The Impacts of BEPS on Intellectual Property Tax Planning: Case Study of "Double Irish" and "Dutch Sandwich"

Kittiya Prueksarungrueang

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Abstract

The Double Irish and Dutch Sandwich strategies are classified as international tax avoidance schemes that are usually exploited by high-tech multinational enterprises (MNEs), like Apple and Microsoft, for generally shifting huge profits through the layer of intellectual property licenses to low-tax or no-tax jurisdictions via Ireland. However, these strategies have been considered as very aggressive tax planning and have been put under global spotlight. Accordingly, the Base Erosion and Profit Shifting (BEPS) project-launched by the Organization for Economic Co-operation and Development (OECD)-purposes to grapple with the problems of BEPS by creating a BEPS Action Plan as internationally agreed standards. Under pressure from OECD and other countries, Ireland has already modified its tax laws and policies to comply with key BEPS recommendations. After the changes, it is doubted whether the Double Irish and Dutch Sandwich strategies will come to an end. Thus, this paper aims to analyze the effect on the Double Irish and Dutch Sandwich structures in the post-BEPS era.

Keywords: intellectual property tax planning, double irish, dutch sandwich

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1. Introduction

Intellectual property (IP)[1] is considered as an intangible asset that constitutes a major value-driver for multinational enterprises (MNEs).[2] Given that intangible assets, with a particular focus on IP, are non-physical assets having non-fixed geographical nexus, these assets can be relocated conveniently with minimal costs.[3] As a consequence, this flexible element of IP has been regularly employed by MNEs by allocating IP assets to their subsidiaries in low-tax or zero-tax jurisdictions, thereby, alleviating their entire tax burden.

In order to realign IP rights to be taxed at a low or zero rate, two tax avoidance techniques known as the "Double Irish" and "Dutch Sandwich" schemes are famously adopted by some of the world's largest companies like Apple and Microsoft. These regimes are different in respect of the company's foundation; Double Irish involves only Irish subsidiaries, but Dutch Sandwich includes Dutch subsidiary adding in middle. In fact, these two schemes usually work together to shield the majority of worldwide sales from being taxed. The techniques take advantage of the difference of corporate tax residency rules between U.S. and Ireland.[4] While the U.S. adopts a place of incorporation to identify the U.S. tax resident, Ireland applies a place of management and control test. This means that if a company is incorporated in Ireland but managed and controlled in a zero-tax

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[1]There are many statutory forms of intellectual property: copyrights, patents, trademarks, etc.

[2]Kelvin King, "The Value of Intellectual Property, Intangible Assets and Goodwill," **Journal of Intellectual Property Rights** 7 (2002): 245-248.

[3]Lisa Katharina Evers, "Intellectual Property (IP) Box Regimes: Tax Planning, Effective Tax Burdens, and Tax Policy Options," (PhD Thesis, Mannheim University, 2014), pp. 37-46.

[4]Danielle Thorne, "The Double Irish and Dutch Sandwich Tax Strategies: Could a General Anti-avoidance Rule Counteract the Problems Caused by Utilisation of these Structures?," (LL.M. Thesis, Victoria University of Wellington, 2013), pp. 5-14.

jurisdiction, a company will pay no tax on its incomes. As a consequence, overall tax bills of MNEs are largely decreased.

This IP-tax planning has captured considerable attention from the Organization for Economic Co-operation and Development (OECD), containing 35 member countries[5] from both EU and non-EU countries. After this IP tax planning has been intensely scrutinized, it has been widely considered to be an aggressive tax planning strategy because they found that several billion dollars per year are shifted to tax havens and became tax-free profits, resulting in national tax bases erosion.[6] The OECD has engaged in challenging tasks of Base Erosion and Profit Shifting (BEPS) in order to cope with the problem by establishing the international standards through OECD's BEPS Project. Accordingly, Ireland, under international pressure, has given a favorable reception to the BEPS project and has modified its law to comply with BEPS recommendations.[7] This article will focus exclusively on the impacts of BEPS on Double Irish and Dutch Sandwich structures and its status in the post-BEPS era.

This article consists of eight parts, including the Introduction and Conclusion. Part II will describe the U.S. tax system in general and its tax features, which are intimately related to the Double Irish and Dutch Sandwich regimes. Part III will demonstrate how the U.S. multinational enterprises (MNEs) exploit international loopholes in different tax systems, particularly Ireland and the Netherlands, to create the classic Double Irish and Dutch Sandwich structures. Part IV will focus on specific cases of the Double Irish and Dutch Sandwich schemes organized by Apple and Microsoft. Part V will examine the impacts of OECD's BEPS on the Double Irish and Dutch Sandwich structures and Ireland's responses. Part VI will discuss whether Ireland is still being an attractive location for foreign direct investment (FDI) after the

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[5]OECD, **Members and Partners** [Online], available URL: http://www.oecd.org/about/membersandpartners/, 2018 (April, 18).

[6]Supra note 4.

[7]Marc Alms, Kieran Taylor, and Cliona Donnelly, **Has BEPS Signaled the Death Knell for U.S. Pharmaceutical IP Migration to Ireland?** [Online], available URL: https://www.alvarezandmarsal.com/sites/default/files/beps_ireland_article.pdf, 2018 (May, 20).

BEPS Project. Part VII will determine whether the Double Irish and Dutch Sandwich regimes are completely eliminated in the post-BEPS era.

2. U.S. Tax System

Under U.S. federal tax purposes, a U.S. resident company is decided by a place of incorporation test. This means that a company will be treated as domestic if it is incorporated under the U.S. law, and a company will be treated as foreign if it is incorporated under another country's law.[8] According to Title 26 of U.S.C., domestic and foreign corporations are treated differently for tax purposes. While domestic corporations are taxed on worldwide income, whether derived from the U.S. or abroad, foreign corporations are taxed only on "gross income which is effectively connected with the conduct of a trade or business within the United States."[9] For eliminating the potential double taxation from this system, a foreign tax credit is granted for taxes paid to foreign countries in order to relieve the U.S. tax burden placed on foreign-source income.

In general, a resident corporation has no tax liabilities on profits generated through its overseas subsidiaries unless the profits are repatriated to the U.S. in the form of dividends. This concept has, therefore, convinced MNEs to set up foreign subsidiaries in tax havens and profit aboard, resulting in domestic tax base erosion. In order to curb this tax deferral problem, the U.S. has enacted the Controlled Foreign Company (CFC) legislation, which is grouped as one of anti-deferral rules.

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[8]PwC, **Worldwide Tax Summaries Corporate Taxes 2017/18** [Online], available URL: https://www.pwc.com/gx/en/tax/corporate-tax/worldwide-tax-summaries/pwc-worldwide-tax-summaries-corporate-taxes-2017-18.pdf, 2017 (April, 5).

[9]26 U.S.C. § 882.

2.1 Controlled Foreign Company (CFC) rules

In 1962, the CFC rules were codified in Subpart F of the Internal Revenue Code.[10] The core concept of CFC rules is to collect taxes from some categories of passive income received through its controlled foreign companies, regardless of whether any distributions are made. One of the Subpart F income categories consists of "Foreign Personal Holding Company Income" (FPHCI), which includes passive income in the form of royalties.[11] Consequently, royalties earned through CFCs can be deemed as taxable income (or tainted income in technical term) in the hands of U.S. resident companies and may be taxed under CFC rules.[12]

Nevertheless, CFC rules have some exclusions. The noteworthy exception is called the "same country" exception. This exception prescribes that royalties earned from a related CFC that is incorporated in the same foreign country and uses a substantial part of its property in that foreign country are not FPHCI and, therefore, not taxed under CFC rules.[13] Under this exception, it is immaterial whether CFCs are considered as tax residents under the laws of their respective foreign country. Apart from the specific CFC exclusions, other statutory regimes can make the CFC rules less efficient, in particular, with check-the-box regulations and look-through rules.

2.2 Check-the-box rules

In order to avoid CFC rules, MNEs have utilized check-the-box regulations contained in the Treasury Regulations. This regime allows a domestic or foreign company to elect whether it will be characterized as a corporation or a disregarded

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[10] 26 U.S.C. § 951-965.

