tax jurisdictions, including Ireland, is provided by Blouin *et al.* (2016). Levin and Coburn (2012, p.18) draw attention to an earlier Senate investigation that showed that, of the MNCs surveyed, "on average 46 per cent of their tax-deferred offshore funds were held in US bank accounts and invested in US assets such as US Treasuries or shares of unrelated US corporations".

The major US political parties have been divided on corporate tax matters since at least the Kennedy era. John Kerry, the 2004 Democratic Party candidate for the presidency, favoured complete anti-deferral, proposing to tax immediately all corporate income whether earned domestically or abroad (Sweitzer, 2005, fn. 100). This was the position Barack Obama also adopted in his first US presidential campaign. His administration failed in its attempts to enact these proposals however (Barry and Bergin, 2012). Engel (2001) concluded that "[n]either the political forces in favour of a pure anti-deferral approach nor the political forces in favour of a pure territorial approach have the clout for complete victory."

III THE IRISH CORPORATE TAX SYSTEM AND ITS INTERACTIONS WITH US TAX LAW

Ireland's low corporation tax regime dates from 1956 when a new incentive, variously referred to as 'export profits tax relief' or 'export sales relief', was introduced. This offered "a remission of 50 per cent income tax on profits of a manufacturing industry derived from increased exports over a datum year". Over

[9] Altshuler and Grubert (2005) ascribe the pronounced change they identify in the effective foreign tax rates paid by US MNCs from 1996 to the effects of check-the-box tax planning.

the following few years the tax remission was expanded to 100 per cent, the exemption period was lengthened and a 25-year exemption was granted for the customs free zone at Shannon Airport (Barry, 2011).[10]

The Irish tax regime has been amended on a number of occasions since then. The export incentive was clearly distortionary and was phased out from 1978, to be replaced by a new low 10 per cent tax rate for manufacturing. This was extended to computer software in 1984 and to qualifying activities carried out at the newly-established International Financial Services Centre in 1987. A general rate of 12.5 per cent was decided upon in 1998 in the face of European Commission insistence on harmonisation across sectors and came into effect from 2003 (Barry, 2012).

In addition to the low tax rate, Ireland also adhered to historic British case law which held that a company registered in the UK but without any UK activities was not subject to British taxation.[11] This feature of Irish law enabled companies to be registered in Ireland without being tax resident in the country and formed the basis of the 'double Irish' tax structure. The ultimate aim of this and other tax planning structures was to have MNC overseas profits accrue in micro state jurisdictions such as the Cayman Islands which levy franchise taxes rather than corporation tax (Gravelle, 2013). The 'double Irish' structure involved the establishment of two Irish companies, only one of which was tax-resident in Ireland.[12] Ownership of the intellectual property was vested in the second company. The first company paid royalties to the second for use of the IP, massively reducing the amount of Irish tax owed. The second company collected the royalties, typically in one of the micro state jurisdictions.[13] As the Netherlands traditionally did not impose withholding tax, while Ireland did not impose withholding taxes on intra-EU transfers, profits frequently transited through the Netherlands on their way from Ireland to the micro states. This was the so-called 'Dutch sandwich' (see e.g. House of Commons Committee of Public Accounts, 2013).[14]

[10] Ireland's inclusion on the Hines and Rice (1994) list of tax havens was based on the availability of 'tax holidays', which had long disappeared by 1994. The reports of the US Government Accountability Office (GAO, 2008; Gravelle, 2013) simply merge the Hines and Rice list with others. Sharman (2010) criticises the lack of care taken in such exercises, pointing to occasional comic outcomes such as when Venezuela, by copying a Mexican blacklist word-for-word, ended up blacklisting itself.

[11] Many British Commonwealth member states also adhered to this. The UK amended this aspect of its legislation in 1988: http://www.hmrc.gov.uk/manuals/intmanual/intm120200.htm.

[12] It could be difficult to make certain passive income 'disappear' under check-the-box. A backstop was available in the same-country exception, under which "an exemption from subpart F income treatment exists for eligible dividends and interest received by a controlled foreign corporation from a related payor corporation that is created under the laws of the same foreign country" (KPMG, 2010).

[13] Google, for example, held its IP in an Irish company that was tax resident in Bermuda. LinkedIn used an Irish company that was tax resident in the Isle of Man (Smyth, 2013). Apple used a different, so-called 'stateless', structure (Ting, 2014). European Commission (2016) provides details of the EC case against Ireland's tax treatment of Apple.

[14] Jenniges *et al.* (2018, Appendix B) provide a simple graphical exposition of the 'double Irish Dutch sandwich'.

