

Intellectual Property Tax Planning in the light of Base Erosion and Profit Shifting

Master thesis

International Business Tax Economics
Tilburg School of Economics and Management, Tilburg University

Reno Nabben
232326

Supervisors:
mr.dr. Cihat Öner

Second reader:
prof.mr.dr. J.L.M. (Hans) Gribnau

June 2017



Abstract

Tax planning techniques using intellectual property (IP), more commonly referred to as *IP tax planning*, have proven to be an effective way for facilitating tax avoidance for multinational enterprises. Due to the high mobility and value-generating character of intellectual property, (future) profits can easily be moved. Consequently, IP tax planning involves exploiting tax-rate differentials by allocating valuable IP to low-tax jurisdictions, as well as ‘stretching’ transfer-pricing rules and the use of tax havens in order to minimise overall taxation. Over the last years some of the largest multinational enterprises have been accused to engage in some form of IP tax planning, and consequently have been reported to pay little to no taxes. These findings have led to considerable debate on political level, as well as in the public media. In 2015 the Organization of Economic Cooperation and Development (OECD), with political support of the G20, has responded by presenting the Base Erosion and Profit Shifting (BEPS) project, which includes 15 Action Plans to counter “aggressive” tax planning. The BEPS Project aims to provide countries with instruments to better align taxation with economic activity and value creation. This thesis will look in what way IP tax planning aligns with the new taxing guidelines presented in the BEPS Project, as well as the implications for multinational enterprises engaged in IP tax planning.

Table of Content

Abstract

Table of Content

Chapter 1 – Introduction

- 1.1 Topic Introduction
- 1.2 Motivation
- 1.3 Scope
- 1.4 Methodology
- 1.5 Societal and Practical Relevance

Chapter 2 – Current International Tax System & BEPS

- 2.1 Introduction
- 2.2 Principles of International Taxation and Allocation of Taxing Rights
 - 2.2.1 Residence & Source Taxation
 - 2.2.2 Eliminating International Double Taxation
- 2.3 The BEPS Project
 - 2.3.1 Background of BEPS
 - 2.3.2 The BEPS Project's Principle
 - 2.3.3 Action 5: Harmful Tax Practices
 - 2.3.4 Action 8-10: Aligning Transfer Pricing with Value Creation
- 2.4 Interim Conclusion

Chapter 3 – Fundamentals of Intellectual Property & IP Tax Planning

- 3.1 Introduction
- 3.2 Intangible Assets
 - 3.2.1 Definition
 - 3.2.2 Allocating Income Related to Intellectual Property
 - 3.2.3 Tax Planning Characteristics
- 3.3 IP Tax Planning Methods

- 3.3.1 Intra-group Disposal of IP from Parent-Subsidiary
- 3.3.2 Intra-group Licensing
- 3.3.3 Intra-group Contract R&D

3.4 Interim Conclusion

Chapter 4 – Analyses of IP Tax Planning Structures

4.1 Introduction

4.2 “Double Irish Dutch Sandwich” Structure

- 4.2.1 Initial Transfer of Intellectual Property
- 4.2.2 Avoiding Taxation in Ireland
- 4.2.3 Avoiding Taxation in Country of Final Consumption
- 4.2.4 No Taxation in the U.S.
- 4.2.5 The “Double Irish Dutch Sandwich” and BEPS

4.3 IP-holding Structures using IP Regimes.

- 4.3.1 Tax Planning Structures
- 4.3.2 IP Regimes and BEPS

4.4 Interim Conclusion

Chapter 5 – Summary & Conclusion

5.1 Summary

5.2 Conclusion

Reference List

Introduction

Tax planning techniques using intellectual property, more commonly referred to as *IP tax planning*, have been in the news a lot over recent years. Some of the largest multinational enterprises have been accused of avoiding taxes through tax planning structures that involve reallocation of profits to low tax jurisdictions, leading to public and political debate. This Chapter will introduce the term intellectual property, explain its role in the context of tax planning, and consequently introduce tax planning structures and the role of BEPS.

1.1 Topic Introduction

Intellectual property is part of a firm's intangible assets: it is the embodiment of personal knowhow, protected by exclusive rights in the form of patents, trademarks and copyrights. No universal definition of intangible assets or intellectual property exists, so the definition may slightly differ depending on the context.¹ In the context of tax avoidance and tax planning structures, intellectual property can perhaps best be defined as the non-physical value drivers behind big companies like Google and Apple.²

Intellectual property has specific characteristics that make it highly interesting for tax planning purposes for multinational enterprises. First of all it is a value-driver for multinational enterprises. Secondly, as any intangible asset, it is highly mobile, meaning it can easily be shifted to other jurisdictions. Thirdly, intellectual property is very firm specific, which create challenges for tax administrations in applying transfer pricing rules following the arm's length principle.³ These characteristics combined create tax-planning opportunities for multinational enterprises by shifting (future) profits to low tax jurisdictions,⁴ and in this way lowering the overall tax burden.

Public and political awareness of tax planning rapidly increased due to a number of tax planning structures of some of the largest multinational enterprises getting exposed. In 2011, at request of U.S. securities regulators, rare details came out on how Microsoft used foreign tax planning to reduce U.S. taxes.⁵ In 2012, Duhigg and Kocieniewski published an article explaining "how Apple sidesteps

¹ National tax codes, bilateral and multilateral instruments, accounting standards, each provide for their own definition of intangible assets / intellectual property. The definition used by the OECD in its Transfer Pricing guidelines, as well as in the BEPS Action Plans, will be discussed in Sub-Section 3.2.2.

² Closely connected to the definition used by the Intangibles Research Center, New York University, which is: "non-physical sources of probable economic benefits".

³ See Sub-Section 3.2.3.

⁴ As will be analysed in detail in Sections 4.2 and 4.3.

⁵ See Richard Waters, 'Microsoft's foreign tax planning under scrutiny', *Financial Times*, June 7, 2011.

billions in taxes” in the New York Times.⁶ Later that year, Drucker published how Google was able to avoid USD 2 billion in taxes by (legally) funnelling profits through the tax haven Bermuda.⁷

These reports initially only focussed on the tax planning structures specifically used by respectively Microsoft, Apple and Google. However, it quickly became clear that the problem was more comprehensive than just those three companies. Kleinbard pointed out that the business model supposedly used by Starbucks, which successfully generated so-called “Stateless Income”⁸ in order to minimise taxation, could be replicated by any other multinational.⁹ The author righteously pointed out the complexity of tax planning strategies and the challenges government face in dealing with it.

Indeed, tax-planning structures by multinationals have developed into a serious concern for legislators.¹⁰ Since the first articles on tax planning by multinational enterprises were published, many studies have tried to estimate the exact impact of tax avoidance. Although it must be noted that measuring the exact scope of tax avoidance is complicated due to difficulties in determining true accounting profits,¹¹ there is evidence that profit shifting takes place and that the amounts are likely to be significant.¹² The Organization of Economic Cooperation and Development (hereafter: OECD) estimated revenue losses by governments due to base erosion and profit shifting to be between USD 100 to 240 million per year globally.¹³ Non-profit organization Oxfam estimates revenue losses for developing countries to be USD 50 billion.¹⁴ Studies focussing on country statistics estimate revenue losses to be GBP 12 billion per year in the UK, and EUR 90 billion in Germany.¹⁵

The reaction from higher level came when the G20 and the OECD joint forces. Led by the increasing public and political pressure, and furthermore accelerated by the increasing need for government revenues in a time of financial crisis, the G20 called upon the OECD to initiate the Base Erosion and Profit Shifting (hereafter: the BEPS project). This eventually led to the OECD presenting the final

⁶ See Charles Duhigg & David Kocieniewski, ‘How Apple Sidesteps Billions in Taxes’, *New York Times*, April 28, 2012.

⁷ See Jesse Drucker, ‘Google Revenues Sheltered in No-Tax Bermuda Soar to \$10 Billion’, *Bloomberg*, December 10, 2012.

⁸ Stateless income is defined as “income derived for tax purposes by a multinational group from business activities in a country other than the domicile of the group’s ultimate parent company, but which is subject to tax only in a jurisdiction that is neither the source of the factors of production through which the income was derived, nor the domicile of the group’s parent company.” This will be explained in more detail in Chapter 4.

⁹ See Edward D. Kleinbard, ‘Through a Latte, Darkly: Starbucks’s Stateless Income Planning’, *Tax Notes*, June 24, 2013.

¹⁰ For a detailed overview of articles related to corporate tax planning, see ‘The great Corporate Tax Dodge’ website of Bloomberg.

¹¹ Hongbin Cai & Qiao Liu, ‘Competition and Corporate Tax Avoidance: Evidence from Chinese Industrial Firms’, *The economic Journal*, Vol. 119, Issue 537, March 2009, p. 2.

¹² For a comprehensive overview of the magnitude of base erosion and profit shifting and the research methods of studies in this field, see Dhammika Dharmapala, ‘What Do We Know About Base Erosion and Profit Shifting? A Review of the Empirical Literature’, September 2014, pp. 3-23.

¹³ OECD, OECD Secretary-General Report to G20 Leaders, Antalya Turkey, November 2015, p. 15.

¹⁴ Oxfam, ‘Tax Havens: Releasing the Hidden Billions for Poverty Eradication’, *Oxfam International Policy Paper*, ISBN 9781848146419, June 2000, p. 6.

¹⁵ Richard Murphy, ‘The Missing Billions – the UK Tax Gap’, *Touchstone pamphlet*, no. 1, 2008. Available online: <https://www.tuc.org.uk/sites/default/files/documents/1missingbillions.pdf>; Stefan Bach, ‘Unternehmensbesteuerung: Hoge Gewinne – Massige Steuereinnahmen’, *DIW Wochenbericht*, Nr. 22+23, 2013, pp. 3-12.

BEPS project in 2015. The BEPS Project is designed to equip governments with domestic and international instruments to address tax avoidance, in order to help them to counter strategies that exploit gaps and mismatches in current international tax law.¹⁶ Through 15 Action Plans the OECD is aiming at a substantial renovation of the current tax standards. It tries to do so by following the principle of more closely aligning taxation of profits with the place where the economic activities take place and where value is created.

It may be questionable whether the tax planning structures used by multinational enterprises are in line with the OECD's view that taxation should be aligned with economic activities. To investigate this, this thesis will analyse two different tax-planning structures, which are presumably used by some of the largest multinational enterprises. Both involve the use of firm-specific intellectual property.

The first structure, and perhaps the most popular one, is the "Double Irish Dutch Sandwich". The structure, known to be used by U.S. multinationals, prohibits profits earned by U.S. multinationals to be taxed in the U.S. against the 35% corporate tax rate. Instead the profits earned all over the world by exploitation of intellectual property flow to the operating company located in Ireland. Furthermore the structure consists of a holding company also located in Ireland, but from an Irish perspective is resident in the tax haven in Bermuda, where no corporate income tax is levied. Last but not least, a Dutch conduit company is interposed between the two companies located in Ireland, hence the name "Double Irish Dutch Sandwich".

A second structure receiving widespread attention is a tax planning structure using intellectual property regimes (hereafter: IP regimes). IP regimes, also referred to as patent boxes, innovation boxes or simply IP Boxes, in general offer substantial lower tax rates to income derived from intellectual property. Instead of locating the IP-holding company in a jurisdiction that does levy any corporate income tax, multinational enterprises may use IP box regimes to substantially lower effective tax rates.

This thesis will combine the topics of IP tax planning structures and BEPS in order to evaluate in what way the IP tax-planning structures comply with the BEPS Project's principle. The thesis supports the notion that the BEPS Project's principle of taxing where economic activities take place and value is created, can be regarded as clear and "should be widely perceived to be fair".¹⁷ By analysing two relevant Action Plans of the BEPS Project¹⁸ it will become clear in what way the OECD aims to embed this principle in relation to IP tax planning. This can be used to investigate in what way IP tax

¹⁶ OECD, *Explanatory Statement*, Base Erosion and Profit Shifting Project, OECD, 2015, p. 4.

¹⁷ Yariv Brauner, 'What the BEPS?' *Florida tax review*, Vol. 17 No. 2, 2014, p. 99.

¹⁸ See the Methodology below for an introduction of the relevant Action Plans.

planning structures comply with the principle, as well as the possible implications for multinational enterprises engaging in these structures. The research question central for this thesis therefore will be:

“In what way do IP tax planning structures comply with the BEPS Project’s principle of more closely aligning taxation with economic activity and value creation?”

The research question will be answered based on the following three sub-questions:

- 1) What are the current international standards & what is the aim of the BEPS Project?
- 2) What are the fundamentals of IP taxation and IP tax planning?
- 3) How do IP tax planning structures work?

1.2 Motivation

The motivation to this research question is twofold. First of all, the motivation for the topic of international tax planning comes from the notion that opinions can be very much divided in what should be ‘morally acceptable’ when it comes to tax planning by multinational enterprises. The issue on the one hand addresses the obligation for companies to be run to ‘maximise shareholder value’.¹⁹ In this view, tax planning is simply a way for companies to maximise profits and by this shareholder value.²⁰ On the other hand there is the obligation for companies to pay their fair share, as well as the need for corporate revenue.²¹ By using the BEPS Project’s principle of more closely aligning taxation with economic activities and value-creation as a benchmark to where profits should be taxed, this issue can be directly addressed by investigating to what extent IP tax planning structures comply with this principle.

Secondly, there is the question if and in what way BEPS can be used to achieve its goal of countering Base Erosion and Profit Shifting. The current debate on profit shifting by multinational enterprises, supported by the empirical evidence that profit shifting is indeed taking place, strongly suggests there is need for a change. The OECD explicitly states that “the current rules have revealed weaknesses that create opportunities for Base Erosion and Profit Shifting” and “inevitably reinforced international standards are needed”.²² This thesis tries to contribute to this discussion by analysing the weaknesses in current international standards, which can prominently be showcased through IP tax planning structures, as well as in what way the BEPS Project may counter this.

¹⁹ See William Lazonick & Mary O’Sullivan, ‘Maximizing shareholder value: a new ideology for corporate governance’, *Economy and Society*, Vol. 29, Issue 1, December 2010, pp. 13-27.

²⁰ Wolfgang Schön, *Tax and Corporate Governance* (Springer, 2008), p. 193.

²¹ See Richard Happé, ‘Multinationals, Enforcement Covenants and Fair Share’, *International Tax Review*, Vol. 35, Issue 10, 2007, pp. 537-547.

²² OECD (2015) Explanatory Statement, pp. 4-5.

1.3 Scope

This thesis will limit to tax planning techniques that use intellectual property to shift profits to low tax jurisdictions. Another way to shift profits to low tax jurisdiction is through debt financing.²³ There is no clear empirical evidence on which profit-shifting strategy is dominant.²⁴ The reason that this thesis will focus on profit shifting through intellectual property is led by the notion that intellectual property is becoming increasingly important: the OECD has recognized intangible property as “one of the most important commercial developments in recent decades” already more than ten years ago.²⁵

Furthermore, studies conducted by the European Patent Office confirm that the role of intellectual property is only growing in recent years.²⁶ The majority of the multinational enterprises who are able to significantly reduce their tax burden through tax planning are also known to use intellectual property to shift profits to low-tax jurisdictions.²⁷

Furthermore, this thesis will limit to the BEPS Project in order to counter profit shifting and tax planning structures used by multinationals enterprises. In literature more fundamental options to reform the international tax system are suggested. These include for instance a destination-based cash flow tax,²⁸ or the Common Consolidated Corporate Tax Base (CCCTB).²⁹ These fundamental options to reform are outside the scope of this thesis.