[11] 26 U.S.C. § 954.

[12] Lowell D. Yoder, David G. Noren and Elizabeth Chao, **Expansion of Subpart F under the Tax Reform Act** [Online], available URL: https://www.mwe.com/en/thought-leadership/publications/2018/02/expansion-of-subpart-f-under-the-tax-reform-act, 2018 (March, 20).

[13] U.S. Internal Revenue Service, **Concepts of Foreign Personal Holding Company Income** [Online], available URL: https://www.irs.gov/pub/int_practice_units/DPLCU_P_2_3_13.pdf, 2018 (February, 29).

entity for U.S. tax purposes.[14] This regime results in what is widely known as a "hybrid entity," which is defined as an entity that is treated as transparent for tax purposes in one jurisdiction while being treated as non-transparent in another jurisdiction.[15] When the check-the-box regime is applied, the subsidiaries of the U.S. parent company are treated as a separate entity for U.S. tax purposes and, therefore, a royalty payment between two overseas subsidiaries will not be taxed under U.S. tax law.[16] Check-the-box regime is one of the fantastic elements in the field of international tax planning. By checking a box on a tax return, a company can suddenly disappear from the radar of U.S. tax law, while remaining visible to all other fiscal systems. This regime, therefore, facilitates a host of tax system arbitrage opportunities.

2.3 Look-through Rules

After issuing the check-the-box regime in 1998, the look-through rules were issued in 2006 to support the effect of check-the-box regime, which was laid down through Treasury Regulations that may be revised or revoked at any time.[17] The rules have been formulated under Section 954 (c) (6) of Internal Revenue Code.[18]

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[14]Eter Burkadze, "Interaction of Transfer Pricing Rules and CFC Provisions," **International Transfer Pricing Journal** 23 (2016): 367-377.

[15]OECD, **Glossary of Tax Terms** [Online], available URL: http://www.oecd.org/ctp/glossaryoftaxterms.htm, 2019 (January, 20).

[16]Joseph B. Darby III and Kelsey Lemaster, "Double Irish More than Doubles the Tax Saving: Hybrid Structure Reduces US, Irish and Worldwide Taxation," **Practical US/International Tax Strategies** 11, 9 (2007).

[17]Felix I. Lessambo, **International Aspects of the US Taxation System** (New York: Palgrave Macmillan, 2016), p. 329.

[18]26 U.S.C. § 951 (c) (6):

"(6) Look-thru rule for related controlled foreign corporations

(A) In general

For purposes of this subsection, dividends, interest, rents, and royalties received or accrued from a controlled foreign corporation which is a related person shall not be

Both look-through rules and check-the-box regulations produce the same result: royalty payments between two CFCs are excluded from the CFC regime, and the look-through rules, thereby, are not taxable.

3. The exploitation of International Tax Loopholes

The Double Irish and Dutch Sandwich strategies are used to minimize the corporate tax burden by taking advantage of the idiosyncrasies of varied national tax law. The main feature of these structures is to exploit the differences in tax residency rules between the U.S. and Ireland. While Irish resident companies are defined by the place of central management and control, US resident companies are defined by the place of incorporation. This means that no taxes are levied on a company incorporated in Ireland if the company is managed and controlled outside Ireland.[19] Many U.S. companies take advantage of this feature in the Irish tax law to create the Double Irish and Dutch Sandwich schemes.

Apart from Irish residency rules, there are other tax features that could bring lots of advantages to MNEs. As most companies expect to transfer their profits to low-tax or no-tax jurisdictions, Ireland may be an attractive destination because of

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treated as foreign personal holding company income to the extent attributable or properly allocable (determined under rules similar to the rules of subparagraphs (C) and (D) of section 904 (d) (3)) to income of the related person which is neither subpart F income nor income treated as effectively connected with the conduct of a trade or business in the United States. For purposes of this subparagraph, interest shall include factoring income which is treated as income equivalent to interest for purposes of paragraph (1) (E). The Secretary shall prescribe such regulations as may be necessary or appropriate to carry out this paragraph, including such regulations as may be necessary or appropriate to prevent the abuse of the purposes of this paragraph."

[19] Stephen C. Loomis, "The Double Irish Sandwich: Reforming Overseas Tax Havens," **St. Mary's Law Journal** 43, 4 (2012): 825-853.

its low corporate tax rate—which is just 12.5%. Another striking feature is that no CFC rules are applied for limiting the deferral of tax abroad.[20]

3.1 Double Irish Structure

As depicted in Figure 1, a principal characteristic of the Double Irish scheme is that a U.S. parent company (hereinafter "U.S. Co") sets up two wholly-owned Irish subsidiaries, as reflected by its name. The first Irish subsidiary (hereinafter "Irish Sub 1") is the first-tier subsidiary organized in Ireland but managed and controlled in low-tax jurisdictions or tax havens such as Bermuda, Cayman Islands, and the British Virgin Islands. The second Irish subsidiary (hereinafter "Irish Sub 2") is a second-tier subsidiary organized, managed, and controlled in Ireland.

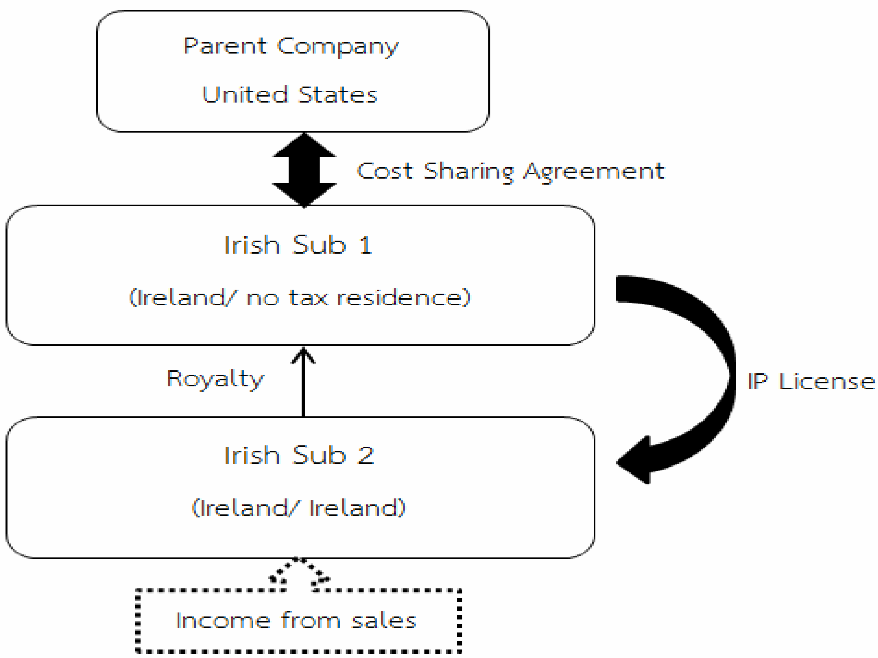

Figure 1. The basic framework of the Double Irish scheme.

[20]Polly Toynbee, "No End to Tax Piracy, No Money," **Gulf News** [Online], available URL: http://gulfnews.com/mobile/business/opinion/no-end-to-tax-piracy-no-money-1.719309, 2017 (November, 28).

After the establishment of the two subsidiaries, it is time for a layer of sublicensing. First, the U.S. Co will transfer some IP rights to Irish Sub 1 for improvement and exploitation of IP outside the U.S., and Irish Sub 1 has to pay an arm-length price in return for such rights. Then, Irish Sub 1 will sublicense these IP rights to Irish Sub 2, which must pay royalty fees in return. The main business of Irish Sub 2 is to sublicense its IP rights to other overseas subsidiaries, sell products to purchasers, and amasses the corresponding income.