A further tax planning practice with an Irish dimension was revealed in the UK House of Commons investigations of 2012-2013. These showed how some 'new economy' firms book their UK sales in Dublin, while a related UK company services the UK customers and is reimbursed on a cost-plus basis by the Dublin operation. This ensures that most of the sales are registered in Ireland rather than the UK.[15]

For reasons entirely unconnected with the introduction of check-the-box, the Irish *Finance Act* of 1999 strengthened the restrictions on the class of companies that would be allowed to be Irish-registered non-resident (IRNR) under the management and control test. Henceforth, IRNR status was confined to Irish-incorporated companies under the ultimate control of persons of tax-treaty countries (such as the EU or the US) and related through ownership to a company with substantive activities in Ireland. Finally, in 2015 – in the wake of the US Senate Subcommittee findings on Apple and in anticipation of the OECD's 'Base Erosion and Profit Shifting' (BEPS) initiative – Ireland's corporate tax residence rules were amended to include companies that were either incorporated or effectively managed in Ireland, with structures existing prior to 2015 grandfathered for tax purposes through to 2020.[16]

The coming-on-stream of BEPS, which seeks to align taxation with economic substance, is one of a number of factors associated with the substantial on-shoring to Ireland of IP assets in recent years. BEPS should work to the advantage of jurisdictions such as Ireland where substantive operations can be located, unlike in the case of the micro states (Mutti and Grubert, 2009). The tax deductibility in Ireland of the capital expenditures entailed in the purchase of these IP assets by Irish-resident companies has also presumably been of importance. The Irish Tax Institute's commentary on the 2014 *Finance Act* states that

> *The capital allowances will ultimately expire, making it difficult for companies to maintain a consistent effective tax rate on their IP profits in the longer term. It is hoped that the 'knowledge development box' regime announced in the Budget will address these issues.*[17]

The 'balance sheet relocation' of IP assets to Ireland was a major component of the increased investment – and increase in associated exports – that drove the dramatic revisions to the 2015 national accounts (McNamara and MacCoille, 2016; Purdue and Huang, 2016).[18]

[15] House of Commons Committee of Public Accounts (2013), p. Ev39; IMF (2013), p. 47. Other 'new economy' companies have used similar strategies to book profits from their UK sales in Switzerland and the Netherlands (*Financial Times*, 14 October 2017).

[16] Some double taxation treaty exemptions remain in place however. These cannot be revoked unilaterally

[17] IMF (2018) suggests however that the KDB "is generally perceived as most useful to small and medium-sized Irish enterprises".

[18] As required by the EU's Anti-Tax Avoidance Directive, Ireland subsequently (in Budget 2019) imposed an exit charge on the transfer of assets out of Ireland. The tax, which is imposed on unrealised capital gains, was set at 12.5 per cent rather than the standard capital gains tax rate of 33 per cent, presumably so as not to disincentivise further relocation into the country.

IV THE NEW US TAX REGIME

While the provisions of the *Tax Cuts and Jobs Act* signed into law by US President Donald Trump in December 2017 are extremely detailed, the most significant elements of the business tax dimension can be summarised as follows:[19]

- A reduction in the headline Federal tax rate from 35 per cent to 21 per cent
- A one-time toll charge on foreign profits held offshore
- A shift from a worldwide to a territorial tax system, and
- The introduction of a series of new taxes to police the offshoring incentives introduced by the shift to territoriality.

The first element is the new tax rate. The previous top rate of 35 per cent was among the highest in the world. The law creates a new single corporate tax rate of 21 per cent, to which state and local taxes will add around another 5 per cent. This leaves the US rate slightly higher than the average for the rest of the OECD, but lower than most of the other G-7 countries (PWC, 2017b). Effective tax rates will be somewhat lower.[20]

The second element, adopted as part of the transition to territoriality, is a one-time toll charge on profits currently held offshore. These are to be taxed at a rate of 15.5 per cent for cash and 8 per cent for investments in illiquid assets whether or not the funds are repatriated to the US. The US Administration appears to hope that the repatriated cash will be used for domestic investment, though Mintz (2018) notes that many companies cite debt reduction as their priority.[21]

The final elements of the Act are the most complicated. Shifting to a *pure* territorial tax system would further incentivise offshore activities since US MNCs' foreign profits would no longer be subject to residual US tax liabilities. A 'carrot and stick' approach is adopted to address this issue. The 'sticks', denoted GILTI and BEAT, and the 'carrot', denoted FDII, are generally aimed "at making the location of intangibles in the United States more attractive than in past law" (Gravelle and Marples, 2018).