1.4 Methodology

The research method used to answer the research question is literature review. This includes literature review of an extensive network of theoretical and methodological contributions, as well as empirical

²³ Profit shifting through debt financing generally uses intra-company loans, for which the tax expenses are deductible, to reduce taxation. Empirical evidence suggests multinationals use debt financing to decrease profits of subsidiaries in high-tax countries. See Mihir A. Desai, C. Fritz Foley, James R. Hines Jr., ‘A Multinational Perspective on Capital Structure Choice and Internal Capital Markets’, *The Journal of Finance*, Vol. 59, Issue 6, December 2004, pp. 2461-2485.

²⁴ Clemens Fuest et al. ‘Profit Shifting and ‘Aggressive’ Tax Planning by Multinational Firms: Issues and Options to Reform’, *ZEW Discussion Paper, No.13-044*, July 2013, p. 11.

²⁵ OECD, *Report on the Attribution of Profits to Permanent Establishments* (December 2004), p. 34.

²⁶ For the period 2008-2010 IP-intensive industries (consisting of firms having an above-average use of intellectual property rights per employee), generated almost 39% of total GDP in Europe, increasing to over 42% for the period 2011-2013. See European Patent Office & Office for Harmonization in the Internal Market, ‘Intellectual property rights intensive industries: contribution to economic performance and employment in the European Union’, *Industry-Level Analysis Report* (September 2013), p. 6; European Patent Office & Office for Harmonization in the Internal Market, ‘Intellectual property rights intensive industries: contribution to economic performance and employment in the European Union’, *Industry-Level Analysis Report*, Second edition (October 2016), p. 6.

²⁷ Fuest et al (2013), p. 3; Kleinbard (2013), p. 705; Hans van den Hurk, ‘Starbucks vs. the people’, *Bulletin for International Taxation*, Vol. 68, No. 1, January 2014, pp. 29-30.

²⁸ A destination-based cash flow tax very much resembles the Value Added Tax (VAT), by essentially taxing business income at the location of final purchasers of goods and services, and in this way improving economic efficiency. A first version was proposed in June 2016 by the Ways and Means Committee of the U.S. House of Representatives. See Michael Devereux et al, ‘Destination-Based Cash Flow Taxation’, *Working Paper Series 2017*, January 27, 2017, pp. 4-8.

²⁹ The CCCTB is an initiative of the European Commission aiming to strengthen the Single Market by providing a single set of rules within the EU to calculate taxable business profits. It was first proposed in 2011, and re-launched in 2016. The re-launched proposal addresses some of the same Actions as the BEPS Project. See European Commission, ‘Proposal for a Council Directive on a Common Corporate Tax Base’ COM (2016), pp. 2-4.

studies, on intellectual property and IP tax planning. Furthermore, BEPS is reviewed on the basis of explanatory statements and discussions related to the OECD's BEPS Project. Specifically, two of the most relevant BEPS Action Plans for IP tax planning structures will be analysed. These are Action Plan 5: "Countering Harmful Tax Practices" (hereafter: Action 5), and Action Plan 8: "Aligning Transfer Pricing Outcomes with Value Creation" (hereafter: Action 8). From both Action Plans it can be clearly derived that the OECD is supporting the principle of aligning taxation with economic activity and value creation.

The build-up to answer the research question will start with explaining the fundamentals of the current international tax regime in Chapter 2. A basic understanding of these principles is needed first to later understand how multinational enterprises are able to avoid taxes, and to assess whether reinforcing the international standards through the BEPS Project is necessary. Concerning the current principles of international taxation and the allocation of taxing rights, the residence and source principle and the avoidance of double taxation through double tax treaties will also be discussed. As the OECD aims to rewrite these fundamentals, this will naturally lead to the discussion of BEPS and the BEPS Project. The emphasis of the discussion on the BEPS Project will be on the BEPS Project's principle of taxing where economic activities take place and value is created. Consequently, Action 5 and Action 8 will be examined to show how this principle is given substance in relation to IP tax planning.

Once the basics of the current international tax regime and the BEPS Project are handled, Chapter 3 will focus on intellectual property and explain their tax planning characteristics. Furthermore, the Chapter will address the basic tax planning methods multinational enterprises use, which involves disentangling the creation and separation of intellectual property. Next, in Chapter 4 it will be explained how these tax-planning methods work in practice, by analysing two typical IP tax planning structures. Step-by-step it will be described how multinational enterprises make use of the weaknesses in current rules through these structures, and how this relates to the BEPS Project. This set-up will lead to the conclusion, which will present the main findings in relation to the research question.

1.5 Societal and practical relevance

This work will be a contribution to the understanding of IP tax planning and the work in the tax policy area of the OECD's BEPS Project. This thesis tries to link the practical policy recommendations of the BEPS Project with existing tax planning strategies. This includes the use of preferential regimes, addressed in Action 5, as well as the challenging issue of transfer pricing for intangibles, addressed in Action 8. By analysing actual tax planning structures in the light of BEPS, recommendations can be made to whether countries should adopt the BEPS policies to tackle what is an extremely relevant issue in today's globalising economy, namely the taxation of intellectual property and countering IP tax planning.

Chapter 2

Current International Tax System & BEPS

2.1 Introduction

Increasing globalizing markets create increasing opportunities for firms to position themselves in different countries to conduct business. Multinational firms established in multiple different taxing jurisdictions may lead to issues concerning where taxation should take place, and without efficient allocation mechanisms may lead to undesirable double taxation or double non-taxation. The allocation of taxing rights in the current international tax system follows the principle of residence- and source-based taxation. The OECD is however aiming to re-write these principles through the BEPS Project, by following the principle of more closely aligning taxation with economic activities and value creation.³⁰ The OECD aims to fight tax avoidance and tax evasion that threaten government revenues.³¹ The BEPS Project is a way to provide countries with measures to counter tax-planning structures used by multinational enterprises, which often involve the use of intellectual property.³²

This Chapter is set to first briefly address the current principles of international taxation that lead to the allocation of taxes worldwide. For this, the principles of residence and source will be set out, and the means of relieving double taxation that may arise from applying these principles. After this the developments of the OECD in this field will be discussed. Based on this, a framework will be created against which IP tax planning can be held. In this way the remainder of this thesis can go beyond simply analysing tax-planning structures, but discuss in what way the tax planning methods can be considered in line with the BEPS Project's guidelines.

2.2 Principles of International Taxation and Allocation of Taxing Rights

This section will address the principles governing the current international tax system that lead to the allocation of taxing rights between countries. To start, the right to tax is solely created by a state's sovereign domestic law.³³ This means that a state determines its own taxing rights. Setting the level of the tax rate is also within the sovereignty of the states.³⁴ This gives them the opportunity to engage in tax competition in order to attract foreign investment, by for instance lowering the rates. There is

³⁰ Matthew Herrington, 'A call to rewrite the fundamentals of international taxation', *FITAR*, September 2013, p. 5.

³¹ See OECD website: <http://www.oecd.org/ctp/fightingtaxevasion.htm>

³² Brauner (2014), pp. 57-58.

³³ Peggy B. Musgrave, 'Sovereignty, Entitlement and Cooperation in International Taxation', *Symposium: International Tax Policy in the New Millennium: Panel II: Revisiting the Theory of International Income Taxation: Principal Papers, 2001*, pp. 1336-1337; Charles E. McLure Jr., 'Globalization, Tax Rules and National Sovereignty', *Bulletin for International Taxation*, Vol. 55, No. 8, August 2001, pp. 328-329.

³⁴ Ruud de Mooij, 'Does the Enlarged European Union Need a Minimum Corporate Tax Rate', *Intereconomics*, Vol. 39, Issue 4, 2004, pp. 180-182.

extensive literature on the effects of tax competition between states, which could possibly lead to a constant lowering of the tax rates in a process called ‘tax race to the bottom’.³⁵ The topics of statutory rates and tax competition are however beyond the topic for this thesis.³⁶ It is however important to understand the difference between the statutory tax rates and the effective tax rates. As will be seen throughout this thesis, IP tax planning structures by multinationals go far beyond tax planning around the statutory tax rates: exploiting tax rate differentials, transfer pricing, specific tax rulings and loopholes in international taxation are used by multinationals to lower their overall tax liability.³⁷ Because of this the term *effective tax rate* is often used to refer to a company’s actual tax paid as a percentage of the total income. The effective tax rate thus is the taxes paid after tax deductions and tax credits. As it shows exactly what percentage of their income multinationals have actually paid to the tax administrations in place, it provides for a better indication of the effective impact of the tax planning structures that are used globally by multinationals, and will therefore often be used.

Whereas the right to tax is within the sovereignty of the respective states, the allocation of taxing rights is governed by international law.³⁸ In practical terms this means a state *can* impose its taxing rights based on national law, though the question *if* the state may tax is decided by international law.³⁹

The basics of the international tax system go back to 1928, when the first tax model was formed by the former League of Nations, the predecessor of the United Nations, known as the Geneva Models.⁴⁰ It has now expanded to an international tax law system centred around more than 3.800 bilateral tax treaties,⁴¹ with its most important principles being residence taxation, permanent establishments, (reduced) source taxation, and credit and exemptions methods to create relief in case of double taxation. The next sub-sections will briefly discuss the current system as an introduction to the current issues of international taxation, which is double non-taxation.

³⁵ See for instance John Douglas Wilson, ‘Theories of Tax Competition’, *National Tax Journal*, Vol. 52, No. 2, June 1999, pp. 269-298.

³⁶ See for statutory tax rate comparison and a discussion on the effects of lowering a corporate income tax rate on revenue, output and national welfare: Jane G. Gravelle, ‘International Corporate Tax Rate Comparisons and Policy Implications’, Washington DC: *Congressional Research Service*, January 2014, pp. 1-27.

³⁷ See Sections 4.2 and 4.3

³⁸ Eric Kemmeren, ‘Source of Income in Globalizing Economies: Overview of Issues and a Plea for an Origin-Based Approach’, *Bulletin for International Taxation*, Vol. 60, No. 11, November 2006, p. 431.

³⁹ According to Vogel, both domestic law and treaty law are equivalent. Vogel summarises the interrelationship as follows: “the (tax) treaty acts like a stencil that is placed over the pattern of domestic law and covers certain parts. Whether the stencil or the pattern is examined first, the same conclusion results”, and therefore argues that the order of application should be decided pragmatically case-by-case. See Klaus Vogel, *Klaus Vogel on Double Tax Conventions* (edited by Ekkehart Reimer & Alexander Rust, 4th edition, Kluwer Law International, 2015), pp. 33-34.

⁴⁰ Bart Kosters, ‘The United Nations Model Tax Convention and Its Recent Developments’, *Asia Pacific Tax Bulletin* 5, 2004, p. 1.

⁴¹ See Itai Grinberg & Joost Pauwelyn, ‘The Emergence of a New International Tax Regime: The OECD’s Package on Base Erosion and Profit Shifting’, *American Society of International Law*, Vol. 19, Issue 24, October 28, 2015. Available online: <https://www.asil.org/insights/volume/19/issue/24/emergence-new-international-tax-regime-oecd%E2%80%99s-package-base-erosion-and>

2.2.1 Residence & Source Taxation

Tax-residence acts as a starting point in international tax law: a person's residence distinguishes between on the one hand residence-based taxation, that is worldwide taxation on income and capital for residents, and on the other hand source-based taxation on sources of income for non-residents.⁴² In general tax-residency for corporations is linked to the place of effective management (*also 'real seat'*), or the place of incorporation (*also 'legal seat'*). A third option that is used by the United States, is residency based on citizenship.⁴³ The allocation of taxing rights can generally be distinguished by a residence or a source approach.⁴⁴ According to the residence approach (or residence principle), the residents of a country are subject to tax on their worldwide income, while non-residents are only taxed on domestic source-income. Conversely, according to the source approach income is taxable in the jurisdiction where the income arises through a source of income, regardless of the taxpayer's residence.

Evidently, double taxation may arise when residence and source taxation conflict. Suppose a resident of country X has business activities in country Y. That person will be liable to tax on his worldwide income in country X according to the residence principle, and possibly be taxed over the same income according to the source principle in country Y. This is a residence/source conflict. Besides residence/source conflicts, double taxation may arise due to countries using different criteria for residency. For example, a company incorporated in the Netherlands (which use a legal seat approach), which has its effective place of management in Germany (which uses a real seat approach), is considered resident in both states and thus subject to tax in both states over its worldwide income, also called a residence/residence conflict. Lastly, double taxation may arise due to a source/source conflict, as there is no internationally agreed definition of source.⁴⁵ An example may be the taxation of royalties, if one state regards the royalty as 'sourced' in its country due to the payment arising from that country, while another country may regard it as sourced there where the related intellectual property is exploited. When the same taxpayer is taxed in more than one state in respect of the same subject matter, for identical periods, it is referred to as (international) juridical double taxation.⁴⁶

⁴² Vogel (2015), pp. 220-221.

⁴³ See *Cook v. Tait*, 265 U.S. 47 (1924).

⁴⁴ A discussion on the legal basis for the residence and source approach in international taxation is provided in: Nancy H. Kaufman 'Fairness and the Taxation of International Income', *Law and Policy in International Business*, Vol. 29, No. 2, 1998, pp. 145-203.

⁴⁵ Klaus Vogel, 'Worldwide vs. source taxation of income – A review and re-evaluation of arguments (Part I)', *Intertax*, Vol. 16, Issue 8/9, 1988, p. 223. To Vogel's surprise, the concept of 'source' generally appears to be taken for granted. One definition of source is provided with reference to Richard Musgrave, 'Criteria for foreign tax credit, taxation and operations abroad', *Taxation and Operations Abroad, Symposium*, 1960. Musgrave defines source as 'the place of the income-generating activity'.

⁴⁶ Vogel (2015), pp 12-13.

2.2.2 Eliminating International Double Taxation

Eliminating double taxation can be done either through unilateral measures or bilateral measures.⁴⁷ An example of a unilateral measure is the ‘Double Taxation Avoidance Decree (2001)’ of the Netherlands,⁴⁸ which may prevent relief from double taxation in case no tax treaty applies. More commonly however relief is granted through bilateral measures in the form of a double tax convention concluded between two countries. In general, both unilateral and bilateral measures come down to one state waiving its taxing rights either through granting an exemption or a tax credit.

The OECD Model Tax Convention on Income and on Capital⁴⁹ (hereafter: OECD Model) acts as a uniform basis for settling double tax conventions between two countries, as well as acting as an important source for the interpretation of tax treaties.⁵⁰ From its first release in 1963, it aims to remove the obstacle of international juridical double taxation, by providing a uniform bases for settling the most common problems that arise in this field.⁵¹ Next to OECD Model, the United Nations has published a similar model in 1980.⁵² In general the UN Model follows the OECD Model, but differences arise due to the UN Model being based on protecting the rights and interests of developing countries.⁵³ Because of this UN Model is leaning more towards source country taxation, whereas the OECD Model is more leaning towards residence country taxation in providing measures for relief of double taxation.⁵⁴

The OECD Model has had a significant influence in international tax law by acting as a starting point in the negotiations towards avoidance of double taxation. However, instead of focussing on avoidance of double taxation and trying to enhance the internal market, the current trend in international taxation and policy design is taking another direction, which is countering aggressive tax planning and tax avoidance.⁵⁵ The focus on aggressive tax planning and tax avoidance is embodied by the OECD’s BEPS Project, which will be discussed in detail in the following section.