The reasonable grounds behind each step will be explained. When Irish Sub 2 receives the worldwide sales income, Irish Sub 2 enables to deduct a huge amount of royalty fees paid to Irish Sub 1 as an expense in the computation of the company's profit; thus, the remaining income of Irish Sub 2 is taxed at only a 12.5% corporate tax rate, resulting in tax reduction.[21] At this point, income received by Irish Sub 1 also obtains benefit from an international tax loophole because there are different rules for determining tax residency of a company between the U.S. and Ireland. A company will be treated as a U.S. tax resident if the U.S. is the place where it is incorporated, while a company will be regarded as an Irish tax resident if Ireland is the place where it is managed and controlled. Accordingly, Irish Sub 1 becomes a dual resident company. As an explanation, it is treated as an Irish company under U.S. tax purposes because of its place of incorporation, while it is regarded as, for example, a Bermuda company under Irish tax purposes due to its place of control and management. Consequently, the royalty fees received by Irish Sub 1 are subject to tax at a very low tax rate, or it may not be subject to tax because it is usually managed and controlled in low-tax or zero-tax territories. From Ireland's perspective, Irish Sub 1 and Irish Sub 2 are recognized as two separate entities: a non-Irish company and an Irish company, respectively. Therefore, these two Irish subsidiaries can be taxed separately.

[21] Lowder J. Bryan, **The Double Irish and the Dutch Sandwich: The Explainer's Field Guide to Exotic Tax Dodges** [Online], available URL: http://www.slate.com/articles/news_and_politics/explainer/2011/04/the_double_irish_and_the_dutch_sandwich.html, 2017 (April, 14).

Under U.S. tax purposes, Irish Sub 1 and Irish Sub 2 can file an election under the U.S. check-the-box regime in order to be recognized as disregarded entities and, as a result, be ignored under U.S. tax purposes. Royalty payments received by Irish Sub 1 will be disregarded because Irish Sub 1 is viewed as an Irish single entity (not U.S. entity); thus, no U.S. tax burden arises. Following this tax effect, some may wonder why the CFC regime, which is intentionally created to impose U.S. tax on passive income from foreign affiliates, is not applied. This is because Irish Sub 1 is regarded as an Irish resident for U.S. tax purposes. When royalty income is paid from Irish Sub 2 to Irish Sub 1, this income will be treated as a payment between two Irish companies. As a result, this income will be exempted under the "same country exception".

Even though the Double Irish structure appears to be an effective strategy for reducing tax liabilities under the U.S. tax purpose, this structure seems to be unsatisfactory for easing tax burdens under the Irish tax purpose. According to Irish law, royalty payments between an Irish resident company and a non-resident company may be subject to an Irish withholding tax. Therefore, Ireland can impose withholding taxes on the royalty payments made by Irish Sub 2 to Irish Sub 1 (located in Bermuda) at 20 percent.[22]

3.2 Double Irish and Dutch Sandwich Structures

The Dutch Sandwich scheme is used together with the Double Irish structure in order to avoid paying withholding taxes. As shown in Figure 2, the structures of the Double Irish and Dutch Sandwich schemes have an elaborated structure, including many steps to follow. The Double Irish and Dutch Sandwich structures usually include at least four companies: one for parent company and others for subsidiaries.

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[22] Supra note 8.

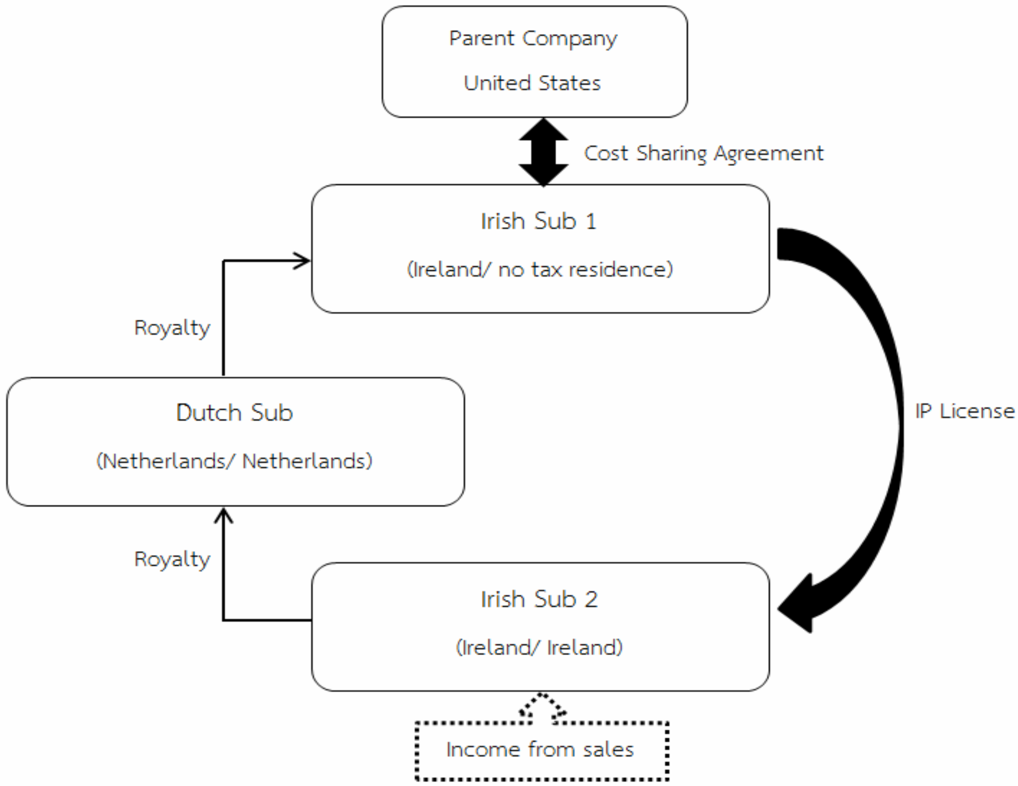

Figure 2. The basic structure of the Double Irish and Dutch Sandwich schemes.

The Double Irish and Dutch Sandwich structures start from the establishment of foreign subsidiaries in the similar way as the Double Irish, but just put Dutch subsidiaries in the middle. A parent company, which is generally tax resident in the U.S., sets up an entirely owned company (e.g., Irish Sub 1) that is registered under the laws of Ireland but managed and controlled in a tax haven country, such as Bermuda, the Cayman Islands, and the British Virgin Islands. Then, Irish Sub 1 finds another totally owned company in the Netherlands (hereinafter "Dutch Sub"), which further forms a wholly owned company that is operated, managed, and controlled in Ireland (e.g., Irish Sub 2). The main business of Irish Sub 2 is the same as the DI structure, which is to sell commodities to purchasers across the globe and generate the sales income. After setting up these affiliates, the layers of IP licenses begin again.

The Double Irish and Dutch Sandwich structures obtain further tax efficiencies, compared to the simple DI structure. By interposing a Dutch (or other EU) company between Irish Sub 1 and Irish Sub 2, the royalty payments from Irish Sub 1 to Irish Sub 2 are not subject to the Irish withholding tax. This is due to the fact that EU directives do not allow EU member states to levy withholding taxes when payments are made between EU resident companies. As pursuant to Dutch law, there is no withholding tax on royalties. Therefore, royalties paid from Irish Sub 2 to Dutch Sub, and then from Dutch Sub to Irish Sub 1 have no withholding tax. It can be obviously seen that inserting Dutch Sub for running the licenses and royalty payments can bypass the Irish withholding tax, thereby, lowering the total tax burden. Moreover, this Dutch Sub also checks the box to be treated as a disregarded entity under U.S. tax purposes. Hence, the Dutch Sub is not subject to U.S. corporate taxes.

4. Case study

Many U.S. MNEs have taken advantage of international laws' loopholes to shift profits around the globe in order to decrease their tax liabilities. Double Irish and Dutch Sandwich structures are famous tactics that have been adopted and are extensively employed by technology corporations since profits from IP rights can be shifted easily, by assigning these rights to foreign subsidiaries. This part gives an illustration of how large MNEs, such as Apple and Microsoft, use Double Irish and Dutch Sandwich structures to transfer profits across countries, which results in paying less taxes.