GILTI ("global intangible low-taxed income") is defined as the excess income earned by a company's foreign subsidiaries over and above a 10 per cent rate of return on their tangible business assets. If no foreign tax is paid on the foreign pool of GILTI profits, the US imposes an effective tax rate of 10.5 per cent on these

[19] For a very broad overview see Desai (2017).

[20] Bilicka and Devereux (2012) provide examples of the wide divergences between effective average corporate tax rates and nominal rates. The annual PWC/World Bank reports on 'Paying Taxes' illustrate how specific the effective tax rate is to the exact characteristics of the type of investment undertaken. See also Annex 20A of Comptroller and Auditor General (2017).

[21] Central Bank (2019) reported recently that "many US MNEs repatriated some of their foreign retained earnings and then undertook substantial share buybacks, primarily in the first half of 2018".

profits. Double taxation relief is available for only 80 per cent of the foreign tax credits attributed to this type of income so that if, for example, a foreign tax rate of around 13.1 per cent is paid, no further US tax is liable.[22] From 2026 the effective US tax rate on this income increases and the foreign tax rate required to pay no additional US tax will rise to around 16.4 per cent (KPMG, 2017).

The second 'stick' is a new Base Erosion Anti-Abuse Tax (BEAT) that limits the ability of MNCs to shift profits from the US by making deductible payments to affiliates in low-tax countries for e.g. the use of patents or other intellectual property in the US.[23] The BEAT applies a minimum tax rate (currently of 10 per cent) to modified taxable income, calculated by disallowing certain tax deductions. Consider for example the case of a US corporation with gross income of $300 million that pays tax-deductible royalties to a foreign affiliate of $200 million. The corporation's regular tax liability is $21 million (21 per cent of $100 million). The alternative tax is $30 million (10 per cent of $300 million). The tax payable in this case is the regular tax of $21 million plus the BEAT add-on of $9 million (Tax Policy Center, 2019).

The 'carrot' consists of the new Foreign-Derived Intangible Income (FDII) provisions. If a US-parented group holds its intellectual property (IP) in the United States, the deduction it receives for the IP income deriving from sales and services to certain foreign parties reduces its effective tax rate to 13.1 per cent, rising to 16.4 per cent from 2025 (KPMG, 2017). This, it will be seen, is in essence a form of export subsidy.

V IMPLICATIONS FOR INWARD-FDI IN IRELAND

In terms of how US business taxes are structured, the changes introduced by the *Tax Cuts and Jobs Act* are genuinely historic. The act rewrites the broad fundamentals of how the US tax system has operated since at least the Reagan era. Many of the operational details remain to be fleshed out however: these will be provided in US Treasury guidelines to be issued over the coming years (IMF, 2018).

Treasury guidelines are also issued in response to emerging aggressive tax planning practices. Such practices thrive on complexity, and the shift to territoriality combined with the range of carrots and sticks designed to counteract some of the associated incentive effects leaves huge scope for tax-planning innovations (Kamin *et al.*, 2018). Though Treasury responses can be stymied by political pressure – as seen above in the case of check-the-box – the fact that the Act was opposed by Congressional Democrats increases the degree of uncertainty as to how long many

[22] 13.1 per cent @80 per cent ≈ 10.5 per cent. Thus a 13.1 per cent foreign rate equates to the 10.5 per cent effective US tax rate.

[23] The BEAT applies only to corporations above a particular size and 'base erosion payments' above a particular threshold.

of the changes will last (Mintz, 2018). Dharmapala (2018) suggests furthermore that "given that there is politically no current prospect of a US VAT, an expectation that the corporate tax rate will increase in the future is far from unreasonable".

This uncertainty can be expected to dampen any short-term response. Further uncertainly is engendered by the fact that concerns have been raised as to the compatibility of aspects of the new tax regime with World Trade Organisation rules and with existing double taxation agreements: components such as the FDII provisions, and to a lesser extent BEAT, face an uncertain future for this reason (Desai, 2017; Kamin *et al.*, 2018; Mintz, 2018; Chalk *et al.*, 2018).[24]

The analysis that follows focuses on the implications of the tax package *as currently constituted*. Take first the case of corporate inversion, whereby a US company changes its legal domicile by merging with (or 'backing into') a company from a jurisdiction that offers a more favourable tax treatment of income. The US tax regime is clearly in direct competition with foreign rates and regimes in these cases. FitzGerald (2013) found that redomiciling was disadvantageous to Ireland as it increased the State's financial obligations to the EU while leaving national income largely unchanged. Though the Trump administration had been expected to rescind the executive orders by which the previous administration had clamped down on such practices, the new tax package achieves the same end by largely removing the incentive to redomicile.