⁴⁷ Klaus Vogel, ‘Double Tax Treaties and Their Interpretation’, 4 *The International Tax and Business Lawyer* 10, 1986, p. 9.

⁴⁸ Besluit voorkoming dubbele belasting 2001.

⁴⁹ The latest OECD Model Tax Convention on Income and on Capital (2014) is available at: <http://www.oecd.org/tax/treaties/model-tax-convention-on-income-and-on-capital-2015-full-version-9789264239081-en.htm>

⁵⁰ Vogel (1986), p. 39.

⁵¹ OECD, *Model Tax Convention on Income and on Capital (Full Version)*, OECD Publishing, Paris (2015), I-1.

⁵² The latest UN Model (2011) is available at: <http://www.un.org/en/development/desa/publications/double-taxation-convention.html>

⁵³ Michael Lang, *Introduction to the Law of Double Taxation Conventions* (2nd edition, Linde, 2013), p. 32.

⁵⁴ Major differences can be found in Art. 7 (business profits), Art. 9 (associated enterprises), Art. 10 (dividends), Art. 11 (interest), Art. 12 (royalties), Art. 13 (capital gains) and Art. 21 (other income), where it becomes clear the UN Model is more favouring the source countries. See in this respect Michael Lennard, ‘The UN Model tax Convention as Compared with the OECD Model Tax Convention – Current Points of Differences and Recent Developments’, *Asia-Pacific Tax Bulletin*, Vol. 39, No. 08, 2009, pp. 4-11.

⁵⁵ See Brauner (2014), pp. 61-67.

2.3 The BEPS Project

2.3.1 Background of BEPS

The financial crisis has brought international tax issues to the top of the political agenda. Because of this, interests were aligned in both developed and developing countries to protect the corporate income tax bases.⁵⁶ The need for tax revenue was recognised by the G20,⁵⁷ who consequently called for the OECD to initiate the BEPS Project.⁵⁸ The BEPS problems had been on the agenda of the OECD for a long time, but with the political support of the G20 the process to provide solutions was now accelerated. This led to the initial BEPS Report in 2013.⁵⁹

There is no single rule that can be appointed to be the root cause of BEPS. Instead, it is an interplay between domestic law rules not being sufficiently coordinated across borders, international standards that have fallen behind with the pace of globalisation and most importantly, a lack of data and information.⁶⁰ These are the three main reasons leading to the BEPS Project. Accordingly, the project includes 15 Action Plans that can be categorised along three fundamental pillars:⁶¹

- (1) Introducing coherence in the domestic rules that affect cross-border activities;
- (2) Reinforcing substance requirements in the existing international standards and;
- (3) Improving transparency.

The final BEPS Project was released in October 2015. Specifically, the 15 Action Plans presented range from addressing general challenges such as the tax challenges in the digital economy (Action Plan 1), to more specific challenges such as strengthening CFC rules (Action Plan 3). Furthermore Action Plans 8-10 and Action 13 involve transfer pricing, with Action Plan 8 specifically focussing on better aligning transfer pricing outcomes related to intangibles. Action Plans 11 to Action Plan 14 focus on administrative and compliance issues, aiming for more disclosure in order to more easily depict aggressive tax planning.⁶²

⁵⁶ Grinberg & Pauwelyn (2015).

⁵⁷ A forum of 19 countries + the European Union who play a considerable role in the global economy. See <http://www.oecd.org/g20/about.htm>

⁵⁸ Yariv Brauner, 'BEPS: An Interim Evaluation', *World Tax Journal*, Vol. 6, No. 1, February 2010, p. 10.

⁵⁹ For the initial BEPS report (2013), see: <http://www.oecd.org/tax/addressing-base-erosion-and-profit-shifting-9789264192744-en.htm>

⁶⁰ A detailed overview of the reasons leading to the BEPS Project, provided by the OECD itself, can be found: OECD, *Action Plan on Base Erosion and Profit Shifting*, OECD Publishing, 2013, pp. 9-11.

⁶¹ OECD/G20, Base Erosion and Profit Shifting Project, *Information Brief*, 2015, p. 3.

⁶² All 15 Action Plans of the BEPS Project are available at: <http://www.oecd.org/tax/beps/beps-actions.htm>

2.3.2 *The BEPS Project's Principle*

An important remark to start with is that the BEPS Project is not hard law: the BEPS Project is designed to equip governments with domestic and international instruments to address tax avoidance, in order to help them counter strategies that exploit gaps and mismatches in current international tax law.⁶³ The OECD stresses that BEPS is not a problem created by one or more companies, but rather lies with the tax rules put in place by governments.⁶⁴ For this reason, the OECD has the ambitious goal of revising international tax standards to align them with the quick developments of a globalizing economy. Most importantly, it tries to do so by embedding one main principle:

“Ensuring that profits are taxed where economic activities take place and where value is created”

Instead of taxation based on the principles of residence and source, the OECD aims to align taxation with economic activities and value creation. This principle is clear and if implemented consistently can be regarded fair.⁶⁵ The remainder of this Section will discuss two Action Plans that are relevant to IP tax planning, to illustrate how the OECD aims to embed this principle in relation to IP tax planning structures. The relevant Action Plans are Action Plan 5: Countering harmful tax practices and Action Plan 8: transfer pricing for hard-to-value intangibles.

2.3.3 *Action Plan 5: Harmful Tax Practices*

One of the Action Plans of BEPS which clearly shows the OECD's aim to align taxation with substance, and which is very relevant to IP tax planning, is Action Plan 5: “Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance”. Action 5 builds on the policy concerns that were already raised in the OECD's ‘Harmful Tax Practices’ Report from 1998. The Harmful Tax Practices Report was the first report to come up with policy recommendations aimed at countering harmful tax practices in the form of tax havens and preferential tax regimes.⁶⁶ Action 5 aims to renew the work of that report, with a specific focus on two current concerns, namely:

- Preferential regimes used for artificial profit shifting *and*;
- Lack of transparency in connection with certain rulings.

- *Preferential Regimes*

For the definition of preferential regimes, Action 5 reverts back to the framework as presented in the Harmful Tax Practices Report. A regime is considered preferential if it offers some form of tax

⁶³ OECD (2015) Explanatory Statement, p. 4.

⁶⁴ OECD, ‘BEPS Frequently asked questions’, p. 1. Available at: <<http://www.oecd.org/ctp/BEPS-FAQsEnglish.pdf>>

⁶⁵ Brauner (2014), p. 99.

⁶⁶ See OECD, *Harmful tax practices: An Emerging Global Issue*. Paris: OECD Publishing, 1998.

preference compared to the standard tax rules of that country.⁶⁷ The Report stresses that a regime must be preferential compared to the general principles applied in that country, and not compared to the tax principles of other countries.

If preferential tax treatment is in place, the Report subsequently sets out four key factors that are used in order to evaluate whether a preferential regime is potentially harmful, and eight other factors to define the four key factors in more detail.⁶⁸

The four key factors are:

- a) The regime imposes no or low effective tax rates on income from geographically mobile financial and other service activities;
- b) The regime is ring-fenced from the domestic economy;
- c) The regime lacks transparency; and
- d) There is no effective exchange of information with respect to the regime.

The eight supporting factors are:

- a) An artificial definition of the tax base;
- b) Failure to adhere to international transfer pricing principles;
- c) Foreign source income exempt from residence country taxation;
- d) Negotiable tax rate or tax base;
- e) Existence of secrecy provisions;
- f) Access to a wide network of tax treaties;
- g) The regime is promoted as a tax minimisation vehicle; and
- h) The regime encourages operations or arrangements that are purely tax-driven and involve no substantial activities.

Of these four factors, the “no or low effective tax rates” factor is the most important and acts as a gateway for the remaining three factors. Neither the Harmful Tax Practice report nor Action 5 provides a number on what is considered a low tax rate, though it must be noted the term *effective tax rate* is used, meaning the imposed taxes after any negative adjustment is to be assessed.

The second key factor, the “ring-fenced” factor, checks whether a preferential regime is isolated from the domestic market of the country offering the regime. That is, it is considered ring-fenced when resident taxpayers are excluded from the benefits of the regime, or the other way around when a firm that has access to the regime is denied access to the domestic market. The fact that a country may be

⁶⁷ OECD, *Countering Harmful Tax Practices More Effectively, Taking Into Account Transparency and Substance, Action 5 - OECD Final Report*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris (2015), p. 19.

⁶⁸ OECD (2015) Action 5, p. 20.

shielding its own economy from the regime evidently can be a strong indication that the regime is (potentially) harmful.

The transparency and effective exchange of information factors are closely linked in the sense that an effective exchange of information can only be achieved when there is sufficient transparency.

Transparency and consequently effective exchange of information provides for the necessary measures that enable other countries to take defensive measures.⁶⁹

- *Nexus Approach of Action 5*

Action 5 however does not focus only on preferential regimes that are potentially harmful, but specifically requires substantial activity for any preferential regime.⁷⁰ The requirement for substantial activity can already be found in supporting factor h) of the Harmful Tax Practices Report. The Report however only provides limited guidance on how substantial activities must be interpreted. Action 5 instead considers the substantial activity requirement a primary factor, which together with the four key factors that are discussed, will assess whether a preferential regime is potentially harmful. By requiring substantial activity for any preferential regime, the OECD aims to prevent artificial profit shifting from the countries where the actual value is created, to preferential tax regimes for sole tax reasons.⁷¹

The substantial activity requirement has to be met through a nexus approach. In the context of IP regimes, in a nutshell, the nexus approach checks whether the benefits that are granted by the regime are conditional upon incurred expenditures giving rise to the income related to the intellectual property.⁷² This approach applies to both “front-end” tax regimes, which grant benefits in the form of R&D credits, as well as “back-end” regimes, which grant benefits related to the income arising from the IP. In “front-end” regimes, the relation between expenditures and the granted benefits is clear, as the expenditures are used to calculate the tax benefit. For “back-end” regimes the relation however is less clear, and Action 5 therefore requires ‘direct-nexus’ between the benefits received on the income and the expenditures that help realising that income.⁷³ In this way the nexus approach tries to ensure that IP regimes only grant the benefits to taxpayers who actually contribute in R&D, i.e. in innovation, which should always be the underlying purpose of IP regimes.⁷⁴ By following this approach, taxation will be aligned with the actual creation of value.

⁶⁹ Action Plan 13 of the BEPS Project specifically focuses on improving transparency, by introducing a three-tiered standardised approach that includes Country-by-Country reporting for large multinational enterprises.

⁷⁰ OECD (2015) Action 5, p. 23.

⁷¹ Ibid, p. 23.

⁷² Ibid, p. 24.

⁷³ Ibid.

⁷⁴ The rationale behind IP regimes will be discussed in Section 4.3.

The on-going work of the OECD in the field of IP regimes requires all existing IP regimes to comply with the substantial activity requirements through the nexus approach. Any IP regimes that do not comply must be amended. In fact, Action 5 has already listed sixteen existing IP regimes that do not comply one way or another with the described nexus approach, and must amend the features of their regimes.⁷⁵ It goes to show the significant impact of Action 5 in the field of IP regimes.

2.3.4 Action Plan 8-10: Aligning Transfer Pricing with Value Creation

Whereas Action 5 is a more general practice to countering harmful tax practices, Action 8-10: “Aligning Transfer Pricing Outcomes with Value Creation” (for the remainder: Action 8-10) specifically focuses on transfer pricing issues. ‘Aggressive’ transfer pricing can be considered the “beating hart” of BEPS planning. This is because, once a structure is set up where intangibles are located in low-tax jurisdictions, transfer pricing is used to maximize the profits in that low-tax jurisdiction instead of in the high-tax jurisdiction such as the U.S.⁷⁶

The current transfer pricing rules are based on the arm’s length principle, and require intra-group transactions to reflect prices that would arise if independent parties would make the same transaction.⁷⁷ The OECD has recognized issues in current transfer pricing rules: Action 8-10 address misapplication of transfer pricing rules, which may result in allocation of profits that are not aligning with the actual economic activities that produce the profits. Action 9 and Action 10 address the contractual allocation of risks and the allocation of profits related to the risks. For this the OECD takes the position that risk⁷⁸ must be allocated to the party that is actually capable of bearing the risk, instead of risks simply being allocated through contractual relations, as this could easily create profit-shifting opportunities. The focus of this Section however will be on Action 8: transfer-pricing issues related to the valuation of intangible assets, as it is strongly linked with IP tax planning.

- Transfer Pricing for Intangible Assets

The OECD takes a three-step approach to provide guidance on transfer pricing for intangibles. These are (1) identifying or defining intangibles, (2) identifying which entity owns the intangibles and which entities contribute to the value of the intangible, and (3) identifying transactions involving the use and transfer of the intangible. These are dealt with independently in four sections, categorised as A-D, of the revision to Chapter VI of the Transfer Pricing Guidelines.

Section A to transfer pricing for intangibles is about identifying exactly what intangibles are. The definition used by the OECD is the following:

⁷⁵ OECD (2015) Action 5, p. 63 (table 6.1).

⁷⁶ Brauner (2014), pp. 96-97.

⁷⁷ See OECD, ‘Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations’, July 2010, Chapter I.

⁷⁸ Risk is defined by the report as “the effect of uncertainty on the objectives of the business”.

*“Something which is not a physical asset or a financial asset, which is capable of being owned or controlled for use in commercial activities, and whose use or transfer would be compensated had it occurred in a transaction between independent parties in comparable circumstances.”*⁷⁹

This means that any related costs or enhancements for developing the intangible should also be taken into consideration for the transfer pricing of intangibles, if these generate (future) economic value. The definition of intangibles used for transfer pricing purposes may therefore be broader than the definition used in accounting, where such costs might be expensed and not reflect on the intangibles’ value on the balance sheet.

Section B is about identifying which entities are entitled to the returns following from the exploitation of the intangible. The legal ownership of the intangible acts as a reference point.⁸⁰ The OECD though stresses that the mere legal ownership of the intangible does not entitle that firm to all the returns. Instead the allocation of the returns should be based on the functions performed, assets used and risks assumed (FARs) related to the so-called DEMPE functions: development, enhancement, maintenance, protection and exploitation. The groups performing functions, using assets and assuming risks related to these DEMPE functions are entitled to compensation on an arm’s length basis, as they are expected to have contributed to the value of the intangible.⁸¹

Identifying the key functions performed related to DEMPE may not be easy. As often there are many routine functions performed, it would be essential to determine what key functions are that actually create value by differentiating the organisation and thus generating returns.⁸² Examples may be the activities that require creativity, decision-making and specific skills and knowhow.