4.1 Apple Inc.

As shown in Figure 3, Apple's group structure is designed to attribute Apple commodities around the globe. Apart from boosting sales, the Apple structure plays a crucial role in tax planning. Following parts of this structure, Apple launched three main wholly-owned subsidiaries in Ireland as follows: Apple

Operations International (AOI), Apple Operations Europe (AOE) and Apple Sales International (ASI). These three subsidiaries are important elements of Apple's Double Irish arrangement.

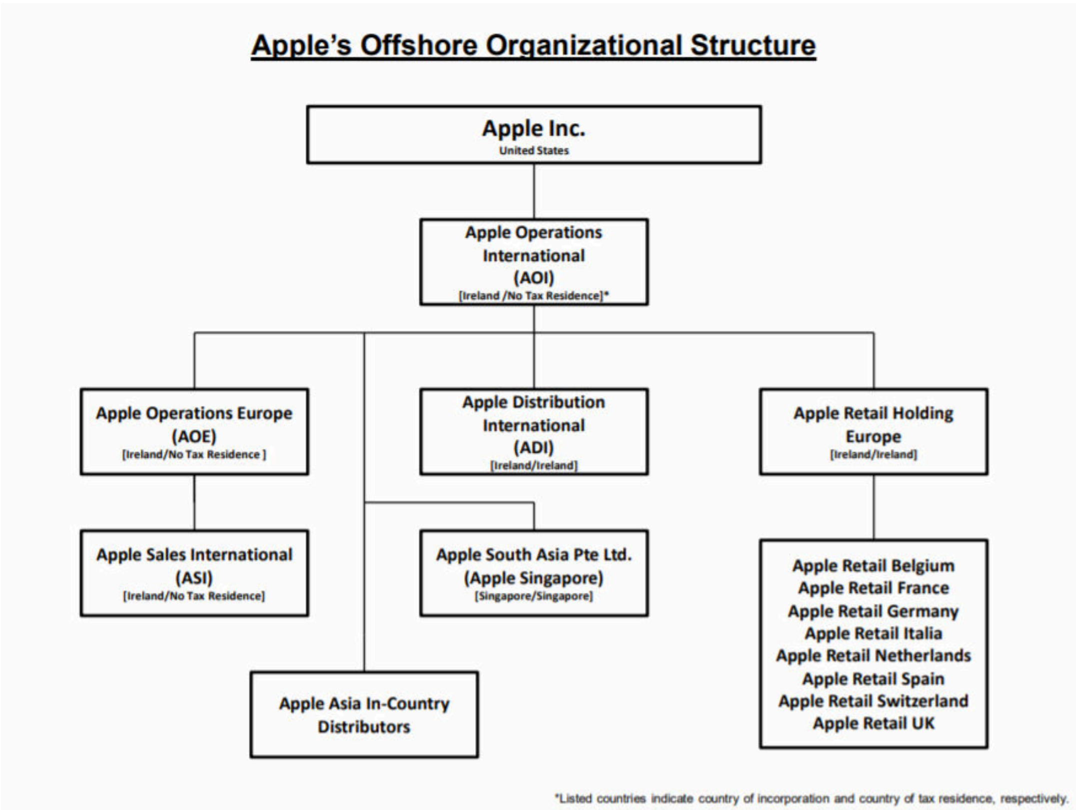

Figure 3. Apple's offshore organizational structure.[23]

Compared to other U.S. MNEs, Apple's tax structure is relatively simple because it does not involve in the Dutch Sandwich scheme, mentioned in Part three. Apple takes advantages from different definitions of corporate residence in Ireland and the U.S. Due to the fact that all three subsidiaries incorporated in Ireland with central management and control in the U.S, these subsidiaries are,

[23]U.S. Government (a), **Offshore Profit Shifting and the U.S. Tax Code-Part 2 (Apple Inc.)** [Online], available URL: https://www.govinfo.gov/content/pkg/CHRG-113shrg81657/pdf/CHRG-113 shrg81657.pdf, 2017 (May, 21).

therefore, neither a resident of Ireland nor the U.S. It follows that foreign income earned by these three subsidiaries are tax-free in both countries; however, source income derived from Ireland can be taxed (if any).[24] The U.S. CFC regime is terribly inefficient to contend with Apple's Double Irish structure because of the magic of check-the-box regime. By checking the box, Apple has elected not to characterize its subsidiaries as a corporation for U.S. tax purposes, but each subsidiary is still considered a juridical person for all non-U.S. tax purposes. As a consequence, each subsidiary is treated as a disregarded entity for U.S. tax purposes which means that no U.S. taxes are levied.

After setting up subsidiaries in Ireland, Apple starts a layer of IP licenses (as presented in Figure 4). Apple Inc., the parent company in the U.S., entered into a cost sharing agreement with AOI. Then, AOI licenses its IP rights to AOE, which relicenses the IP rights to ASI in exchange of a high amount of licensing fees. ASI is, ultimately, the heart of Apple's international tax arrangements, which has an important duty to relicense its IP rights to Apple's other foreign subsidiaries and collects royalties for IP rights on its products around the world.

[24] Antony Ting, "iTax-Apple's International Tax Structure and the Double Non-Taxation Issue," **British Tax Review** 1 (2014).

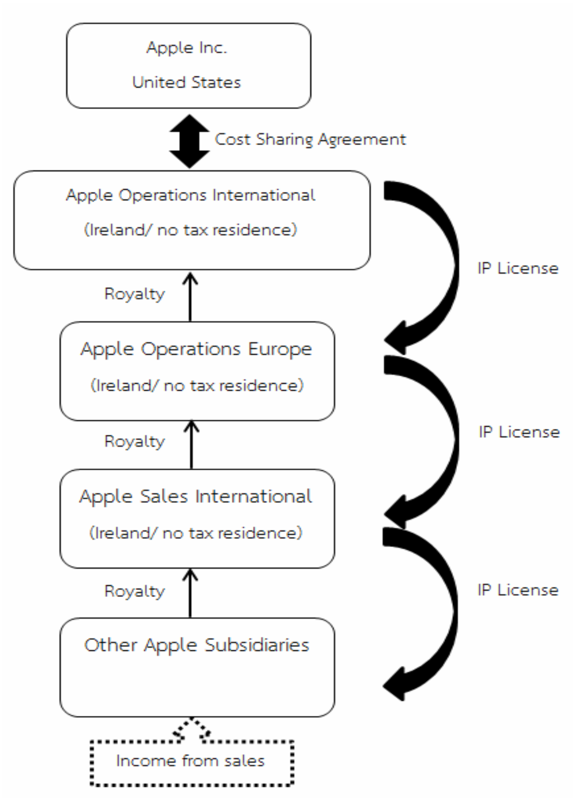

Figure 4. Apple's Double Irish structure.

When Apple receives earnings from selling Apple products within overseas markets, including both the European and Asia market, Apple's overseas subsidiaries have to pay a huge amount of royalties to an Irish company (e.g., probably AOI) for the exploitation of its' IP rights. Royalty fees paid by foreign affiliates can be deducted as an expense in computing the company's taxable profits. As a result of shifting profit earned on the sale to the Irish subsidiary, Apple's tax bills of its foreign subsidiaries around the world are declined massively.[25] According to the financial data provided by Apple in 2015, Apple's revenue comes mostly from United States, Europe, and Asia, respectively. However, Apple paid

[25] U.S. Joint Committee on Taxation, **Present Law and Background Related to Possible Income Shifting and Transfer Pricing** [Online], available URL: https://www.jct.gov/publications.html?func=download&id=3692&chk=3692&no_html=1, 2017 (July, 22).

$16.1 billion for U.S. federal and state taxes while Apple paid just $2.9 billion for all foreign taxes which make a sharp difference. Consequently, Apple tax payments around the world have come under spotlight.

