

THE NEXUS STANDARD AND ITS IMPLICATIONS FOR INTERNATIONAL  
TAX COMPETITION AND SOFT LAW

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A DISSERTATION SUBMITTED TO  
THE FACULTY OF GRADUATE STUDIES  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

GRADUATE PROGRAM IN LAW

OSGOODE HALL LAW SCHOOL

YORK UNIVERSITY

TORONTO, ONTARIO

April 2020

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**ABSTRACT**

This dissertation investigates the importance of the nexus approach to international taxation. The nexus approach was first adopted in Action 5 of the G20/OECD Base Erosion and Profit Shifting (BEPS) Project and has since been implemented as a minimum standard through the BEPS Inclusive Framework. It requires a country to apply preferential taxation of income from patent and patent-like intellectual property (IP) under patent box regimes only to the amount that has a nexus with that country. Drawing on the existing literature and a case study of 10 countries that have adopted the nexus standard, this dissertation makes two central claims. First, in term of the technical nature, the nexus standard is more effective than earlier, failed OECD harmful tax competition measures because it sets minimum standard, developed by consensus, and effectively implemented, to regulate international tax competition for patent income. Professor Dagan's tax competition theory also supports its effectiveness in combating harmful tax competition. Second, in term of the legal nature, the nexus standard is a unique category of soft law in international taxation because it has a built-in "enforcement" mechanism.

The dissertation seeks to contribute to the literature on international tax competition and soft law in international taxation. First, it confirms Professor Dagan's tax competition theory which seeks to solve harmful tax competition problem. Dagan's theory posits that a common and transparent standard can overcome market failures characteristic of decentralized tax competition, which are inherently harmful. The nexus standard is such a common and transparent tax competition standard that has proven to be effective. It also advances her theory by showing the feasibility of setting up such a standard through soft law strategy. Second, this dissertation contributes to the literature on soft law in international taxation by demonstrating that soft law can induce compliance from countries and eliminate harmful tax competition in the same way that hard law might induce compliance. More importantly, it shows for soft law to have coercive force in international taxation especially in areas with obvious distribution consequences, both the process of creating the instrument and the mechanisms for monitoring compliance are critical.

**DEDICATION**

*For Mom, Eric and Anna*

## **ACKNOWLEDGEMENTS**

I would like to express my great appreciation and gratitude for the mentoring I received from my supervisor, Professor Jinyan Li, in the researching and writing of this doctoral dissertation. Without having met Professor Li and taking the international tax law course she taught, I would never have had the opportunity to fall in love with tax law and later, to develop an interest in pursuing a doctoral degree in this area. The research and writing of this doctoral dissertation, to me, was a process of discovery, rather than a single event that produced a research product. It was a process that was both self-challenging and very rewarding. Professor Li was always there, accompanying me and guiding me with her incisive intelligence, patience, and endless commitment of time. I am also very grateful that Professor Li provides generous financial support for my PhD project.

During this process, the guidance of my thesis committee members Professor Neil Brooks and Professor Thaddeus Hwong was irreplaceable. Without Professor Brooks' encouragement and guidance, I would not have had the chance to continue my research on this fascinating topic regarding patent box regimes for this dissertation. I cannot count how many times Professor Brooks made himself available to answer my questions, to introduce me to the most current articles in the area, and to provide me with invaluable feedback on the earlier drafts of my dissertation amid a busy schedule. I also cannot count how many cups of coffee and tea Professor Hwong bought me whenever we met so he could help me out with writing skills, organizing ideas, designing tables, and formatting references. The advice Professor Hwong offered me on research methodologies was always creative and inspiring.

I am also indebted to Osgoode Hall Law School's Graduate Program for offering me the opportunity to pursue doctoral studies and for providing me with generous financial support. In a special way, I am grateful to Professor Sonia Lawrence, the Director, Osgoode Hall Law School's Graduate Program, for organizing the law school's writing workshop; to Professor Gus Van Harten for his excellent teaching and guidance in the study group on Law in a Global Context, which also contributed to my research project.