As for the analyses on the risks assumed, in order to identify them, the OECD discussion draft on revisions to Chapter I of the Transfer Pricing Guidelines, provides a helping hand by identifying different types of risks⁸³, as well as a framework on how these risks should be analysed.⁸⁴ This involves taking into account the nature and source of a risk, how they are allocated in contractual agreements and do the actual transactions reflect these contractual agreements, as well as taking into account the potential impact of the risks.

⁷⁹ OECD, *Aligning Transfer Pricing with Value Creation, Actions 8-10 – 2015 Final Reports*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris (2015), p. 67.

⁸⁰ Ibid, p. 73.

⁸¹ Ibid.

⁸² Alan Ross, ‘Taxation and Pricing of Intangibles’, *Singapore Management University School of Accountancy Research Paper No. 2016-S-44*, March 2016, p. 22.

⁸³ OECD, ‘Discussion draft on Revisions to Chapter I of the Transfer Pricing Guidelines (including risk, recharacterisation, and special measures)’, December 2014, pp. 16-17.

⁸⁴ Ibid. p. 13.

Section C characterises the specific controlled transactions involving intangibles. In addition to identifying which entities are entitled to the returns of the intangibles, it may be necessary to identify and examine the intangibles involved for transfer pricing purposes.⁸⁵ Generally there are two transactions that require careful identification and examination of intangibles, which are: (i) transactions involving the transfer or rights of intangibles, and (ii) transactions involving the use of intangibles in connection with the sale of goods or provision of services.⁸⁶ Most importantly this Section refers to the application of Chapters I-III of the Transfer Pricing Guidelines, meaning that the general arm's length principle applies to such transactions.

- *Hard-to-value intangibles*

Lastly, but very relevant for IP tax planning structures, **Section D** provides supplemental guidance on “hard-to-value” intangibles. Intangibles may be hard to value in case no reliable comparables exist, or when the level of success of the intangible is still difficult to predict at the time of the transfer.⁸⁷ Such cases may arise when for instance the intangible is not yet fully developed at the time of the transfer, or when it involves a completely new type of exploitation of the intangible.

Because in these specific circumstances there is information asymmetry between the taxpayer and tax administration, Action 8 allows the tax administration to use *ex post* outcomes to determine the reliability of the initial transfer pricing.⁸⁸ This means that tax administrations may use financial outcomes, such as the sales resulting from the exploitation of the intangible, to make adjustments to the *ex ante* transfer price.

2.4 Interim Conclusion

According to the OECD itself the approach of the BEPS Project represents “the first substantial renovation of the international tax standards in almost a century”.⁸⁹ Whether the BEPS Project will be implemented and achieve its goal of aligning taxation with economic activities remains to be seen, as implementing the actions will lead to significant distributional consequences in the field of cross-border trade.⁹⁰ Besides, it must be noted the OECD does not have the power to make direct changes to the law, so it must rely on domestic implementation by the sovereign states.⁹¹ In literature the BEPS Project is generally positively welcomed. Grinberg expects major parts of the BEPS Project to be implemented, due to the link with the OECD Model and commentaries that have a self-enforcing effect, however stresses the need for binding arbitration to settle disputes.⁹² Van Apeldoorn marks the

⁸⁵ OECD (2015) Actions 8-10, p. 88.

⁸⁶ Ibid. pp. 88-92.

⁸⁷ Ibid. p.110.

⁸⁸ Ibid. pp. 111-112.

⁸⁹ OECD (2015) Explanatory Statement, p. 5.

⁹⁰ Grinberg & Pauwelyn (2015)

⁹¹ Matthew Herrington, ‘A call to rewrite the fundamentals of international taxation’, *FITAR* (September 2013), p. 3.

⁹² See Itai Grinberg, ‘Breaking BEPS: The New International Tax Diplomacy’, September 15, 2015, pp. 50-53.

BEPS Project as an important step in tackling aggressive tax planning through increased cooperation between states, however takes the position that “it insufficiently addresses the injustice of current inequality in effective tax sovereignty”.⁹³ More critical views expect the BEPS Project to not create a stable tax system in the long run, as it only tries to close loopholes rather than addressing the fundamental issues, which is the allocation of taxing rights based on the residence and source principle.⁹⁴

This Chapter has discussed both the current international tax principles, as well as the proposed ‘new’ standards presented by the OECD. The current international tax system is based on residence- and source based taxation, leaning on an extensive international network of tax treaties to avoid double taxation. The OECD, through its BEPS Project, is putting forward the principle of ‘aligning taxation with economic activities and value creation’ in order to solve for loopholes in current tax systems. In Action 5 this principle shows by requiring substantial activity for preferential (IP) regimes. In Action 8 it is displayed by developing a set of rules to ensure transfer pricing of intangibles to be in line with value creation. The remainder of this thesis will discuss the fundamentals of IP tax planning and typical IP tax planning structures, and it will be seen to what extent these structures align with the rules and principles discussed in this Chapter.

⁹³ See Laurens Van Apeldoorn, ‘BEPS, tax sovereignty and global justice, Critical Review of International, Social and Political Philosophy’, August 19, 2016, pp. 1-17.

⁹⁴ Michael Devereux & John Vella, ‘Are We Heading Towards a Corporate Tax System Fit for the 21st Century?’ *The Journal of Applied Public Economics*, Vol. 35, Issue 4, December 2014, p. 20.

Chapter 3

Fundamentals of Intellectual Property & IP Tax Planning

3.1 Introduction

This Chapter will introduce the fundamentals of intellectual property and IP tax planning. For a good understanding of this thesis, it is first important to define intellectual property, as part of a firm's intangible assets. Subsequently, the Chapter will describe the tax planning characteristics of intellectual property and the difficulties in allocating income related to intellectual property.

Once the basics are discussed, the last Section will explain three ways through which multinationals can separate the creation and the exploitation of intellectual property. These are (i) intra-group disposal of IP from the parent to a subsidiary, (ii) intra-group licensing of intellectual property, and (iii), intra-group contract R&D. Separating the creation and the exploitation of intellectual property is a key step for IP tax planning, as it allows multinational enterprises to shift profits to low-tax jurisdictions. For each method it will be discussed how they work and what measures countries may take to counter these methods.

3.2 Intangible Assets

3.2.1 Definition

Intangible assets, as opposed to tangible assets, are the firm's non-physical assets. Intangibles can be distinguished by their commercial activities: marketing intangibles and trade intangibles.⁹⁵ Trade intangibles are the "product-related intangibles". They are created by research & development (R&D) and often involve significant risks related to the development.⁹⁶ Examples include patents, software and trade secrets. Marketing intangibles on the other hand are, as the name suggests, intangibles used for marketing purposes such as trademarks and symbols.

Perhaps a more practical way of defining intangibles is to look at the degree to which they can be identified. In practice patents, trademarks, designs and copyrights are legally protected through intellectual property rights.⁹⁷ Legal protection of these intangibles is necessary to ensure you hold the rights to exploiting the intangible.⁹⁸ Intellectual property rights can be seen as the moral right of the

⁹⁵ OECD (2010) Transfer Pricing Guidelines, pp. 192-193.

⁹⁶ D.R. Wright, 'OECD Chapter VI: Special Considerations for intangible property issues and analysis', *International Transfer Pricing Journal*, 1996, p. 16.

⁹⁷ See Lionel Bently & Brad Sherman, *Intellectual Property Law* (2nd edition, Oxford University Press 2004).

⁹⁸ See Michael Harvey, 'Protecting the core competencies of a company: Intangible asset security', *European Management Journal*, Vol. 15, Issue 4, August 1997, pp. 370-380.

creator to control his work and a way to foster innovation.⁹⁹ Opposed to intangibles protected through intellectual property rights are intangibles such as human capital, valuable relationships and networks, which also create value but are much harder to identify.¹⁰⁰ An example of human capital is the value Elon Musk represents for Tesla, which is obvious yet hard to identify. According to IAS 38, intangibles are identifiable if they meet either one of the following criteria:

- a) The asset is capable of being separated from the entity and transferred individually or through a related contract;
- b) The asset arises from a contractual or other legal right

Only identifiable intangible assets can be recognized on the balance sheet according to IAS 38.¹⁰¹ This can be seen as logical as it would be practically impossible to recognise unidentifiable intangible assets.

For this thesis, it suffices to know that when discussing intangibles or intellectual property in the context of IP tax planning, this usually refers to the product-related intangibles, which are protected by intellectual property rights. As they are product-related, this means they can generate income and thus can be used for profit shifting of multinationals. The exact definition of intellectual property rights and intangible assets may however vary depending on the national tax codes or sources of bilateral and multilateral tax law.

3.2.2 *Allocating Income Related to Intellectual Property*

Income from intellectual property is normally subject to the normal corporate tax rate according to the respective country legislation. In some cases, income related to intellectual property is subject to a more favourable regime, namely so-called IP regimes.¹⁰²

Difficulties arise in the allocation of taxing rights concerning the income related to intellectual property. First of all, the R&D activities leading to the creation of the intellectual property may be integrated in different entities.¹⁰³ The knowledge and work put in by different persons or entities, which all contributes to the value of the intellectual property, may be practically impossible to identify separately.¹⁰⁴ This may give rise to the question who actually owns the intellectual property, which is

⁹⁹ For a survey of the theoretical landscape of intellectual property, see Peter S. Menell, 'Intellectual Property: General Theories', *Encyclopedia of Law and Economics*, Vol. 2, 2000, pp. 129-164.

¹⁰⁰ Boos (2013), p. 19

¹⁰¹ IAS 38 Intangible Assets

¹⁰² IP regimes will be discussed in Chapter 4.

¹⁰³ Wolfgang Schön, 'International Tax Coordination for a Second-Best World (Part I)', *World Tax Journal*, vol 1. No. 1, October 2009, p. 68.

¹⁰⁴ Patrick Roxworthy et al, 'Session 1 – Competitive Advantage: The Importance of Intangible Assets to U.S. Economic Growth in the Global Economy', *Taxes – the tax magazine*, Vol. 61, June 2013, pp. 19-21. Resolving issues specifically related to the integration of R&D activities is however beyond the scope of this thesis.

important as legal ownership acts as a starting point for the taxation of intangibles.¹⁰⁵ Furthermore, the creation and exploitation of the intellectual property may be split, or the intellectual property may be held by an IP-holding company. This may give rise to multiple different jurisdictions claiming taxation rights for the royalty income relating to the exploitation of the intellectual property.¹⁰⁶

Following the system of residence and source based taxation, the allocation of taxing rights for the exploitation of the intellectual property in the end is decided through double taxation treaties settled by the respective countries.¹⁰⁷ According to the OECD Model Convention, the right to tax income from royalties is assigned exclusively to the state where the beneficial owner of that income resides, i.e. the residence state.¹⁰⁸ Many OECD countries however deviate from this by allowing in their treaties income from royalties to be taxed in the country where the income arises, i.e. taxation at the source.¹⁰⁹ In contrast, the UN MC assigns taxation rights initially to the source country.¹¹⁰

Allocating income related to intellectual property is guided by transfer pricing rules. In this respect, Action 8 of the BEPS Project aims to ensure that allocation of profits that are aligning with the actual economic activities that produce the profits. Instead of solely looking at who is the legal owner or the intellectual property, or where the intellectual property is exploited, Action 8 refers to the DEMPE functions to assist in allocating the returns amongst the different parties involved.¹¹¹

3.2.3 *Tax Planning Characteristics*

Three important characteristics can be distinguished that explain why intellectual property plays an important role in tax planning structures used by multinational enterprises. Firstly, for the increasing number of IP-intensive firms, intellectual property is (one of) the main value-driver(s) for their business; for them it is the business asset that generates revenues. This means that by allocating IP to a group company situated in a low-tax jurisdiction, (future) profits can be shifted and become subject to tax in these lower-tax jurisdictions. Shifting IP to another jurisdiction is possible due to IP being highly mobile, and that is the second factor that makes it so interesting for tax planning purposes. As IP is a part of a firm's intangible assets, it can be moved with relatively low costs compared to fixed assets like buildings or machinery.

¹⁰⁵ OECD, Guidance on Transfer Pricing Aspects of Intangibles, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, 2014, p. 39

¹⁰⁶ Allocation of taxing rights of income arising from intangibles in the end is between reaching a 'status quo' between the source country, the R&D country, the IP holding country and the ultimate parent country. For an analysis on the perspectives of all these countries why, and to for what reasons they want to tax income, see: Lisa Evers, 'Intellectual Property (IP) Box Regimes', 2016, pp. 27-35.

¹⁰⁷ See Section 2.2.

¹⁰⁸ See Article 12(1) of the OECD Model Convention.

¹⁰⁹ See OECD Model Convention Commentaries, commentaries on article 12, recitals 33-37 for the respective countries and how they include source taxation in negotiating treaties. Canada for example wishes to retain a 10% rate of tax at source in its tax treaties.

¹¹⁰ See Article 12(1) of the UN Model Convention.

¹¹¹ See Sub-Section 2.3.4.

The third factor is that IP is very firm specific, making it hard to apply the arm's length principle, as often there are no comparable intangibles on the market. In case of the transfer of intellectual property within a group, companies thus have room to come up with creative ways to determine the price of either the intellectual property itself, or the royalty payments for the use in case the IP is licensed. Companies can in this way choose to allocate profits in the low tax countries, while reducing profits in the high-tax countries. This is exactly what happens in the tax planning structures used by U.S. multinationals, as taxation in the U.S. is relatively high compared to corporate tax rates in for instance Ireland.¹¹² Possible reasons to apply a low price in case of transfer of the intellectual property can be that the IP is not yet fully developed at time of the transfer, or that the risk related to future earnings must be taken into account.¹¹³ The same is true for setting the price of royalty payments in case the IP-holding out-licences the IP: the actual benefit of the IP may be hard to establish as it has to be integrated with other assets in order to generate income.¹¹⁴

3.3 IP Tax Planning Methods

An important part of tax planning structures using intellectual property is locating the valuable intellectual property in low-tax jurisdiction, and consequently licensing out the intellectual property to an operating subsidiary.¹¹⁵ Generally three tax planning methods can be distinguished: intra-group disposal of the intellectual property to a subsidiary, intra-group licensing and intra-group contract R&D. All three methods lead to the intellectual property being exploited in a jurisdiction other than the parent company. The parent company is assumed to be the place where the intellectual property is created. All three methods have different tax consequences as well as differences in who becomes the legal owner of the patent. Each method will be explained separately next.

3.3.1 Intra-group Disposal of IP from Parent-Subsidiary

The first method is the transfer of the intellectual property to a subsidiary, also referred to as intra-group disposal. Transferring the intellectual property to a subsidiary situated in a low-tax jurisdiction would result in the income from the exploitation of the intellectual property to be lower taxed. Intra-group transfer of assets are however generally subject to transfer pricing rules, meaning the price agreed between the parent and the subsidiary must be at arm's length.¹¹⁶ Transferring the intellectual property would thus triggers taxation on the difference between the book value and the sales price.¹¹⁷

¹¹² Van den Hurk (2013), p. 29.

¹¹³ Fuest et al (2013), p.5.

¹¹⁴ This is in case an income-approach is used to royalty setting, in which the royalty payment is based on the earnings that it generates, see Tim Heberden, 'Intellectual Property Valuation and Royalty Determination', 2011, p. 8.

¹¹⁵ See Section 4.2.