On June 12, 2013, the European Commission (the Commission) requested Ireland to provide data about the practice of tax rulings in Ireland, particularly about the Apple group. The Commission suspected that the tax ruling granted to Apple constituted State aid pursuant to Article 107(1) of the Treaty on the Functioning of the European Union (TFEU).[26] The Commission had to examine whether that aid is compatible with the internal market.[27] After the examination process, the Commission decided that the Apple's tax arrangements with Ireland were illegal and Apple had to pay $16.1 billion for tax penalty.[28]

The Asia-Pacific countries also put the Apple arrangement under scrutiny. China will be used as an example in this case. The standard corporate tax rate in China is 25% but can reduce to 15% for qualified new and high-tech enterprises.[29] Apple's 2015 fiscal year reported $23 billion operating income in Greater China but that profit was taxed at only 12.6%, which is extremely low.[30] Robert Willens, a tax

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[26]TFEU Article 107 (1): '(1) Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market.'

[27]European Commission, **State aid-Ireland - State aid SA.38373 (2014/C) (ex 2014/NN) - Alleged aid to Apple - Invitation to submit comments pursuant to Article 108 (2) of the Treaty on the Functioning of the European Union Text** [Online], available URL: https://publications.europa.eu/en/publication-detail/-/publication/fce0c6ed-55d2-11e4-a0cb-01aa75ed71a1/language-en, 2016 (October, 17).

[28]Ibid.

[29]Supra note 8.

[30]Zheping Huang and Heather Timmons, **Apple's Tax Rate in China also Appears to be Remarkably Low** [Online], available URL: https://qz.com/771449/it-is-almost-impossible-to-know-how-much-tax-apple-is-paying-in-china/, 2016 (September, 2).

consultant and Columbia Business School professor of taxation, explained on CNBC in 2016 that Apple's Chinese subsidiaries have to pay royalty fees to the Irish company under an IP license agreement, thereby, shifting profits out of China.[31] There is no formal requirement imposed by China's State Administration for Industry & Commerce in order to force companies to publish their financial statements. As a result, there's no public channel to investigate Apple's Chinese tax liabilities.[32]

4.2 Microsoft

Microsoft began to create an elaborate structure of interconnected overseas entities, as depicted in Figure 5, to generate international sales and lower tax burdens of the Microsoft group. Microsoft has also utilized the Double Irish and Dutch Sandwich arrangements. Under Microsoft's Double Irish and Dutch Sandwich structures, there are at least six companies involved: (1) Microsoft Corporation, which is the parent company situated in the U.S.; (2) RI Holdings, which is registered in Bermuda but located in Ireland; (3) Microsoft Round Island One, which is an Irish affiliate; (4) Microsoft Ireland Research, which is an Irish trust company located in Ireland; (5) Microsoft Ireland Operation Ltd, which is an Irish company but placed in Bermuda and, (6) Microsoft Financing International B.V., which is a Dutch resident.

[31]Ibid.

[32]Ibid.

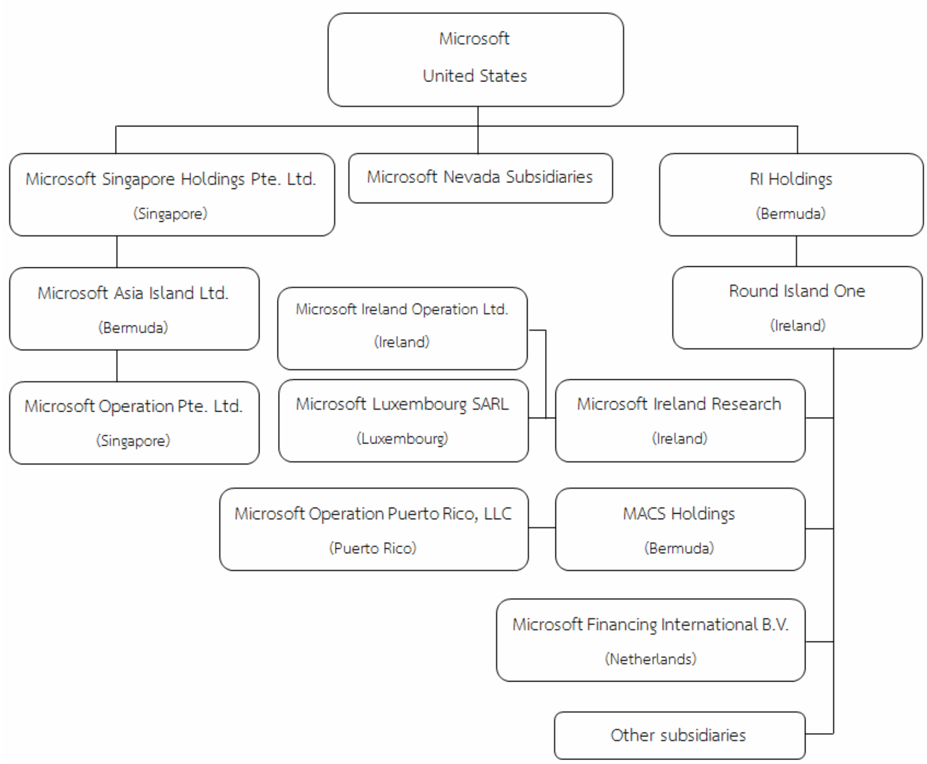

Figure 5. Microsoft's overseas tax structure.[33]

All Microsoft Affiliates are linked in a chain. Microsoft Corporation entirely owns RI Holdings, a holding company with industrial company status registered in Bermuda but located in Ireland. As its place of incorporation, RI Holdings is subject to a zero percent tax rate in Bermuda. Therefore, neither the U.S. nor the Irish tax authorities can collect taxes from this company. Through this holding company, Microsoft Corporation then totally owns Microsoft Round Island One as its CFC. Under the control of CFC rules, it means that profits arriving from Ireland may be taxed under the U.S. tax law. In order to escape CFC rules, they planned to set up

[33] Susana Anggraeni, "Money Moves: Tax Planning in Multinational Companies: A Case of Microsoft," (CEMS Thesis, Norwegian School of Economics, 2015), pp. 49-59.

Microsoft Ireland Research and Microsoft Ireland Operation Ltd, which are totally owned by Microsoft Round Island. A group of entities in Ireland then performs a role as regional operating centers for licensing, manufacturing, operating, and selling their products across Europe, the Middle East and South Africa (EMEA).[34]

After setting up the company structure, the IP-tax planning started with reaching a licensing agreement between Microsoft Corporation (licensor) and Microsoft Ireland Research (licensee) in exchange of royalty fees. After that, Microsoft Ireland Research (new licensor) relicensed its IP rights to Microsoft Ireland Operation Ltd (new licensee), which ultimately has IP rights to manufacture and sell the Microsoft commodities across EMEA. All incomes earned by Microsoft Ireland Operation Ltd will transfer to Microsoft Ireland Research, and then to Round Island One. However, the profits transferred to Round Island One are not liable for U.S. taxes because both subsidiaries are transparent entities for tax purposes under check-the-box rules. At the same time, the transfer will not be taxed in Ireland since Round Island One is the owner of both subsidiaries.

Then, Round Island One needs to move the profits to RI Holdings in Bermuda. Nevertheless, if the profits are directly transferred to RI Holdings, Round Island one will be liable for withholding taxes. In order to avoid withholding taxes, the profits are routed to Microsoft Financing International B.V. in the Netherlands before being shifted to RI Holdings because the payment made between European countries is exempted from withholding taxes. Through this structure, not only can the Microsoft group decrease the levied tax but also facilitate international sales across the globe.[35]According to the Irish Times (2005), Microsoft's Irish subsidiaries made a profit of $802.4 million in 2004 but paid no tax.[36] The Microsoft's Double

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[34]Susana Anggraeni, "Money Moves: Tax Planning in Multinational Companies: A Case of Microsoft," (CEMS Thesis, Norwegian School of Economics, 2015), pp. 49-59.

[35]Anggraeni, Ibid.

[36]Colm Keena, **Microsoft Earns $802m Tax-free in Irish Subsidiary** [Online], available URL: https://www.irishtimes.com/business/microsoft-earns-802m-tax-free-in-irish-subsidiary-1.519644, 2017 (November, 19).