A next case to consider is that of US firms currently producing in Ireland for the EU or other *non-US markets*. For firms ineligible for the FDII export subsidy (for whatever reason) there is likely to be little incentive to shift production back to the US.[25] Current sales would not necessarily be replaced by US exports: existing markets could instead be captured by non-US competitors. Total US exports could indeed be damaged as a substantial proportion consists of parent company sales to foreign affiliates (Slaughter, 2009, pp. 6, 14).

Other considerations arise in the case of US MNC exports from Ireland *to the United States*. The FDII 'export subsidy' is irrelevant to the decision as to whether to shift these operations to the US since sales within the US are clearly ineligible. BEAT may come into play in this case however. The BEAT imposes an extra tax liability on large corporations whose payments of interest, royalties and management fees to foreign affiliates exceed a certain proportion of total deductible expenses (Chalk *et al.*, 2018). That the provision does not apply to deductible expenses based on 'goods purchased' should shield US-affiliate Irish pharmaceutical exports to the US from the tax, though Chalk *et al.* (2018) warn

[24] Avi-Yonah and Vallespinos (2018) describe the FDII as a 'direct descendent' of the earlier 'border adjustment tax' which was widely considered to be incompatible with World Trade Organisation rules and was ultimately jettisoned (Avi-Yonah and Clausing, 2017). They judge FDII to be 'a blatant and obvious violation' of WTO rules. (See also IMF, 2018).

[25] IMF (2018) judges that even eligible firms are unlikely to shift operations to the US given the uncertainties surrounding the future of FDII.

that it "may prove punitive for a range of legitimate commercial activities" e.g. in financial services.

Where European-bound US FDI is motivated by (e.g. logistical or market-access) considerations other than tax, it is the relationship between Irish and other European tax rates that is of primary significance. In assessing the consequences of the new US regime in this case, the relevant questions are, firstly, how are US FDI inflows to Europe affected, and secondly, is Ireland advantaged or disadvantaged relative to other European locations?

While a reduction in the US tax rate incentivises increased investment in the US, there are offsetting impacts on US outbound FDI. The substitution effect discourages outbound FDI while the income effect – the increase in investable funds – works in the opposite direction. The empirical evidence brought to bear by Davies (2017) suggests that the latter effect is likely to dominate, a conclusion supported by the analysis of Clancy (2019) on how Ireland was affected by variations in the effective US corporate tax rate over the decades to 2006.

The shift to a territorial system further incentivises overseas investment. Consistent with this, a simulation analysis of the US tax changes conducted by a team of German economists predicts a sharp increase in FDI flows between Europe and the US *in both directions* (Spengel *et al.*, 2018, Figure 7).[26] These authors note, furthermore, that with an "end to US taxation of worldwide income, high-tax jurisdictions like Germany or France will become less attractive relative to European low-tax jurisdictions like Ireland or Eastern Europe from the perspective of US investors" (Spengel *et al.*, 2018, page 6 and Figure 8).[27]

Finally, we come to the question of how the tax changes might impact on the location of IP *for use outside the US*. When the choice is solely between an Irish and a US location, the tax liability is almost exactly the same. For IP retained in the US the FDII provisions would see the income taxed at 13.1 per cent. For IP located in Ireland and subject to the GILTI provisions, an extra 0.5 per cent would be added by the US authorities to the Irish rate, bringing the effective rate on Irish profits to 13 per cent.[28] IMF (2018) thus judges "Ireland's 12.5 per cent CIT rate on trading income well-positioned with respect to GILTI".[29]

[26] Their study takes into account a range of range of issues not considered here, such as cross-border financing strategies and changes to expensing rules. An issue not considered however is the possible impact on the incentive to reinvest offshore earnings abroad. Lundan (2006) shows that these have financed around 40 per cent of US FDI in Europe. The new US regime reduces the incentive to hold such funds abroad. UNCTAD (2019) notes that "the removal of the provisions triggering tax liabilities upon repatriation may lead to structurally lower reinvested earnings by United States MNEs in the future."

[27] In 2009, the United Kingdom abolished dividend taxes on foreign repatriation from many low-tax countries including Ireland. A recent IMF working paper (Liu, 2018) finds that UK MNCs engaged in significantly more overseas investment in low-tax countries after the shift to a territorial tax system.

[28] 12.5 per cent @80 per cent = 10 per cent. Thus an extra 0.5 per cent tax would be imposed by the US to bring this up to the 10.5 per cent effective US tax rate imposed by the GILTI provisions.