¹¹⁶ See Sub-Section 2.3.4.

¹¹⁷ Ulrich Schreiber & Gregor Führich, 'European group taxation – the role of exit taxes', *European Journal of Law and Economics*, Vol. 27, Issue 3, December 2008, p. 264.

Besides, the U.S. has the super royalty provision, according to which transfer prices may be adjusted in future years if they are not commensurate with the income attributable to the intangible.¹¹⁸

Under these rules, the transfer price triggered at the time of the disposal would simply reflect the value of future income generated by the subsidiary, and hence would not create an incentive for multinational enterprises to engage in such transactions.¹¹⁹ IP tax planning structures therefore come up with ways to keep transfer prices low as well as circumventing the U.S. super royalty provision, as will be shown in Chapter 4.

3.3.2 *Intra-group Licensing*

Another way to shift the location of the intellectual property is through a licensing arrangement with a subsidiary, also referred to as intra-group licensing. Different from the intra-group disposal, is that through intra-group licensing the parent company remains the legal owner of the intellectual property. The subsidiary licensing the intellectual property in turn pays royalties to the parent company. These royalty payments are deductible at the level of the subsidiary, and are taxed at the level of the parent. This makes the tax planning method interesting in structures where the parent company is situated in a low-tax jurisdiction, as the royalties will be low taxed at the level of the parent, while reducing the profits at the level of the subsidiary. In such a structure, group companies may have an incentive to charge excessively high royalty payments. Transfer pricing rules generally try to make sure that the royalty payments are at arm's length to prevent such excessively high payments.¹²⁰ Furthermore, withholding tax may be levied at the level of the subsidiary, although in practice this can easily be avoided via the Interest-Royalty Directive or by interposing conduit companies in jurisdictions that do not levy withholding taxes.¹²¹

As the parent in this method remains the legal owner and is thus still entitled to the returns related to the intellectual property, intra-group licensing is generally used as a second step (the first step being locating the intellectual property in a low-tax country). This method is then used to reduce taxation at the level of the operating companies.¹²²

¹¹⁸ Internal Revenue Code (IRC) 482, US Income Tax Reform Act.

¹¹⁹ Chris J. Finnerty, Paulus Merks & Raffaele Russo et al, *Fundamentals of International Tax Planning* (1st edition, IBDF 2007), p. 180.

¹²⁰ See Sub-Section 2.3.4.

¹²¹ Such as the Netherlands, who do not levy withholding tax on royalties, or by accessing the EU Interest-Royalty Directive in case the parent company is established in Europe, and royalties are paid between two Member States. See the explanation of tax planning structures in Sections 4.2 and 4.3 for more details.

¹²² Joint Committee on Taxation, 'Present Law and Background Related to Possible Income Shifting and Transfer Pricing', July 2010, p. 105; Michael J. Graetz & Rachael Doud, 'Technological Innovation, International Competition, and the Challenges of International Income Taxation', *Columbia Law Review*, Vol. 113, May 2013, pp. 392-404.

- *Cost-Contribution Arrangements*

Instead of intra-group licensing, business enterprises can also conclude a cost contribution agreement (hereafter: CCA).¹²³ CCAs are defined as “special contractual arrangements among business enterprises to share the contributions and risks involved in the joint development, production or the obtaining of intangibles, tangible assets or services”.¹²⁴ Companies may enter such arrangements expecting to create mutual benefits for all participants, for instance by pooling resources and skills.

The principal difference between a CCA and a licensing arrangement is that under a CCA, each participant is entitled to exploit the interest in the CCA separately as the effective owner.¹²⁵ This means that any intangibles that are created under the CCA can be exploited without having to pay a royalty or other consideration to another party, opposed to a licensing arrangement where such royalties must be paid by the licensee.¹²⁶ According to the revised standards of CCAs in Action 8, most importantly the outcomes of the CCA and the returns to the participants must be at arm’s length. This means that the CCA must be “consistent with what independent parties would have agreed to contribute” under similar economic circumstances, expecting the same benefits.¹²⁷

3.3.3 *Intra-group Contract R&D*

A third tax planning method is intra-group contract R&D. In the case of contract R&D, like in the previous two methods, the parent creates the intellectual property through R&D activities. It now however does so on behalf of the subsidiary: the subsidiary pays the parent a ‘contract R&D fee’, and hence becomes the legal owner of the intellectual property.¹²⁸ The sum of the contract R&D fee can be determined on a cost-plus basis, provided that the subsidiary bears the risks related to the intellectual property.¹²⁹ The tax consequence, besides the R&D fee being subject to tax at the parent level and deductible at the level of the subsidiary, again is that the income related to the exploitation of the intellectual property is subject to tax in the jurisdiction where the subsidiary is located.

¹²³ Cost contribution arrangement (CCA) is the OECD’s equivalent of a cost sharing agreement (CSA) that is used by the IRS. This thesis will therefore use the term CCA consistent with the OECD. See Rezan Okten, ‘A Comparative Study of Cost Contribution Arrangements: Is Active Involvement Required To Share in the Benefits of Jointly Developed Intangible Property?’, *International Transfer Pricing Journal*, January/February 2013, p. 4.

¹²⁴ OECD (2015) Action 8, p. 163.

¹²⁵ OECD (2010) Transfer Pricing Guidelines, p. 220.

¹²⁶ Tomas Brabenec, ‘Certain Important Aspects of Cost Contribution Arrangements in Financial Management’, *International Journal of Social, Behavioural, Educational, Economic, Business and Industrial Engineering*, Vol. 4, No. 7, 2010, p. 1869.

¹²⁷ OECD (2015) Action 8, p. 166.

¹²⁸ Christoph Spengel & Lisa Evers, ‘Effective Tax Rates under IP Tax Planning’, *ZEW Discussion paper*, no. 14-111, 2014, p. 23.

¹²⁹ In accordance with the OECD Transfer Pricing Guidelines: OECD (2010) Transfer Pricing Guidelines, pp. 75-76.

3.4 Interim Conclusion

This Chapter has expressed that intellectual property has some specific characteristics that make it attractive for tax planning purposes. These are that it is a driver of value, mobile and firm specific. These create opportunities for tax planning. By disentangling the location where the IP is created and where the IP is exploited, multinational enterprises can reduce their overall tax burden by locating the subsidiary in a low-tax country, as the profits generated from the exploitation of the intellectual property will be taxable in that country.¹³⁰

Three tax planning methods have been discussed how this can be done, namely intra-group disposal, intra-group licensing and contract R&D. In case of intra-group disposal and contract R&D, the subsidiary in the exploiting country becomes the legal owner, whereas with intra-group licensing the parent company remains the legal owner, and thus royalty payments have to be paid. Instead of intra-group licensing, companies can conclude a CCA, in which case participants of the CCA may exploit intellectual property as the effective owner, and thus no royalty payments have to be paid.

The result of these tax-planning methods is that there is a separation between where the R&D activities are performed that lead to the creation of the intellectual property, and where the income related to intellectual property is taxed.¹³¹ On first sight this seems to be inconsistent with the principle of taxing where economic activities take place and the value is created. According to the nexus approach of Action 5, benefits granted by an IP regime must be conditional upon incurred expenditures giving rise to the income related to the intellectual property.¹³² This would mean that in case of an intra-group disposal to, or a contract R&D arrangement with a subsidiary who is benefiting from an IP regime, that subsidiary would not be entitled to the benefits of that IP regime if he does not contribute any R&D activities.

Furthermore, transfer-pricing rules generally limit the leeway of IP tax planning methods.¹³³ In accordance with Action 8, the IP tax planning methods discussed in this Chapter must comply with the arm's length principle. In the case of intra-group disposal, this would trigger taxation on the value of the intellectual property. In case of intra-group licensing, the arm's length conditions apply for the

¹³⁰ Rachel Griffith, Helen Miller & Martin O'Connell, 'Ownership of intellectual property and corporate taxation', *Journal of Public Economics*, Vol. 113, April 2014, p. 13.

¹³¹ Spengel & Evers (2014), p. 39.

¹³² See Sub-Section 2.3.3.

¹³³ Spengel & Evers (2014), p. 39.

royalty payments. Lastly, in case of intra-group contract R&D, the arm's length applies to the contract R&D fee. Although there are multiple transfer pricing methods that may be applied to these transactions, for now it is assumed that application of the transfer pricing rules in accordance with Transfer Pricing Guidelines, would suffice for these tax planning methods to be in accordance with Action 8, and therefore comply with the principal of taxing where economic activities take place and where value is created.

Unfortunately, commonly used IP tax planning structures are not as straightforward as presented above. Instead these structures consist of multiple levels, with subsidiaries located in multiple different jurisdictions in order to lower overall taxation. In order to provide a more comprehensive answer to the research question, more information is needed about the actual structures that are used in this area. In pursuance of this, Chapter 4 will discuss two of the most well-known IP tax planning structures, which are presumably used by some of the largest multinational enterprises.

Chapter 4

Analyses of IP Tax Planning Structures

4.1 Introduction

Tax planning is the structuring of the taxpayer's economic affairs in fiscally the most favourable way.¹³⁴ Before discussing IP tax planning structures, it is important to distinguish tax planning from tax avoidance and tax evasion. Tax evasion is strictly illegal and can lead to criminal sanctions.¹³⁵ It includes for instance deliberately not disclosing all facts and circumstances to the tax authorities, or producing false documents or statements.¹³⁶ Tax planning and tax avoidance on the other hand are not criminal offences, but ways for a taxpayer to reduce his tax burden given the rules set in place by governments.¹³⁷ The line between tax avoidance and tax planning is less clear. In its report on International Tax Avoidance and Tax Evasion, the OECD refers to tax avoidance as a “serious concern to governments as it is contrary to fiscal equity, has serious budgetary effects and distorts international competition and capital flows”.¹³⁸ Reducing the tax liability through tax planning by “choosing the most advantageous route consistent with normal business transactions” is however regarded acceptable by the report. Tax avoidance may therefore perhaps best be depicted somewhere between “bad” tax evasion and “good” tax planning.¹³⁹

Tax planning can however reach a point where it cannot be tolerated within a legal system intended to conform to principles of justice.¹⁴⁰ In the context of BEPS, the OECD seems to use the term ‘aggressive tax planning’ as tax planning that can no longer be tolerated and must be countered through the BEPS Project. This Chapter will discuss two of the most popular aggressive tax planning structures that use intellectual property to shift profits to low tax jurisdictions: the “Double Irish Dutch Sandwich”, and IP-structures using IP-box regimes. Besides describing how the structures work, they will be analysed in the light of the BEPS Project's principle of taxing profits where economic activities take place and value is created.

¹³⁴ OECD, *International Tax Avoidance and Tax Evasion, Four Related Studies*, Paris, 1987, p. 12.

¹³⁵ Paulus Merks, ‘Tax Evasion, Tax Avoidance and Tax Planning’, *Intertax*, Vol. 6, Issue 5, 2006, pp. 272-273.

¹³⁶ European Commission, ‘On concrete ways to reinforce the fight against tax fraud and tax evasion including in relation to third countries’, June 2012, p. 1.

¹³⁷ Frans Vanistendael, ‘Juridical Interpretation and the Role of Anti-Abuse Provisions in Tax Law’, in G.S. Cooper, *Tax Avoidance and the Rule of Law* (IBFD Publications, Amsterdam 1997), p. 132.

¹³⁸ OECD, *International Tax Avoidance and Evasion, Four related studies* (OECD Paris 1987), p. 11.

¹³⁹ Merks (2006), p. 275.

¹⁴⁰ Vogel (1997), pp. 116-117.

4.2 “Double Irish Dutch Sandwich” Structure

The most well-known tax planning strategy using intellectual property is the “Double Irish Dutch Sandwich”. It is recognised as a tax planning structure used by U.S. multinational enterprises to reduce the tax liability on non-U.S. income.¹⁴¹ The structure consists of two companies in Ireland (one Irish Holding Company and one Irish Operating Company), a Dutch Conduit Company, as well as involving the Parent Company situated in the United States, and the tax haven Bermuda. The structure can be broken down into multiple distinct steps. See the figure below for an overview.

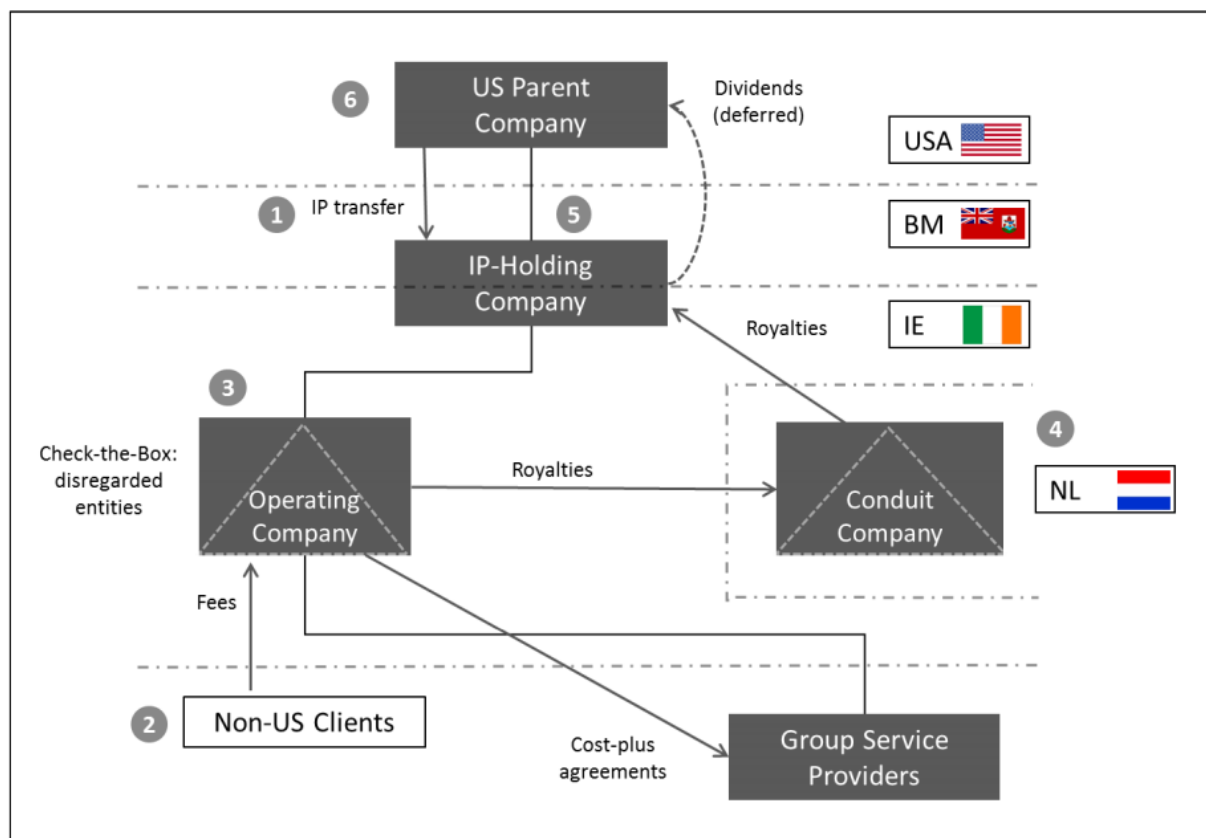


Figure 1: “Double Irish Dutch Sandwich” structure¹⁴²

4.2.1 Initial Transfer of Intellectual Property

The first step is to transfer the intellectual property out of the U.S. to the Irish Holding Company. Transferring intellectual property to a foreign country is, just like the transfer of any other asset such as a machine, perfectly acceptable. This would however normally trigger exit taxation as well as

¹⁴¹ Fuest et al (2013), p. 4.