Irish and Dutch Sandwich structures to generate sales across EMEA are illustrated in Figure 6.

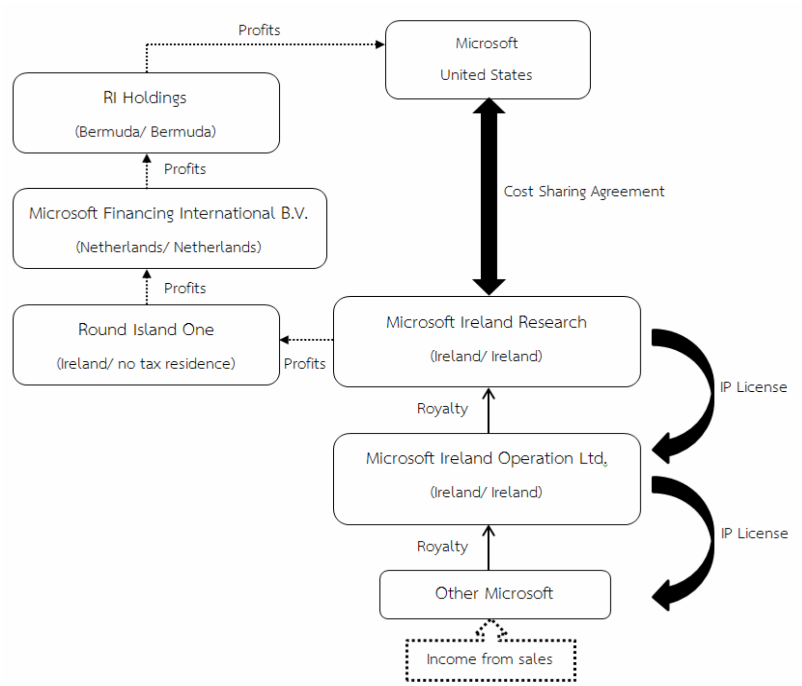

Figure 6. Microsoft's Double Irish and Dutch Sandwich structures.

While Ireland is a regional operating center in EMEA, Singapore is chosen as a regional operating center in Asia and Pacific. Microsoft has planned to establish a group of Singapore subsidiaries that have a pivotal role for retail sales across Asia and Pacific. Microsoft formed first-tier subsidiary named Microsoft Singapore Holdings Pte. Ltd, which is a totally-owned CFC of Microsoft parent company. To escape U.S. CFC rules, Microsoft Singapore Holdings Pte. Ltd established second-tier subsidiaries named Microsoft Asia Island Limited (MAIL) registered in Bermuda, which wholly owns Microsoft Operation Pte. Ltd (MOPL).[37] MAIL has entered into the cost sharing

[37] Jeffrey A. Maine and Xuan-Thao Nguyen, **The Intellectual Property Holding Company Tax Use and Abuse from Victoria's Secret to Apple** (Cambridge: Cambridge University Press, 2017), pp. 197-198.

agreement with Microsoft U.S. in exchange of $1.2 billion royalty fees and then relicensed the right to attribute Microsoft commodities in Asia-Pacific to MOPL for $3 billion. As both second-tier subsidiaries are disregarded entities under U.S. CFC rules, Microsoft group saved $1.05 million in 2012 since the transaction is not liable for U.S. taxes.[38] At the same time, Microsoft can shift its profits from Singapore to Bermuda, through MAIL, without being taxed by the U.S. government. Under Microsoft group arrangement, MOPL in Singapore has a similar rule as Microsoft Ireland Operation Ltd in Ireland to collect most of Microsoft's international revenues. It is obvious that Microsoft sales in Asia does not involve the Double Irish and Dutch Sandwich regimes but Singapore has been used as its business hub (see Figure 7), whereas Microsoft sales in Europe has utilized Double Irish and Dutch Sandwich regimes to lower their group tax burdens.

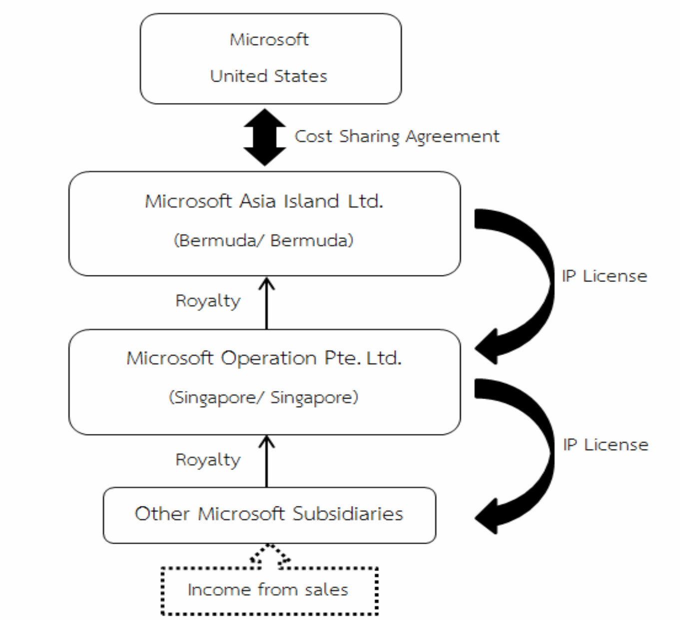

Figure 7. Microsoft sales structure in Asia.

[38] U.S. Government, **Offshore Profit Shifting and the U.S. Tax Code-Part1 (Microsoft and Hewlett-Packard)** [Online], available URL: https://www.govinfo.gov/content/pkg/CHRG-112shrg76071/pdf/CHRG-112shrg76071.pdf, 2017 (May, 1).

Microsoft's tax arrangement has also come under tax spotlight by other jurisdictions across the globe, alongside with Apple, Google, and other high-tech technology companies. Australia will be used as a sample of this case. According to Seattle Times (2015), Microsoft's Australia generated massive sales about $2.1 billion to Australian customers in its 2014 fiscal years, but only 5% of those revenues were taxed in Australia with a 30% corporate tax rate.[39] The rest of the revenues were technically billed by an offshore company located in Singapore. Microsoft Australia was audited by the Australian Tax Office as its profits are being sent offshore. Bill Sample, Microsoft's corporate vice president of tax, admitted that the revenues from Australia were billed in Singapore[40] and said that Microsoft "complied with the tax rules in Australia and in each jurisdiction in which it operates and pays billions of dollars each year in total taxes."[41]

Microsoft's tax structure was also scrutinized by the government of China. According to an article published in 2014 by Xinhua, China's official news agency, a U.S. Tech giant company-referred to only as "Company M"- had to pay the Chinese government 840 million yuan ($140 million) in back taxes and interest, as well as additional 100 million yuan ($15.8 million) per year in future taxes.[42] Microsoft agreed to pay the tax fine. This case has been called China's first major

[39] Matt Day, **How Microsoft Moves Profits Offshore to Cut Its Tax Bill** [Online], available URL: https://www.seattletimes.com/business/microsoft/how-microsoft-parks-profits-offshore-to-pare-its-tax-bill/, 2016 (December, 16).

[40] Nassim Khadem, **Microsoft Defends Using Hubs in Ireland, Singapore and Puerto Rico to Cut Tax Rate** [Online], available URL: https://www.smh.com.au/business/microsoft-defends-using-hubs-in-ireland-singapore-and-puerto-rico-to-cut-tax-rate-20150211-13boea.html, 2017 (February, 11).

[41] Jenni Ryall, **Apple, Google and Microsoft Grilled Over Australian Tax Avoidance** [Online], available URL: https://mashable.com/2015/04/08/apple-google-microsoft-tax/#5aDM7JJoUaqH, 2017 (April, 8).