I am grateful I met so many wonderful mentors in a foreign country who generously and tirelessly guided me and encouraged me through this learning journey. Indeed, I am indebted to many people on this journey, too many to mention here. All these experiences motivated and inspired me to continue writing and to realize my dreams. All errors in this Ph.D. dissertation are my own.

Toronto, March 2020

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**LIST of ACRONYMS AND ABBREVIATIONS**

<b>APAs</b>	Advance pricing arrangements
<b>BEPS</b>	Base Erosion and Profit Shifting
<b>CbCR</b>	Country-by-Country Reporting
<b>CCCTB</b>	Common Consolidated Corporate Tax Base
<b>CFA</b>	Committee on Fiscal Affairs
<b>CFC</b>	Controlled foreign corporation
<b>CRA</b>	Canada Revenue Agency
<b>ECJ</b>	European Court of Justice
<b>EU</b>	Europe Union
<b>FDI</b>	Foreign Direct Investment
<b>FHTP</b>	Forum of Harmful Tax Practices
<b>G20</b>	Group of Twenty
<b>HTC</b>	Harmful Tax Competition
<b>IBFD</b>	International Bureau for Fiscal Documentation
<b>IFA</b>	International Fiscal Association
<b>IMF</b>	International Monetary Fund
<b>IP</b>	Intellectual Property
<b>MNEs</b>	Multinational Enterprises
<b>NGOs</b>	Non-governmental Organizations
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>PHTMs</b>	Potential Harmful Tax Measures
<b>R&amp;D</b>	Research and Development
<b>SMEs</b>	Small and Medium Enterprises
<b>UK</b>	United Kingdom
<b>UN</b>	United Nations
<b>US</b>	United States of (America)
<b>WB</b>	World Bank
<b>WTO</b>	World Trade Organization

# Chapter 1 Introduction

## 1.1 Research Questions

This dissertation is a study of the nexus approach that was adopted in Action 5 of the G20/OECD Base Erosion and Profit Shifting (BEPS) project (*Action 5 Report*) and is being implemented through the G20/OECD BEPS Inclusive Framework (OECD, 2016). As a minimum standard for assessing whether a country's preferential tax regime, such as a patent box, constitutes harmful tax practices, the nexus approach requires a link between the income benefiting from the Intellectual Property (IP) regime and the extent of the substantial research and development (R&D) activities that generate the IP taking place in that country (OECD, 2019, p. 14). The nexus approach has been incorporated into the 24 preferential IP regimes in domestic law of more than 22 countries (OECD, 2019, pp.18-19, 21-23). It is used by the OECD Forum of Harmful Tax Practices to monitor the use of preferential tax regimes by countries to engage in international tax competition (*Action 5 Report*, p. 10).

This research study seeks to investigate why and how the nexus approach became a global standard, and what its success means for the theory of international tax competition and the governance of international tax issues through standard or soft law. This research is important for the following reasons. First, the BEPS Project has far-reaching implications for “renovating” or “reforming” the international tax regime. As part of the BEPS Project, Action 5 introduces a new standard for engaging in international tax competition and imposes obligations on state actors to make their tax competitive measures transparent to the global community. This is a fascinating development as while tax sovereignty remains important and states are free to engage in tax competition, how states compete is now subject to constraints. It is possible that such a standardized and transparent form of tax competition is more effective than the OECD's earlier efforts in curbing harmful tax competition.

Second, the process of developing and implementing the nexus approach has important implications for international tax governance. Even though neither the G20 nor the OECD, which co-directed the BEPS project, has any taxation power, nor the power to introduce legally binding tax rules, the BEPS Project produced the nexus approach and other forms of “soft law” that are effecting real changes in domestic tax laws and tax treaties. What gives rise to the legitimacy of these soft laws? Why have these soft laws performed more and more like “hard law”? Can the use of soft law expand to other areas of international taxation? These questions are theoretically interesting and practically important as more and more novel global taxation issues require solutions that may not be found in hard law.