¹⁴² Ibid.

taxation of future income attributable to the transferred intellectual property under the U.S. Super Royalty Provision.¹⁴³ To avoid this, instead of transferring the intellectual property, the Ireland Holding Company makes a buy-in payment¹⁴⁴ to acquire the rights of using the intellectual property of the U.S. Parent Company.¹⁴⁵ The arm's length principle is used to determine the price of the buy-in payment, but this is difficult, as the intellectual property is not yet fully developed.¹⁴⁶ This means that there is information asymmetry between the taxpayer and the tax administration on the true underlying value of the intellectual property. Next to the buy-in payment, the U.S. Parent Company and the Ireland Holding Company agree on a cost-sharing agreement, which allocates future development costs to the Ireland Holding Company. This results in the avoidance of any future royalty payments as the Ireland Holding Company is considered the owner of the intellectual property according to the cost-sharing agreement.¹⁴⁷

The transfer of intangibles through a buy-in payment as described above very much resembles a controlled transaction involving the transfer of intangibles that is covered in Action 8.¹⁴⁸ For this reason Action 8 explicitly states that the guidance on hard-to-value intangibles that is provided in its report is “fully applicable” to buy-in payments, as well as CCAs.¹⁴⁹ This means that, following the guidance on hard-to-value intangibles of Action 8 Section D, tax administrations are allowed to take into account *ex post* outcomes for the determination of transfer prices.

4.2.2 Avoiding Taxation in Ireland

Once the intellectual property is transferred to the Irish Holding Company, it is exploited by the Irish Operating Company. The operating company pays royalties for the licensing of the intellectual property, resulting in profits at the holding level (1), and consequently exploits the intellectual property, resulting in profits at the operational level (2). Furthermore, withholding tax (3) is levied on royalties paid outside the EU, which is relevant as the Irish Holding Company is a Bermuda resident for Irish tax purposes, as will be explained in a moment. The “Double Irish Dutch Sandwich” minimises taxation on all three levels.

(1) Holding level: the profits earned at the level of the Irish Operating Company remain untaxed due to dual residency of the holding company.¹⁵⁰ From a U.S. perspective the Irish Holding Company is an Irish resident, as in the U.S. residency for corporations is based on the legal seat. The profits are

¹⁴³ See Sub-Section 3.3.1.

¹⁴⁴ A buy-in payment is a payment made to acquire an interest in an already active cost-contribution arrangement. Through a cost-contribution arrangement the costs and risks for developing the intangible are shared.

¹⁴⁵ Edward D. Kleinbard, ‘Stateless Income’, *Florida Tax Review*, Vol. 11, No. 9, 2011, p. 707.

¹⁴⁶ *Ibid.* p. 708.

¹⁴⁷ See Sub-Section 3.3.2, part *Cost-Contribution Arrangements*.

¹⁴⁸ See Sub-Section 2.3.4, part *Transfer Pricing for Intangibles*.

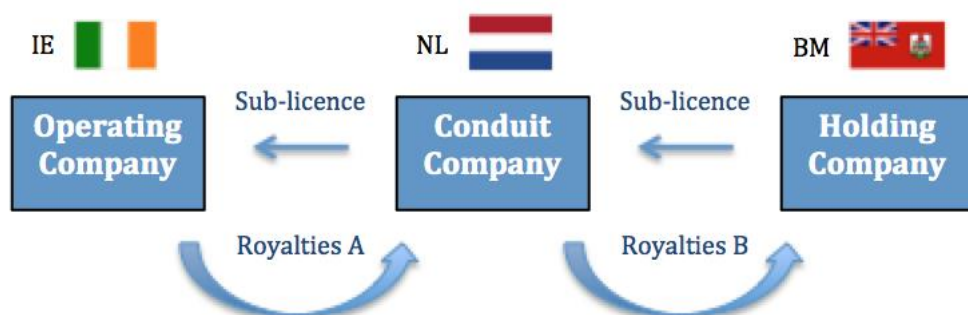
¹⁴⁹ OECD (2015) Action 5, paragraph 8.47 (for buy-in payments) and paragraph 8.40 (for CCAs).

¹⁵⁰ Kleinbard (2011), p. 709; Fuest et al (2013), p. 4.

therefore not taxed in the U.S, but would normally be taxed the residence state Ireland. The Irish Holding Company is however managed and controlled in Bermuda. Because Ireland uses the real seat principle, from the perspective of Ireland, the holding is considered a Bermuda resident. Taxation of the profits in Bermuda is zero, as Bermuda does not levy any corporate income tax.¹⁵¹ In this way the profits earned by the Irish Holding Company remain completely untaxed.

(2) Operating Company level: the profits earned at the level of the Irish Operating Company are held low due to high royalty payments paid to the Dutch Conduit Company. Eroding the tax base in Ireland through high royalty payments is no longer possible after 2010. The reason why this was possible in Ireland, making it an attractive place to conduct business from, was because Ireland did not have broad transfer pricing rules prior to the Finance Act 2010.¹⁵² The new transfer pricing rules in Ireland only apply for transactions agreed on after 1 July 2010, and basically require both domestic and international transactions between associated companies to be at arm's length.¹⁵³ These new transfer pricing rules can be regarded to be in line with Action 8, following that the royalty payment is based on the arm's length principle. For structures set-up before 1 July 2010, such as most "Double Irish Dutch Sandwich" structures, the new rules however do not yet apply.¹⁵⁴

(3) Royalty payments: the royalty payments from the Irish Operating Company to the Irish Holding Company, which is a Bermuda resident for Irish tax purposes, would be subject to Irish withholding tax. To avoid this withholding tax, the Dutch Conduit Company is interposed. Instead of directly sub-licensing the intellectual property to the Irish Operating Company, the Irish Holding Company (resident in Bermuda for Irish tax purposes) first sub-licenses it to the Dutch Conduit Company, who consequently sub-licenses it to the Irish Operating Company. The royalties follow the exact opposite direction. This can be illustrated in the following scheme:



¹⁵¹ Bermuda does not levy any taxes on profits, dividends or income. The only 'burden' for Bermuda companies is an annual company fee based on share capitals (with a maximum of USD \$31.120, and a payroll tax for employers and employees to a maximum of 14%).

¹⁵² See Liam Grimes & Tom Maguire, 'Ireland Becomes an Even More Attractive Prospect for Corporate Entities', *European Taxation*, Vol. 45, No. 4, April 2005, pp. 148-154.

¹⁵³ See Finance Act 2010, Ireland.

¹⁵⁴ Fuest et al (2013), p. 6.

Figure 2: Royalty flow “Double Irish Dutch Sandwich”.

Royalty payment A, from Ireland to the Netherlands, is not taxed due to the Interest-Royalty Directive.¹⁵⁵ Royalty payment B, from the Netherlands to the Holding Company resident in Bermuda (from Irish tax perspective), is not taxed because the Netherlands does not levy withholding tax on royalty payments.¹⁵⁶ By interposing the Dutch Conduit Company, withholding taxes on royalties is thus completely avoided.

4.2.3 Avoiding Taxation in the Country of Final Consumption

Besides profits accumulating either in Ireland or Bermuda, goods may be sold or services may be provided to countries all over the world. These goods and services are sold by the Irish operating company over the Internet i.e. through e-commerce.¹⁵⁷ Because of this no physical presence is created in these countries and thus no tax liability.¹⁵⁸ Action Plan 1 of the BEPS Project addresses the tax challenges of the digital economy such as the ability to have a significant digital presence in an economy without being liable to tax due to a lack of ‘nexus’ in current rules.¹⁵⁹ A discussion of the challenges related to e-commerce is however beyond the scope of this thesis.

4.2.4 No Taxation in the U.S.

The U.S. can tax the income either if it is repatriated to the U.S., or if it qualifies as Subpart F-income. According to Subpart F, any income generated by a controlled foreign corporation (CFC) that is not distributed or taxed in a given year, is considered to be repatriated.¹⁶⁰ This can however easily be avoided through the ‘check-the-box regulation’.¹⁶¹ The U.S. ‘check-the-box regulation’ allows entities to choose their classification for tax purposes.¹⁶² When both the Dutch Conduit Company and the Irish Operating Company “check the box”, i.e. they choose to not be regarded corporations from a U.S. perspective, the result is that they become disregarded entities.¹⁶³ Because of this the U.S. now only ‘sees’ one Irish Holding Company, and in this way, no income falls under the Subpart F rule. This

¹⁵⁵ Council Directive 2003/49/EC of 3 June 2003 on a common system of taxation applicable to interest and royalty payments made between associated companies of different Member States [2003] OJ C123/9. The Interest-Royalty Directive covers companies subject to corporate tax in the EU, and who are tax resident in an EU Member State. It is designed to eliminate withholding tax obstacles for cross-border interest and royalty payments within a group of companies by abolishing withholding taxes on royalty and interest payments arising in a Member State.

¹⁵⁶ Article 8c Dutch corporate tax law 1969 (*Dutch: Wet op de vennootschapsbelasting 1969*)

¹⁵⁷ Fuest et al (2013), p. 5.

¹⁵⁸ According to Article 5(1) and 7(1) of the OECD Model, business profits are taxed in the residence state of the enterprise, unless a permanent establishment is situated in another state, which in the case is not.

¹⁵⁹ OECD, *Addressing the Tax Challenges of the Digital Economy, Action 1 – 2015 Final Report*, OECD/G20 Base Erosion and Profit Shifting Project, Paris (2015), p. 16.

¹⁶⁰ U.S. Code, Title 26, Subtitle A, Chapter 1, Subchapter N, Part III, Subpart F – Controlled Foreign Corporations.

¹⁶¹ IRC Section 7701

¹⁶² For an analysis and background on the “check-the-box” regulations, see: Heather M. Field, ‘Checking in on “Check-the-Box”’, *Loyola of Los Angeles Law Review*, Vol. 42:451, 18 July 2008.

¹⁶³ Kleinbard (2011), p. 710.

results in the profits remaining untaxed in the U.S. as long as multinational enterprises engaging in this structure do not repatriate the income to the U.S.

4.2.5 The “Double Irish Dutch Sandwich” and BEPS

The “Double Irish Dutch Sandwich” structure as described above is a complex structure that runs through four different jurisdictions and effectively uses gaps and loopholes to lower overall taxation. In the end, taxation of the business profits by the U.S. parent company may be indefinitely deferred as long as the profits are parked in Bermuda without being repatriated to the U.S., also referred to as the deferral problem.¹⁶⁴ It may seem highly unlikely that the accumulation of profits in an offshore tax haven is satisfactory from a BEPS Project’s point of view, whose aim is to align taxation with economic activities and value creation.

Most relevant for the “Double Irish Dutch Sandwich” is Action 8. To start, two transactions should be distinguished, which are (i) the transfer of the intellectual property from the U.S. to Ireland and (ii) the exploitation of the profits in Ireland. According to Action 8, the transfer of the intellectual property may be subject to *ex post* adjustments. Although there is no real transfer of the intellectual property, but a buy-in payment combined with a cost-sharing agreement, the guidance on hard-to-value intangibles may equally apply to such arrangements. According to this, *ex post* evidence may be used by tax administrations for the determination of transfer prices.¹⁶⁵ Furthermore, the profits related to the exploitation of the intellectual property should be allocated based on the functions performed, assets used and risks assumed related to the DEMPE functions. Although the contractual relationships may allocate profits from the Irish Operating company, through a Dutch Conduit Company, to the Irish / Bermuda Holding Company, Action 8 requires the actual functions of the entities to take priority.¹⁶⁶ That is, the taxation of profits must follow the key contributions that are made to create these profits.

4.3 IP-Holding Structures using IP Regimes

Another structure using intellectual property to shift profits to low-tax jurisdictions is the IP-holding structure using IP regimes. Intellectual property box regimes, also referred to as patent box (UK), innovation boxes (Netherlands) or simply IP Boxes, in general offer substantial lower tax rates to income derived from intellectual property, or grant credits to expenditures incurred in the creation of the IP. According to the European Union, 27 OECD Member Countries provide some form of IP tax

¹⁶⁴ Stephan C. Loomis, ‘The Double Irish Sandwich: Reforming Overseas Tax Havens’, *St. Mary’s Law Journal*, Vol. 43, 2011, p. 832.

¹⁶⁵ OECD (2015) Action 8-10, paragraphs 8.40 and 8.47.

¹⁶⁶ Sarah Churton, Ellis Lambert & Ian Dennis, ‘The Impact of BEPS on intangible assets’, *International Tax Review*, March 2016. Available online: <http://www.internationaltaxreview.com/Article/3535797/The-impact-of-BEPS-on-intangible-assets.html>

incentives, of which eleven offer a corporate tax reduction.¹⁶⁷ These reduced tax rates vary from 0% to 15%.¹⁶⁸

A reason for a country to introduce an IP box can be to potentially attract foreign companies that may come along with (high-skilled) employment, or as a way to incentivize local research and development (R&D) and to raise tax revenues more efficiently.¹⁶⁹ IP-box regimes have however also been targeted by both the European Union and the OECD, as they are arguably used for profit shifting by locating the intellectual property in a country with an IP box regime, whilst not performing any R&D activities in that country.¹⁷⁰ In this way, IP box regimes lead to tax planning opportunities rather than promoting innovation. Action 5 of the BEPS Project precisely tackles this issue. Before entering this discussion, first the tax planning structure will be explained.

4.3.1 Tax Planning structures

IP holding structures using IP regimes are not that different from the “Double Irish Dutch Sandwich”. The main difference is that instead of locating the intellectual property in an Ireland Holding Company, this structure locates the IP-holding company in a European country that offers an IP-box regime. Whereas in the “Double Irish Dutch Sandwich” the profits accruing through royalties are untaxed at the level of the Irish holding company due to it being a Bermuda resident for Irish tax purposes (and Bermuda does not levy corporate income tax), IP-holding structures using IP box regimes reduce taxation through the reduced tax rates offered by the IP box regime. Because the IP-holding company is now located in Europe, in case the intellectual property is licensed-out to an operating company also located in Europe, royalty payments are untaxed due to the Interest-Royalty Directive. Therefore, the Dutch conduit company that is interposed in the “Double Irish Dutch Sandwich” is no longer required in this structure. See the figure below for an overview.

¹⁶⁷ European Commission, ‘A Study on R&D Tax Incentives’, *Final Report*, November 2014, p. 19.

¹⁶⁸ For an overview, see Lisa Evers, ‘Intellectual Property (IP) Box Regimes’, 2016, p. 51.

¹⁶⁹ Lisa Evers, Helen Miller & Christoph Spengel, ‘Intellectual property box regimes: effective tax rates and tax policy considerations’, *International Tax and Public Finance*, Vol. 22, Issue 3, June 2014, p. 504.