[42] Bill Rigby and Bernad Orr, **Microsoft to Pay China $140 Million for 'Tax Evasion'** [Online], available URL: https://www.reuters.com/article/us-microsoft-china-tax/microsoft-to-pay-china-140-million-for-tax-evasion-idUSKCN0J92DD20141125, 2016 (November, 26).

anti-tax evasion case because a huge amount of profits was transferred through various jurisdictions, taking advantage of the differences in their tax rates.[43]

5. BEPS Impacts & Ireland's Responses

5.1 BEPS Impacts

As the Double Irish regime has contributed to BEPS by exploiting tax loopholes to artificially shift profits to non-tax or low-tax countries, this regime has been chiefly concerned by the OECD. The OECD has attempted to tackle BEPS through the OECD BEPS Project by launching the action plans as a comprehensive framework of international standards and recommendations. There are three main action plans relevant to this topic: Action 5, Action 8, and Action 13.

1) BEPS Action 5

Action 5 of the BEPS Action Plan develops a strategy to oppose harmful tax practices. In context of the IP regime, the nexus approach is picked as an appropriate IP regime. This approach uses expenditures as a proxy for substantial activity, allowing a taxpayer to gain advantages from the IP regime-only to the extent that IP income arising from qualifying Research and Development (R&D) expenditures in that country-in order to stimulate R&D activities and to foster growth and employment.[44]

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[43]Toh Han Shih, **Beijing to Step Up Tax Evasion Campaign after US Multinational Firm Caught** [Online], available URL: http://www.scmp.com/business/china-business/article/1647942/ beijing-step-tax-evasion-campaign-after-us-multinational, 2017 (November, 25).

[44]OECD, **Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance, Action 5-2015 Final Report** [Online], available URL:http://dx.doi.org/10.1787/9789264241190-en, 2015 (April, 22).

2) BEPS Action 8

The most relevant BEPS Action Plan is Action 8, which refers to transfer pricing issues of intangibles. This Action gives guidance to countries on how to prevent BEPS from transferring intangibles among group members by offering three suggestions. The first suggestion is the meaning of intangibles should be broad and clear. The second suggestion is to ensure that intangibles are properly allocated in accordance with value creation, based on DEMPE (Development, Enhancement, Maintenance, Protection, and Exploitation) functions, and profits must be aligned with substance. The final suggestion is to impose transfer pricing rules or special measures for hard-to-value intangibles' transactions.[45] As a result of these recommendations, MNEs can allocate intangibles in country merely where certain key functions are performed.

3) BEPS Action 13

Apart from Action 8, the OECD BEPS Project Action 13 also requires OECD member states, including Ireland, to implement Country-by-Country (CbC) reporting into their domestic laws.[46] CbC reporting is an automatic government-to-government information exchange mechanism that allows tax authorities to access useful information on the global allocation of MNEs' budget, profit, tax, and other attributions. Consequently, tax authorities around the world can observe and understand tax planning structures of MNEs and have an opportunity to prevent aggressive tax planning before, or immediately after, eroding their tax bases.

[45] OECD, **Aligning Transfer Pricing Outcomes with Value Creation, Actions 8-10-2015 Final Reports** [Online], available URL: http://dx.doi.org/10.1787/9789264241244-en, 2015 (November, 18).

[46] OECD, **Transfer Pricing Documentation and Country-by-Country Reporting, Action 13-2015 Final Report** [Online], available URL: http://dx.doi.org/10.1787/9789264241480-en, 2015 (October, 20).

As OECD's BEPS Project raises public concern toward BEPS issues, many countries tend to concentrate more on MNEs' cross border structure to protect their revenue bases. Apart from focusing on MNEs' structure, most jurisdictions around the world have already changed their domestic rules complied with several key BEPS recommendations.[47] The onus is on jurisdictions, especially Ireland, to defend its reputation as an international market hub by proving that their laws and policies are complied with internationally agreed tax standards and not just for tax breaks.

5.2 Ireland's Responses

Due to acquiring negative connotations made by the OECD BEPS Project, the updated report on Ireland's international tax strategy was published in October 2015 to indicate that "Ireland has committed to the BEPS process and will play its full part in implementation."[48] This was affirmed by the introduction of new Irish corporate tax residence rules, the Knowledge Development Box (KDB), as well as country-by-country reporting into Ireland's domestic law.

1) New Irish corporate tax residence rules

With the aim of defending Ireland's reputation, the former Minister for Finance, Michael Noonan, announced in 2014 during the Budget 2015 that "I am abolishing the ability of companies to use the "Double Irish" by changing our residency rules to require all companies registered in Ireland to also be tax-resident."[49]

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[47]KPMG, **OECD BEPS Action Plan-Moving from Talk to Action in the Asia Pacific Region** [Online], available URL: https://home.kpmg.com/xx/en/home/insights/2016/05/oecd-beps-taking-the-pulse-in-the-asia-pacific-region-2016.html, 2017 (July, 3).

[48]Department of Finance (Ireland), **Update on Ireland's International Tax Strategy** [Online], available URL: http://www.budget.gov.ie/Budgets/2016/Documents/Update_on_ Irelands _International_Tax_Strategy_pub.pdf, 2017 (October, 12).

[49]Dominic Coyle, **Multinationals Turn From 'Double Irish' to 'Single Melt' to Avoid Tax in Ireland** [Online], available URL: https://www.irishtimes.com/business/economy/multi nationals-turn-from-double-irish-to-single-malt-to-avoid-tax-in-ireland-1.3290649?mode= sample&auth-failed=1&pw-origin=https%3A%2F%2F, 2017 (November, 14).

The changes are contained in the Irish Finance Act 2014 with effect from January 1, 2015 onwards. This means that any companies incorporated in Ireland on or after January 1, 2015 will be treated as Irish resident companies for Irish tax purposes.[50] Transitional period were also contained in grandfathering provisions, such that companies incorporated on or before December 31, 2014 may continue to be treated as non-Irish resident companies until January 1, 2020 if certain conditions are fulfilled.[51] According to these changes, the Double Irish structure could not be built henceforth. However, there is only one exemption to this new rule by means of the double taxation agreement (DTA). If the terms of DTA between Ireland and a country regard a company as a resident in that country, the company will still be treated as resident of that country.[52]

2) Knowledge Development Box

The Knowledge Development Box (KDB) has been introduced by the Irish Finance Act 2015, with effect from January 1, 2016 onwards. KDB is defined by Irish Tax and Customs as a corporation tax relief,[53] which seems to be used as one of the tax incentives for IP holding companies located in Ireland. In accordance with the modified nexus approach set out in BEPS Project Action 5, certain profits of a company may be entitled to be taxed at a 6.25% tax rate (which is twice lower than the corporate tax rate for trading income at 12.5%), only if the IP profits arising from qualifying assets that are the result of actual R&D activities conducted in Ireland or an offshore branch of the Irish enterprise.[54] This means that only qualifying IP profits

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[50]Louise Kelly, **Ireland-An Attractive Location in a Post-BEPS World** [Online], available URL: https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/Tax/ITR-Ireland.pdf, 2018 (February, 8).

[51]Supra note 50.

[52]Supra note 50.

[53]Irish Tax and Customs, **Knowledge Development Box (KDB)** [Online], available URL: https://www.revenue.ie/en/companies-and-charities/reliefs-and-exemptions/knowledge-development-box-kdb/index.aspx, 2018 (December, 12).

[54]Ibid.

can be taxed at 6.25%. Interestingly, Ireland's KDB is the first KDB regime complying with the new standards of the OECD's modified nexus approach, which was set out in the final reports of the OECD's BEPS project Action 5.

3) Country-by-Country reporting

In accordance with the BEPS Action 13 Final Report, the CbC reporting was implemented in Ireland, as contained in Section 891H of the Taxes Consolidation Act 1997-inserted by Section 33 of Finance Act 2015 and amended by Section 24 of Finance Act 2016-and Taxes (CbC Reporting) Regulations 2016. Following the OECD guidance published in August 2016, Guidance on the Implementation of CbC Reporting,[55] the legislations require MNE Groups with consolidated group revenue of €750 million or more in the immediately preceding fiscal year to file CbC reports in Ireland.[56] A CbC report should include information, such as the amount of unconnected party revenue, connected party revenue and total revenue, amount of profit or loss before income tax, as well as amount of income tax paid.[57]

6. The Attractiveness of Ireland after BEPS

It is undeniable that many MNEs were influenced to structure their IP ownerships in Ireland because of the Double Irish scheme. However, due to the impacts of the BEPS Project, the Double Irish structure may become less feasible. The obvious question flashing into mind is whether Ireland remains an attractive location to stimulate new investment. As a competitive environment has been increasing progressively in order to attract FDI, Ireland has to maintain and develop its competitive position to be a higher-level position. Consequently, new Irish tax

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[55]OECD, **Guidance on the Implementation of Country-by-Country Reporting: BEPS Action 13** [Online], available URL: www.oecd.org/tax/guidance-on-the-implementation-of-country-by-country-reporting-beps-action-13.pdf, 2018 (February, 14).