Third, there is a vast body of literature on BEPS in general, but not much empirical research on the implementation of BEPS standards and other outcomes. This research seeks to fill in that gap as an empirical study that presents, compares and analyses the patent box regime in 10 European Countries--namely Hungary, the Netherlands, Belgium, Luxembourg, Spain, Cyprus, the UK, Portugal, Italy and Ireland (“Ten Countries”) before and after the nexus approach was adopted by BEPS Action 5.

## **1.2 Research Methodology**

### **1.2.1 Doctrinal Research**

This dissertation relies on doctrinal research methods and case study methods. Doctrinal research is used to review the existing literature in order to determine the scope of the research project, to inform the design of the case study and to assess whether or not this research can advance the existing literature, and if so, how? The literature review focuses on work related to the BEPS project, patent box regimes, tax competition, and soft law.

More specifically, reviewing the literature on the BEPS project provides the broader context for explaining BEPS Action 5 and the development of the nexus standard. The literature on patent box regimes sheds light on the design and nature of pre-BEPS preferential tax regimes and some of the reasons for developing an international minimum standard. It also helps to inform the design of the case study. Reviewing the literature on the tax competition, Dagan’s theory in particular, is

necessary for developing one of my research claims that the nexus standard can better combat harmful tax competition than OECD earlier harmful tax competition measures. Reviewing the literature on soft law helps me to situate the nexus standard as a new type of soft law and helps me to explore and explain why the nexus standard has some hard law effects.

### **1.2.2 Case Study**

The case study covers the patent box regimes in the Ten Countries. It is designed to achieve three goals. First, it demonstrates the potential harmfulness of the pre-BEPS patent box regimes and the importance of adopting the nexus approach as a counter measure. Second, it shows how each of the Ten Countries implemented the nexus approach and the extent to which this global standard was technically modified in each country. Third, it illustrates the motivations and/or local pressures facing each country in implementing the standard.

The Ten Countries are chosen because they are among the first ones that introduced patent box regimes. Most of them had different pre-BEPS patent box designs and subsequently amended their domestic patent box legislation to incorporate the nexus approach. Another reason for choosing these Ten Countries is that they are from the European Union (EU) where there is a high degree of tax competition (Pinto, 2003, p. 520). Interestingly, three of the Ten Countries – the Netherlands, Luxembourg and Portugal abstained from the earlier harmful tax competition OECD initiatives of the late 1990s and early 2000s (OECD, 1998; OECD, 2000; OECD, 2001). So, the question is Why did they agree to implement the nexus approach from the G20/OECD BEPS Action 5 while they opposed to OECD earlier harmful tax competition measures? The answer to this question is key to my claims about the significance of the nexus approach. The third reason for choosing these countries is that each of them has adopted lightly different designs to their regime after incorporating the nexus approach standard. This will help demonstrate the range of local variations possible in incorporating a global standard.

## **1.3 Central Claim and Contributions**

Drawing on the literature review and the findings of the case study, there are two central claims I make in answering the research questions in this dissertation. First, compared with the earlier

harmful tax practices of the OECD of the 1990s and early 2000s, the nexus standard can better combat harmful tax competition. The nexus approach represents a paradigm shift from a laissez-faire style of tax competition to a standardized form of tax competition. According to Professor Dagan (2018, p. 225, 236-238), a common and transparent standard can overcome market failures in a decentralized tax competition market (harmful tax competition) by improving informational exchange among countries, by reducing taxpayers' free riding opportunities and by reducing countries' transaction costs in enforcing their tax laws. This claim is also supported by the literature on the influence of soft law and by the findings of my case study.

Second, compared with existing soft laws in international taxation, as a new form of soft law, the nexus standard contains more hard law elements because of its coercive enforcement arrangements and enhanced legitimacy. I base this claim on how countries have behaved since the introduction of the nexus standard when they were notified of non-compliance with the standard. The fact that countries have given up some tax sovereignty and certain economic advantages in order to incorporate the nexus standard into their tax regimes demonstrates that the nexus standard can function as effectively as hard law.