¹⁷⁰ See Chu Shi, ‘IP Boxes in Light of the BEPS Project and EU Law – Part I’, *European Taxation*, Vol. 56, No. 8, July 2016 pp. 334-341.

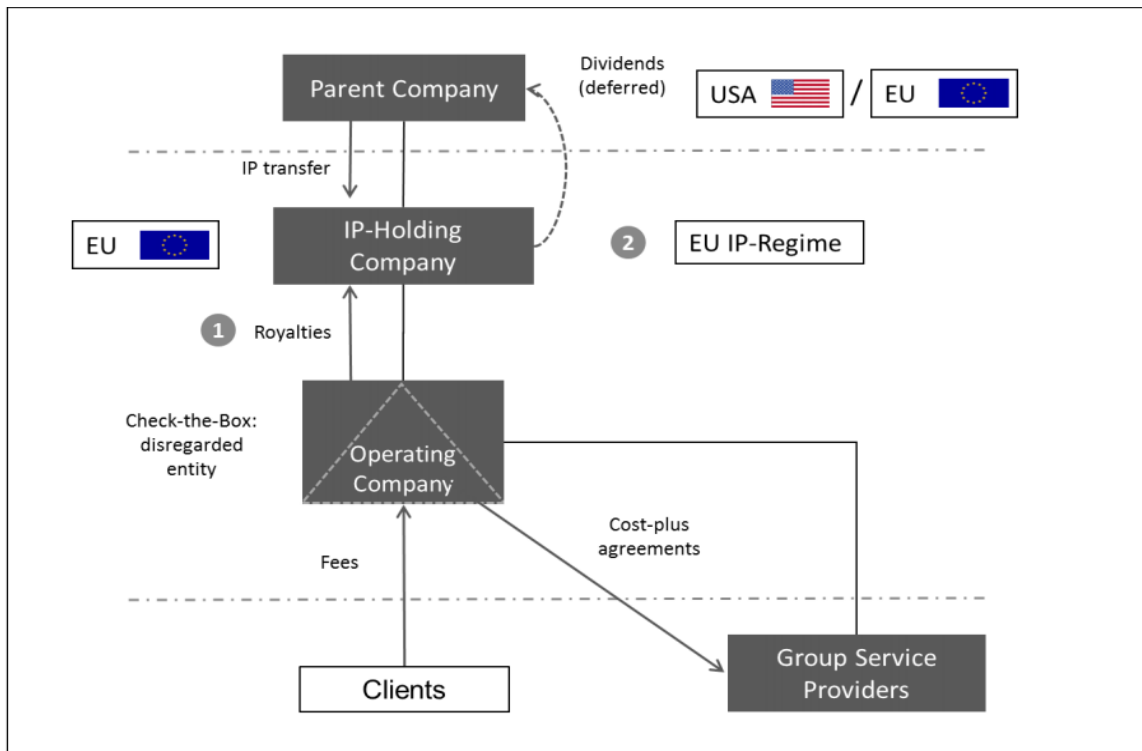


Figure 3: IP-holding structure using IP regimes.¹⁷¹

4.3.2 IP Regimes and BEPS

For tax planning structures using IP regimes, Action 5 is very relevant. As the IP regimes specifically grant tax benefits that are not part of the standard tax rules, such regimes qualify as preferential regimes. Consequently, Action 5 specifically requires substantial activity for all IP regimes through the nexus approach. This means that IP holding structures using IP regimes are only entitled to the benefits granted by the IP regime to the extent that the companies situated in the IP regime have actually contributed to the development activities, i.e. the R&D activities.¹⁷² Studies on the effect of IP regimes show the shortcomings of current IP regimes in respect of increasing R&D activities in the country providing the IP regime. So called “front-end” regimes that grant benefits in the form of R&D credits, do have a positive effect on R&D activity.¹⁷³ On the other hand, “back-end regimes” providing reduced tax rates to income deriving from intellectual property, are regarded a poor policy instrument for incentivising R&D activity because these regimes do not target the underlying activities.¹⁷⁴ These “back-end regimes” can therefore create leeway for profit shifting

¹⁷¹ Figure from Fuest et al (2013), p. 7.

¹⁷² Churton, Lambert & Dennis (2016).

¹⁷³ Nicholas Bloom, Rachel Griffith & John van Reenen, ‘Do R&D tax credits work? Evidence from a panel of countries 1979-1997’, *Journal of Public Economics*, Vol. 85, Issue 1, July 2002, pp. 1-31. It must be noted however that this does not mean that such R&D activities are automatically desirable from a tax competition point of view, as tax competition between governments can be costly.

¹⁷⁴ Evers, Miller & Spengel (2014), pp. 521-522.

By requiring substantial activity through the nexus approach, Action 5 targets precisely those regimes that do not meet the underlying purpose of an IP regime as required by Action 5, which is granting benefits to taxpayers who also contribute to innovation in the respective country.¹⁷⁵ In Chapter 2 it was already stated that currently sixteen IP regimes do not align with the BEPS Project's nexus approach. This implies that taxation of IP Holding structures using IP regimes that choose to locate the Holding Company in one of these regimes, currently do not align with the BEPS Project's principle of taxing where economic activities take place and value is created.

4.4 Interim Conclusion

This Chapter has analysed two tax planning structures that use intellectual property to shift profits to low or no tax jurisdictions, and in this way effectively reduce taxation: the “Double Irish Dutch Sandwich” and IP-holding structures using IP regimes. As the structures involve multiple cross-border transactions, in order to analyse to what extent the structures comply with the BEPS Project's principle, or more specifically with Action 5 and Action 8, they have been analysed in regard to the different steps of the structures.

The analyses of both structures in relation to BEPS have revealed that both structures require careful assessment to see whether they comply with the frameworks presented in Action 5 and Action 8. Both Action 5 and Action 8 aim to align the taxation of profits with the value creating functions. For the “Double Irish Dutch Sandwich” this means that the transfer price of the initial ‘transfer’ of intellectual property may be challenged by *ex post* evidence. Taking into account evidence of how valuable the intellectual property has actually turned out to be can be regarded as a welcome extension of the transfer pricing guidelines of Action 8 in order to align taxation with value creation. Secondly, regarding the allocation of the returns related to the exploitation of the intellectual property, taxation should be at the level of the entities that have actually contributed to the value creation. This might result in multinational enterprises engaging in this structure having to carefully assess the relevant contributions in relation to the value creating DEMPE functions.

For IP holding structures using IP regimes, the same consequences apply to the transfer of the intellectual property, as this step is the same for both structures. What is substantially different in this structure is the use of IP regimes. For this, Action 5 specifically requires that there is sufficient nexus between the benefits that are granted by the IP regime and the R&D activities conducted by the entity receiving the benefits. Currently, sixteen regimes that are reviewed must be amended, implying that IP Holding Structures using IP regimes that are structured into one of these regimes are contrary to the BEPS Project's Principle. Specifically, those regimes that grant benefits related to the income deriving

¹⁷⁵ See Sub-Section 2.3.3.

from the intellectual property, so-called “back-end regimes”, seem to be inconsistent with the BEPS Project’s principle, as this leads to taxation not being aligned with the creation of value.

Chapter 5

Summary & Conclusion

5.1 Summary

This thesis has analysed IP tax planning in the light of Base Erosion and Profit Shifting. From the introduction it followed that there exists evidence that profit shifting is taking place. Although the exact scope is hard to measure, the estimated revenue losses for governments from multiple studies suggest there is need to counter aggressive tax-planning by multinational enterprises. In this regard, Chapter 2 has focussed on the BEPS Project as a way to counter tax avoidance and aggressive tax planning. To start, Chapter 2 has addressed the current standards governing international taxation. From this it followed that the current international tax system is based on the residence and source principle, with tax-residence acting as a starting point, and countries providing relief for double taxation based on double tax conventions. The OECD, driven by the financial crisis and with political support of the G20, has aimed to revise these international tax standards by introducing the BEPS Project. The BEPS Project should help governments address tax avoidance by providing instruments that lead to taxation of profits where economic activities take place and where value is created.

In relation to IP tax planning, this principle is given substance in Action 5, which addresses preferential tax regimes. According to Action 5 preferential tax regimes, such as IP regimes, provide preferential treatment compared to the standard tax principles of that regime. To prevent artificial profit shifting to these preferential regimes, Action 5 requires substantial activity in that regime through the nexus approach. The nexus approach requires that the benefits that are granted by the regime are conditional upon expenses incurred, i.e. benefits may only be granted when there are actual R&D activities performed. The second Action Plan that was discussed is Action 8, which is aimed at providing guidance on transfer pricing issues related to intangibles. Most importantly Action 8 stresses that the allocation of returns related to intangibles should not be based on mere legal ownership, but should be based on who performs functions and assumes the risks in relation to the DEMPE-functions: development, enhancement, maintenance, protection and exploitation. Furthermore, in the case of hard-to-value intangibles, Action 8 allows tax administrations to use *ex post* outcomes to make adjustments to the transfer prices.

Then, Chapter 3 has introduced intangibles, their tax planning characteristics, and common tax planning methods using intellectual property. The reason why intellectual property is an often-used tax-planning tool is that it is a driver of value, mobile and very firm specific. Because of this it can be

used to shift profits to low or no tax jurisdictions. An important part of IP tax planning discussed next was disentangling the location where the intellectual property is created and where it is exploited. Intra-group disposal of the intellectual property from the parent to a subsidiary results in the income from the exploitation to be taxed in the (low-taxed) subsidiary country, but has the disadvantage of triggering exit taxes on the difference between the book value and the sales price. Intra-group licensing also shifts the location of the intellectual property to a (low-tax) subsidiary, but requires royalty payments from the subsidiary to the parent, as the parent remains the legal owner. The third tax planning method discussed was intra-group contract R&D, in which case the parent performs R&D activities on behalf of the subsidiary in return for a 'contract R&D fee'. Similar to the intra-group disposal, this method leads to the subsidiary becoming the legal owner of the intellectual property. From the analysis at the end of the Chapter, it was concluded that general transfer pricing rules limit the leeway for the IP tax planning methods discussed through application of the arm's length principle. However, the IP tax-planning structures discussed in Chapter 4 proved to be more complex.

The two IP tax-planning structures that have analysed are known to be popular among multinational enterprises: the "Double Irish Dutch Sandwich", and IP holding structures using IP regimes. The basics of the structures are very similar. Both structures start with the transfer of the intellectual property to an IP Holding country. In both structures, taxation on the value of the intellectual property that would be levied in case of a normal transfer is avoided, as instead of transferring the intellectual property, the Holding Company makes a buy-in payment. Determining the arm's length price of this buy-in payment is difficult due to information asymmetry between the taxpayer and the tax administration on the true value of the intellectual property. No royalty payments have to be paid as the Holding Company agrees on a CCA with the Parent Company, granting him the right to exploit the intellectual property separately as the effective owner.

After that, the intellectual property is licensed by the Holding Company to an Operating Company, which exploits the intellectual property. The royalties are either untaxed due to the interposition of a conduit company in the Netherlands, in case of the "Double Irish Dutch Sandwich", or because of the Interest-Royalty Directive, in case of IP holding structures using IP regimes. The royalty payments effectively reduce taxation at the level of the Operating Company.

The big difference between the two structures is that in the end, in case of the "Double Irish Dutch Sandwich", the accumulated profits are untaxed due to dual-residency of the IP Holding Company with profits being parked in Bermuda, whereas for IP holding structures using IP regimes the profits are low-taxed due to the benefits granted by an IP regime, either in the form of R&D credits or reduced tax rates on the income arising from the intellectual property.

5.2 Conclusion

This thesis has tried to analyse in what way IP tax planning structures comply with the BEPS Project's principle of more closely aligning taxation with economic activity and value creation. To answer this, a few remarks need to be made.

The IP tax-planning structures analysed in this thesis have been subject to much criticism. The structures can be regarded 'aggressive', but they cannot be considered illegal. Because of this the question how and to what extent these IP tax-planning structures must be countered is difficult, and can be a matter of opinion and perspective. Evidence from multiple studies however has suggested that tax planning and profit shifting lead to significant revenue losses for governments, and this strongly suggests there is need for a change. This thesis has supported the principle that is put forward by the OECD through its BEPS Project, which is that taxation should be aligned with economic activity and value creation. In this way taxation is based on economic reality, and only businesses whose legal and tax structures do not reflect underlying economic reality are affected. By taking this principle as a benchmark, rather than simply criticizing these structures based on the observed low effective tax rates, the IP tax planning structures can be assessed in the light of a well-founded benchmark.

From the analyses of two popular IP tax planning structures it is displayed that multinational enterprises are able to reduce their effective tax rates by exploiting flaws in both domestic and international taxation. In particular, this is caused by ineffective transfer pricing rules, conflicting definitions of tax residency, avoidance (or a lack of) withholding taxes, ineffective CFC rules and preferential IP regimes. It is highly questionable whether the outcome of these structures, which may come down to extremely low effective tax rates, comply with the BEPS Project's principle. This is especially true for the "Double Irish Dutch Sandwich", as it is highly unlikely that value is actually created where the profits accumulate, namely in Bermuda. For this reason, according to Action 8, tax administrations are allowed to take into account *ex post* evidence to determine the transfer price of the initial transfer of the (hard-to-value) intellectual property. Furthermore, multinational enterprises must assess whether the allocation of the profits related to the exploitation of the intellectual property follow the functions performed, assets used and risks assumed related to the value creating DEMPE functions.

As for IP holding structures using IP regimes, the above mentioned implications of Action 8 equally apply. In addition, the nexus approach of Action 5 tries to ensure IP regimes only grant benefits to

multinational enterprises that actually contribute to innovation. This seems to uphold for “front-end regimes”, where the benefits granted by the IP regime relate to the R&D expenditures. However, this does not seem to be the case for “back-end regimes”, which grant benefits related to the income arising from the IP. According to Action 5, these regimes must therefore be amended in order for these to comply with Action 5. It can therefore be concluded that IP holding structures that use one of the regimes that need to be amended also do not comply with the BEPS Project’s principle.

Overall, it is expected that the BEPS Project, specifically through Action 5 and Action 8, is likely to have serious implications for IP tax planning structures, as it is highly questionable whether these structures are taxed in accordance with the principle of aligning taxation with economic activity and value creation. The words ‘expected’ and ‘highly questionable’ are carefully chosen, as providing hard evidence on where the actual value of intellectual property is created will remain problematic from a tax administration’s point of view.

As a concluding remark it must be noted that the question *if* the BEPS Project will be implemented and achieve its goal of aligning taxation with economic activities and value creation remains to be seen. First of all, it is dependent upon domestic implementation by the sovereign states. Secondly, there are no guarantees that multinational enterprises will not come up with a counteraction by finding new loopholes in domestic and international taxation. Because of this, as well as the difficulties related to proving where the actual value of intellectual property is created, future research to more fundamental reforms should always be encouraged. In this respect it may be interesting to see how the concept of a destination-based cash flow tax will develop.