[56]Irish Tax and Customs, **Country-By-Country Reporting Some Frequently Asked Questions (FAQs)** [Online], available URL: https://www.revenue.ie/en/companies-and-charities/documents/country-by-country-reporting.pdf, 2018 (December, 12).

[57]Ibid.

policies have been implemented since 2015 for representing a positive direction towards competition.

It is not totally surprising that another preferential tax regime, the KDB with an effective tax rate of 6.25%, has been established as an alternative one. It may be seen that the creation of the KDB regime is less beneficial than the phenomenon of Double Irish; nevertheless, it offers a viable alternative for Ireland. The low 6.25% and 12.5% corporate tax rate is one of the policies to convince companies to actually engage in R&D activities in Ireland. If this mission is completed, the growth of R&D capability may result in enormous advantages for Ireland in the long term and may be even greater than the former preferential regime.[58]

Other major tax incentives that Ireland offers under its IP regime are: 25% tax credit on qualifying R&D expenditures, in addition to the normal 12.5% revenue deduction available for the R&D expenditure; capital allowances on capital expenditure incurred on qualifying IP, up to a maximum deduction of 80% of the relevant IP profits; deductions for interest expenses incurred on borrowings to fund the acquisition of IP; and relief for foreign withholding tax suffered on royalty income.[59] A combination of the IP-tax incentives might be considered as interesting alternatives due to the fact that it provides substantial benefits to IP holding companies which locate, exploit, and develop IP in Ireland.

Unfortunately, Ireland will face an enormous challenge to attract FDI from U.S. companies due to proposed changes in U.S. tax rules. In December 2017, the U.S. Senate gave final approval to the U.S. tax reform. Two days later, President Donald J. Trump brings it into effect by signing the new tax bill. The outstanding

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[58]Bernhard Gilbey and others, **The Changing Landscape for IP Regimes Around** [Online], available URL: https://www.squirepattonboggs.com/~/media/files/insights/publications/2015/12/the-changing-landscape-for-ip-regimes-around-the-world/21631--ip-regimes-around-the-world-alert.pdf, 2017 (December, 5).

[59]Petrina Smyth, Jonathan Sheehan and Brendan O'Brien, **Ireland's Intellectual Property Tax Regime** [Online], available URL: https://www.walkersglobal.com/images/Publications/Advisory/2016/01.08.201_Walkers_Ireland_Intellectual_Property_Tax_Regime.pdf, 2018 (January, 15).

change in this bill is the reduction of corporate tax rate from 35% to 21%.[60] As a result, it seems that U.S. companies have more incentive to invest in their own country.

Although some U.S. companies may be encouraged by the new U.S. tax rate, many academics hold the opinion that this change cannot produce a major effect to Ireland. Peter Vale, tax partner at Grant Thornton, explained that this is because the Irish tax rate of 12.5% is, approximately, half the U.S. tax rate of 21%.[61] Furthermore, Olivia Buckley, communications director at the Irish Tax Institute, stated that international operations remain necessary and essential for large U.S. companies and Ireland is still an attractive place for conducting such operations.[62]

7. From "Double Irish" to "Single Malt"

The new Irish tax residency rules have been claimed as the abolition of the Double Irish scheme since Irish-registered companies can no longer be tax-resident in the classic tax havens, such as the Cayman Islands, British Virgin Islands and Bermuda. However, it may be doubted that this scheme will continue because the new rules can be excluded by exploiting the loopholes in double tax treaties, which, in some cases, could prevail over Irish's domestic law.[63] This means that the

[60]Andy Khawaja, **How Trump's Tax Plan May Affect Your Business** [Online], available URL: https://www.forbes.com/sites/forbesfinancecouncil/2017/12/28/how-trumps-tax-plan-may-affect-your-business/#16d6b37188c4, 2017 (December, 28).

[61]Cliff Taylor, **Trump's US Tax Reform a Significant Challenge for Ireland** [Online], available URL: https://www.irishtimes.com/business/economy/trump-s-us-tax-reform-a-significant-challenge-for-ireland-1.3310866, 2017 (November, 30).

[62]Ibid.

[63]Ibid.

rules still let Irish-registered companies to be tax-resident in other jurisdictions that Ireland has a tax treaty with.[64]

One of feasible loopholes is the definition of tax residence included in the double tax treaties, which define Ireland's tax resident by center of management and control. This definition includes double tax treaties between Ireland and other countries, such as Panama, Melta, Hong Kong, the United Arab Emirates, the Netherlands, and Belgium. By placing the center of management and control of a company in one of these nations, the company will not be taxed in Ireland and will become a tax resident elsewhere.[65]

Shortly after the announcement of the Irish Budget locking the door on the Double Irish in 2014, an alternative structure called the "Single Malt" was considered immediately by late 2014. The Single Malt scheme has been referred to as a replacement of the Double Irish or the "son of Double Irish."[66] This is due to the fact that it should still be possible to achieve the same results as the Double Irish.[67] This scheme exploits loopholes found in the Malta-Ireland tax treaty, which retains the "place of effective management" residency test. Under the terms of the Malta-Ireland treaty, a company can be Irish-registered and a Maltese tax-resident company. Although MNEs with existing Double Irish scheme may not rearrange until the end of the 2021 deadline, an initial search presents that some major MNEs have

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[64]Christian Aid, **'Impossible' Structures: Tax Outcomes Overlooked by the 2015 Tax Spillover Analysis** [Online], available URL: https://www.christianaid.ie/sites/default/files/2018-02/impossible-structures-tax-report.pdf, 2017 (November, 20).

[65]Ibid.

[66]Bob Kiggins, **BEPS-Double Irish/ Dutch Sandwich Hybrid Entity Mismatches–Part II of II** [Online], available URL: https://www.culhanemeadows.com/7098-2/, 2016 (November, 19).

[67]Cantillon, **Three Years of Silence on 'Single Malt' Tax Loophole Raises Questions** [Online], available URL: https://www.irishtimes.com/business/economy/three-years-of-silence-on-single-malt-tax-loophole-raises-questions-1.3293313?mode=sample&auth-failed=1&pw-origin=https%3A%2F%, 2017 (November, 16).

already set up Irish-registered but Maltese tax-resident companies: including LinkedIn, Microsoft, Zetiq Aesthetics, Allergan, etc.[68]

8. Conclusion

In the pre-BEPS era, many MNEs had been attracted by the Double Irish and Dutch Sandwich tax regimes and had designed their IP ownership structures in Ireland. In the post-BEPS era, the Double Irish and Dutch Sandwich tax structures may become less feasible because of changes in the Irish tax residency rules. Ireland needs to maintain its status as an attractive place for investment by offering various tax incentives, including R&D tax credit regimes, IP capital allowance, and KDB, which is compliant to BEPS recommendation. Despite the issuance of BEPS Actions and changes to Irish tax policies, MNEs still need to escape the high amount of tax paid by exploiting benefits from tax loopholes, as evidenced from the existence of the alternative structure called Single Malt. Ireland has faced not only the challenge from MNEs but also the new challenge from new U.S. corporate tax rates as a tool for snatching companies' investment. As lessons from Ireland, every government should bear in mind that tax planning structures-in the national and international tax law context-might be incessantly changed; therefore, effective strategies are needed in response to the existing and forthcoming events.

[68]Supra note 64.

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