[29] Wagman *et al.* (2018) also comment that "it is unclear how strong [the US export incentive] will prove to be", as sales to overseas customers made by a non-US subsidiary of a US parent generally are subject to a lower tax than the rate imposed on the US parent's FDII. A similar point is made by Kamin *et al.* (2018).

This may not be the calculation of greatest relevance however since factors other than the corporate tax rate also have a bearing on where global intangible income is located. As Griffith *et al.* (2014) note, “we would not expect all intellectual property to be legally registered in the lowest tax countries.” They point out in particular that there are reasons why some IP may be co-located with the innovative activities that are concentrated in R&D-intensive high-tax countries.[30]

Mutti and Grubert (2009, Table 3A) use royalty payments to US parents as an indicator of IP location, and show that, although the share received from Irish affiliates increased significantly with the introduction of check-the-box, substantial flows continued to come from other European jurisdictions, particularly the UK. As the GILTI provisions apply not on a per-country basis but to the aggregate of the relevant income earned in all foreign jurisdictions, a low-tax location like Ireland – exactly as discussed earlier – can be used to *blend away* the disadvantages of simultaneously holding IP (or earning other forms of intangible income) in higher-tax jurisdictions (Chalk *et al.*, 2018, pp. 21, 24; Kamin *et al.*, 2018, p. 41).[31]

One further point of note is that the GILTI provisions encourage US companies to hold more tangible assets overseas in support of their foreign IP operations. Recall that GILTI is the *excess income earned* by a company’s foreign subsidiaries *over and above a 10 per cent rate of return on their tangible business assets.* Holding more tangible assets overseas reduces the amount of such income – a factor remarked upon by numerous scholars, including Kamin *et al.* (2018), Mintz (2018), Chalk *et al.* (2018) and Dharmapala (2018). While these tangible assets can be held anywhere overseas, this factor too has the potential to work to Ireland’s advantage.

VI CONCLUSIONS

Ireland, it is concluded, is unlikely to be affected adversely by the recent dramatic changes to the US corporate tax system. This arises for the following reasons, which may be broken down into issues pertaining to production and IP location. In terms of production, the changes are likely to lead to increased *real* (plant and machinery) investment in Europe as well as in the US, and Ireland will be further advantaged relative to competitor EU locations. The tax changes offer little incentive to ‘re-onshore’ or shift existing production back to the US. In terms of IP location, even if the US export subsidy for IP-intensive goods and services is deemed compatible with WTO rules, the margin associated with locating IP assets in Ireland will not disappear. Irish-located IP, furthermore, can be used to blend away the tax

[30] Large, rich, R&D-intensive economies exploit the innate advantages associated with these characteristics by levying higher tax rates than smaller, peripheral, less R&D-intensive economies.

[31] That the micro state jurisdictions appear to have lost favour in recent years enhances Ireland’s attractiveness for such blending purposes.

disadvantages of choosing to locate some IP or global intangible income close to where R&D is undertaken in higher-tax European economies.

The many uncertainties surrounding the sustainability and permanence of the new regime, and the fact that key details remain to be clarified, will ensure however that any major structural changes to investment behaviour will occur only over the medium term.

How do these conclusions relate to reports of a recent sharp reversal in US FDI inflows to Ireland, as well as to Luxembourg and the Netherlands, which UNCTAD (2018b, 2019) ascribes to the tax changes? The background analysis in the reports reveals that these outflows reflect the repatriation of profits formerly held offshore for deferral purposes. These financial flows, as is widely recognised, are of limited relevance to the real economy.[32]

The Central Bank (2019) remarks, for example, that:

> *Since the introduction of the US tax reform, Ireland's reported holdings of US treasuries have declined by approximately €50 billion. This is consistent with the repatriation of retained earnings by US MNEs' subsidiaries, as the firms may have sold US treasuries in order to repatriate funds to the US before paying dividends or engaging in share buybacks… The direct economic effects of these transactions on underlying Irish economic activity are likely to be limited.*

An issue not considered in the present paper is whether and to what extent the tax rates of high-tax European economies might be adjusted downwards in the coming years in response to the US initiative.

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[32] As Forfás (2002) noted, "flows of direct investment into IFSC companies are roughly matched by outward flows of portfolio investment, and have little impact on the real domestic economy". UNCTAD (2004, p. 104) too remarks that "a good deal of services FDI – notably that in holdings and financial affiliates – involves activities with little value added, employment, sales or investment expenditure on fixed capital".

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