Reference List

- van Apeldoorn, Laurens. 'BEPS, tax sovereignty and global justice, Critical Review of International, Social and Political Philosophy', August 19, 2016.
- Ault, Hugh J. 'Some reflections on the OECD and the Sources of International Tax Principles', *Tax Notes International*, vol. 70, no. 12, June 2013.
- Bach, Stefan, 'Unternehmensbesteuerung: Hoge Gewinne – Massige Steuereinnahmen', *DIW Wochenbericht*, Nr. 22+23, 2013.
- Bently, Lionel & Brad Sherman, *Intellectual Property Law* (2nd edition, Oxford University Press 2004). ISBN: 9780199264308.
- Bloom, Nicholas, Rachel Griffith & John van Reenen, 'Do R&D tax credits work? Evidence from a panel of countries 1979-1997', *Journal of Public Economics*, Vol. 85, Issue 1, July 2002.
- Boos, Monica. *International transfer pricing: the valuation of intangible assets* (Kluwer Law International 2003).
- Besluit voorkoming dubbele belasting 2001.*
- Bloomberg, 'The Great Corporate Tax Dodge', website accessible at:
<<http://topics.bloomberg.com/the-great-corporate-tax-dodge/>>
- Brauner, Yariv. 'BEPS: An Interim Evaluation', *World Tax Journal*, Vol. 6, no. 1, February 2010.
- Brauner, Yariv. 'What the BEPS?' *Florida tax review*, Vol. 17, No. 2, 2014.
- Cai, Hongbin & Qiao Liu, 'Competition and Corporate Tax Avoidance: Evidence from Chinese Industrial Firms', *The economic Journal*, vol. 119, issue 537, March 2009.
- Churton, Sarah, Ellis Lambert & Ian Dennis, 'The Impact of BEPS on intangible assets', *International Tax Review*, March 2016.
<http://www.internationaltaxreview.com/Article/3535797/The-impact-of-BEPS-on-intangible-assets.html>
- Cook v. Tait, 265 U.S. 47 (1924).
- Council Directive 2003/49/EC of 3 June 2003 on a common system of taxation applicable to interest and royalty payments made between associated companies of different Member States [2003] OJ C123/9.
- Cullis, John G. & Alan Lewis. 'Why People Pay Taxes: from a conventional economic model to a model of social convention' *Journal of Economic Psychology* 18, May 17, 1994.

- Desai, Mihir A, C. Fritz Foley, James R. Hines Jr. ‘A Multinational Perspective on Capital Structure Choice and Internal Capital Markets’, *The Journal of Finance*, Vol. 59, Issue 6, 2004.
- Devereux, Michael & John Vella. ‘Are We Heading Towards a Corporate Tax System Fit for the 21st Century?’, *The Journal of Applied Public Economics*, Vol. 35, Issue 4, December 2014.
- Devereux, Michael, et al. ‘Destination-Based Cash Flow Taxation’, *Working Paper Series 2017*, January 27, 2017.
- Dharmapala, Dhammika. ‘What Do We Know About Base Erosion and Profit Shifting? A Review of the Empirical Literature’, September 2014.
- Dolan, Kevin D. & Robert S. Rich. ‘Transfer of assets into and out of a taxing jurisdiction – United States’, *IFA Cahiers*, vol. 71a, 1986.
- Drucker, Jesse. ‘Google Revenues Sheltered in No-Tax Bermuda Soar to \$10 Billion’, *Bloomberg*, December 10, 2012.
- Duhigg, Charles & David Kocieniewski. ‘How Apple Sidesteps Billions in Taxes’, *New York Times*, April 28, 2012.
- European Commission, ‘A Study on R&D Tax Incentives’, *Final Report*, November 2014.
- European Commission, ‘On concrete ways to reinforce the fight against tax fraud and tax evasion including in relation to third countries’, June 2012.
- European Patent Office & Office for Harmonization in the Internal Market, ‘Intellectual property rights intensive industries: contribution to economic performance and employment in the European Union’, *Industry-Level Analysis Report*, September 2013.
- European Patent Office & Office for Harmonization in the Internal Market, ‘Intellectual property rights intensive industries: contribution to economic performance and employment in the European Union’, *Industry-Level Analysis Report*, Second edition, October 2016.
- European Commission, ‘Proposal for a Council Directive on a Common Corporate Tax Base’ COM (2016).
- Evers, Lisa. ‘Intellectual Property (IP) Box Regimes’, 2016, p. 27-35.
https://ub-madoc.bib.uni-mannheim.de/37562/4/Dissertation_Lisa_Evers_IP_Box_Regimes.pdf
- Evers, Lisa, Helen Miller, and Christoph Spengel. ‘Intellectual property box regimes: effective tax rates and tax policy considerations’, *International Tax and Public Finance*, Vol.22, Issue 3, June 2014.
- Field, Heather M. ‘Checking in on “Check-the-Box”’, *Loyola of Los Angeles Law Review*, Vol. 42:451, 18 July 2008.
- Finance Act 2010, Ireland.
- Finnerty Chris J, Paulus Merks & Raffaele Russo et al, *Fundamentals of International Tax Planning* (1st edition, IBDF 2007), ISBN: 978-90-8722-016-7.
- Fuest, Clemens, et al. ‘Profit Shifting and ‘Aggressive’ Tax Planning by Multinational Firms: Issues and Options to Reform’, *ZEW Discussion Paper*, No.13-044, July 2013.

- Graetz, Michael J. & Rachael Doud, 'Technological Innovation, International Competition, and the Challenges of International Income Taxation', *Columbia Law Review*, Vol.113, may 2013.
- Gravelle, Jane G. 'International Corporate Tax Rate Comparisons and Policy Implications', Washington DC: *Congressional Research Service*, January 2014.
- Gribnau, Hans. 'Corporate Social Responsibility and Tax Planning: Rules and Principles', 2016.
- Gribnau, Hans. 'Fair share en tax planning: een moeilijk maar noodzakelijk debat', *Ongewenste belastingontwijking? De jacht naar een fair share*, 35-54, 2013.
- Grimes, Liam & Tom Maguire. 'Ireland Becomes an Even More Attractive Prospect for Corporate Entities', *European Taxation*, Vol.45, no. 4, April 2005.
- Grinberg, Itai and Joost Pauwelyn. 'The Emergence of a New International Tax Regime: The OECD's Package on Base Erosion and Profit Shifting', *American Society of International Law*, Volume: 19, Issue 24, October 28, 2015.
- Grinberg, Itai. 'Breaking BEPS: The New International Tax Diplomacy', September 15, 2015.
- Harvey, Michael. 'Protecting the core competencies of a company: Intangible asset security', *European Management Journal*, Vol.15, Issue 4, August 1997.
- Heberden, Tim. 'Intellectual Property Valuation and Royalty Determination' in Adam Liberman, Peter Chrocziel, and Russel Levine, *International Licensing and Technology Transfer: Practice and the Law* (Wolters Kluwer Law & Business 2011).
- Herrington, Matthew. 'A call to rewrite the fundamentals of international taxation', *FITAR*, September 2013.
- Hurk, Hans van den. 'Starbucks vs. the people', *Bulletin for International Taxation*, Vol.68, no. 1, January 2014.
- Internal Revenue Code (IRC) 482, US Income Tax Reform Act.
- Joint Committee on Taxation, 'Present Law and Background Related to Possible Income Shifting and Transfer Pricing', July 2010.
- Kaufman, Nancy H. 'Fairness and the Taxation of International Income', *Law and Policy in International Business*, Vol.29, No. 2, 1998.
- Kemmeren, Eric. 'Source of Income in Globalizing Economies: Overview of Issues and a Plea for an Origin-Based Approach', *Bulletin for International Taxation*, November 2006.
- Kleinbard, Edward D. 'Stateless Income', *Florida Tax Review*, Vol.11, no. 9, 2011.
- Edward D. Kleinbard, 'Through a Latte, Darkly: Starbucks's Stateless Income Planning', *Tax Notes*, June 24, 2013.

- Kosters, Bart. 'The United Nations Model Tax Convention and Its Recent Developments', *Asia Pacific Tax Bulletin* 5, 2004.
- Lang, Michael. *Introduction to the Law of Double Taxation Conventions* (2nd edition, Linde 2013).
- Lazonick, William & Mary O'Sullivan. 'Maximizing shareholder value: a new ideology for corporate governance', *Economy and Society*, vol. 29, Issue 1, December 2010.
- Lennard, Michael. 'The UN Model tax Convention as Compared with the OECD Model Tax Convention – Current Points of Differences and Recent Developments', *Asia-Pacific Tax Bulletin*, Vol.39, No. 08, 2009.
- Loomis, Stephan C. 'The Double Irish Sandwich: Reforming Overseas Tax Havens', *St. Mary's Law Journal*, Vol.43, 2011.
- McLure Jr, Charles C. 'Globalization, Tax Rules and National Sovereignty', *Bulletin for International Taxation*, Vol.55, No. 8, August 2001.
- Menell, Peter S. 'Intellectual Property: General Theories', *Encyclopedia of Law and Economics*, Vol. 2, 2000.
- Merks, Paulus. 'Tax Evasion, Tax Avoidance and Tax Planning', *Intertax*, Vol.6, Issue 5, 2006.
- de Mooij, Ruud. 'Does the Enlarged European Union Need a Minimum Corporate Tax Rate', *Intereconomics*, Vol.39, Issue 4, 2004.
- Murphy, Richard. 'The Missing Billions – the UK Tax Gap', *Touchstone pamphlet*, no. 1, 2008.
<https://www.tuc.org.uk/sites/default/files/documents/1missingbillions.pdf>;
- Musgrave, Penny B. 'Sovereignty, Entitlement and Cooperation in International Taxation', *Symposium: International Tax Policy in the New Millennium: Panel II: Revisiting the Theory of International Income Taxation: Principal Papers, 2001*, p. 1336-1337;
- Musgrave, Richard. 'Criteria for foreign tax credit, taxation and operations abroad', *Taxation and Operations Abroad, Symposium*, 1960.
- OECD, *Action Plan on Base Erosion and Profit Shifting*, OECD Publishing, 2013.
- OECD, *Addressing the Tax Challenges of the Digital Economy, Action 1 – 2015 Final Report*, OECD/G20 Base Erosion and Profit Shifting Project, Paris (2015).
- OECD, *Aligning Transfer Pricing with Value Creation, Actions 8-10 – 2015 Final Reports*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris (2015).
- OECD, 'Background Brief: inclusive Framework on BEPS', January 2017.
- OECD, 'Consolidated Application Note: Guidance in applying the 1998 report to preferential tax regimes' (1998).

- OECD, *Countering Harmful Tax Practices More Effectively, Taking Into Account Transparency and Substance, Action 5 - OECD Final Report*, OECD/G20 Base Erosion and Profit Shifting Project (2015).
- OECD, 'Discussion draft on Revisions to Chapter I of the Transfer Pricing Guidelines (including risk, recharacterisation, and special measures)', December 2014.
- OECD, *Explanatory Statement*, Base Erosion and Profit Shifting Project, OECD, 2015.
- OECD, *Guidance on Transfer Pricing Aspects of Intangibles*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, 2014.
- OECD, *Harmful tax practices: An Emerging Global Issue*. Paris: OECD Publishing, 1998.
- OECD, *International Tax Avoidance and Evasion, Four Related Studies* (OECD Paris 1987).
- OECD, *Model Tax Convention on Income and on Capital (Full Version)*, OECD Publishing, Paris (2015). Available at: <<http://www.oecd.org/tax/treaties/model-tax-convention-on-income-and-on-capital-2015-full-version-9789264239081-en.htm>>
- OECD, 'OECD Secretary-General Report to G20 Leaders', Antalya, Turkey, November 2015.
- OECD, *Report on the Attribution of Profits to Permanent Establishments* (December 2004).
- OECD, *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 2010*, OECD Publishing, Paris.
- OECD/G20, Base Erosion and Profit Shifting Project, *Information Brief*, 2015.
- Okten, Rezan. 'A Comparative Study of Cost Contribution Arrangements: Is Active Involvement Required To Share in the Benefits of Jointly Developed Intangible Property?', *International Transfer Pricing Journal*, January/February 2013.
- Owens, Jeffrey. 'How the BEPS Project should tackle harmful tax competition', *International Tax Review*, November 2003 <http://www.internationaltaxreview.com/Article/3275221/How-the-BEPS-project-should-tackle-harmful-tax-competition.html>.
- Oxfam, 'Tax Havens: Releasing the Hidden Billions for Poverty Eradication', *Oxfam International Policy Paper*, ISBN: 9781848146419, June 2000
- Ross, Alan. 'Taxation and Pricing of Intangibles', *Singapore Management University School of Accountancy Research Paper No. 2016-S-44*, March 2016.
- Roxworthy, Patrick et al. 'Session 1 – Competitive Advantage: The Importance of Intangible Assets to U.S. Economic Growth in the Global Economy', *Taxes – the ta magazine*, Vol.61, June 2013.
- Ulrich Schreiber & Gregor Führich, 'European group taxation – the role of exit taxes', *European Journal of Law and Economics*, Vol. 27, Issue 3, December 2008,

- Wolfgang Schön, *Tax and Corporate Governance* (Springer, 2008). ISBN: 978-3-540-77275-0
- Schön, Wolfgang. ‘International Tax Coordination for a Second-Best World (Part I)’, *World Tax Journal*, Vol. 1. No. 1, October 2009.
- Shi, Chu. ‘IP Boxes in Light of the BEPS Project and EU Law – Part I’, *European Taxation*, Vol. 56, No. 8, July 2016
- Slemrod, Joel. ‘The Economics Of Corporate Tax Selfishness’, *NBER Working Paper*, No. 10858, October 2004.
- Spengel, Christoph & Lisa Evers, ‘Effective Tax Rates under IP Tax Planning’, *ZEW Discussion paper*, no. 14-111, 2014.
- UN, United Nations Model Tax Convention between Developed and Developing Countries (*last updated 2015*)
- U.S. Code, Title 26, Subtitle A, Chapter 1, Subchapter N, Part III, Subpart F – Controlled Foreign Corporations.
- Vanistendael, Frans. ‘Juridical Interpretation and the Role of Anti-Abuse Provisions in Tax Law’, in G.S. Cooper, *Tax Avoidance and the Rule of Law* (IBFD Publications, Amsterdam, 1997).
- Vogel, Klaus. ‘Double Tax Treaties and Their Interpretation’, Klaus Vogel, ‘Double Tax Treaties and Their Interpretation’, 4 *The International Tax and Business Lawyer* 10, 1986. Available at: <http://scholarship.law.berkeley.edu/bjil/vol4/iss1/1/>
- Vogel, Klaus. *Klaus Vogel on Double Tax Conventions* (edited by Ekkehart Reimer & Alexander Rust, 4th edition, Kluwer Law International, 2015). ISBN: 9789041122988.
- Vogel, Klaus. ‘Worldwide vs. source taxation of income – A review and re-evaluation of arguments (Part I)’, *Intertax*, Vol. 16, Issue 8/9. 1988.
- Waters, Richard. ‘Microsoft’s foreign tax planning under scrutiny’, *Financial Times*, June 7, 2011.
- Wilson, John Douglas. ‘Theories of Tax Competition’, *National Tax Journal*, Vol. 52, No. 2, June 1999
- Wright, D.R. ‘OECD Chapter VI: Special Considerations for intangible property issues and analysis’, *International Transfer Pricing Journal*, 1996.
- Wet op de vennootschapsbelasting 1969, art. 8c* (Dutch Corporate Tax Law).