This dissertation seeks to contribute to the literature on tax competition and soft law. First, it contributes to the literature on tax competition by illustrating Professor Dagan's theory on tax competition and explaining why standardized tax competition is more effective. Professor Dagan posits that with increasing globalization, a global tax competition market has developed in which countries provide tax deals or preferential tax regimes to compete for Multinational Enterprises (MNEs)' mobile income. However, a fragmented international tax system unavoidably leads to some market failures, such as asymmetric information among countries and among countries and taxpayers, free riding by MNEs who are capable of gaming national tax laws through sophisticated tax planning schemes, increased transaction costs for countries to enforce tax laws and collusion against tax competition. A uniform and transparent standard can improve tax competition among countries by mitigating those market failures.

The case study tests Dagan's standard setting solution by showing that, as Dagan predicts (Dagan, 2018, pp. 236-238), the nexus standard reduces taxpayers' opportunities of 'riding free' on

countries' taxation systems and reduces countries' costs in taxing IP-intensive taxpayers by requiring a nexus for all patent box regimes. The information exchange on patent box rulings and patent box legislation under the transparency framework further reduces harmful tax competition based on secret administrative tax rulings, and provides governments the information they need to effectively enforce their tax laws. Meanwhile, the nexus standard still leaves countries the freedom to determine patent box tax rates and other design aspects, avoiding the insufficient competition caused by collusion against tax competition.

More importantly, my dissertation advances Dagan's theory by demonstrating the feasibility of designing and implementing a global tax standard among countries through a soft law approach. Dagan is suspicious about the feasibility of setting a global tax standard due to the institutional challenge, the absence of a supranational institution in charge of developing and enforcing a common international tax standard, and due to the enforcement issue, such as the undercutting of global tax standard by tax havens (Dagan, 2018, p. 239). My case study suggests that these challenges can be overcome. An inclusive and transparent soft law-making process and built-in enforcement mechanism imposing a defection cost are important in ensuring and explaining the nexus approach's evolution into international taxation law.

This dissertation also contributes to the literature on international tax competition by explaining why standardized tax competition can curb harmful tax competition, at least in respect of IP income. Compared to earlier OECD harmful tax competition measures that failed to be elevated to standards, the nexus standard was set as a minimum standard, developed by consensus, and effectively implemented, to regulate international tax competition for IP income. The political support from major countries, the transparent and inclusive standard-setting process and the effective enforcement through the BEPS Inclusive Framework all contributed to the success of nexus approach.

Second, this research contributes to the literature on soft law, especially soft law in international taxation. It shows that the nexus standard (like other minimum standards adopted by the BEPS Project) is different from existing soft laws, such as earlier, harmful OECD tax competition initiatives, the OECD Model Convention and the OECD Transfer Pricing Guidelines. The nexus

approach is more “coercive” and has more hard law elements due to its “enforcement” mechanism. These mechanisms are mainly some institutional arrangements by informal institutions, such as peer review and monitoring by countries under the supervision by G20 and the OECD Forum on Harmful Tax Practices (FHTP), and leveraging of reputational, market and institutional disciplinary measures against defaulting countries. These informal coercive enforcement strategies are effective at the premise that soft law is legitimate (Brummer, 2015, p. 184; Gribnau, 2007, p. 297; McLaren, 2009, p. 447; Vega, 2012, p. 8). This dissertation contributes to the literature on soft law in international taxation by showing the importance of enforcement (Brummer, 2015) and the legitimacy (Rixen 2009; Carrero, 2007; Christians 2010; Vega 2012, p. 8; McLaren 2009, p. 447), and how legitimacy was generated and enhanced in developing and implementing the nexus standard. This research also contributes to soft law in general by finding a type soft law that is more coercive than traditional wisdom thinks about soft law, more importantly, it challenges legal positivists who recognize only formal legitimacy (legality) (Kelsen, 1989) by demonstrating informal institutions through informal arrangements can also create legitimacy and compliance.

While not a major focus, this dissertation teases out some implications of the nexus standard for international tax governance. It is thus possible that a new tax standard can become part of international tax law through a series of informal arrangements targeting the nature of the tax issue at hand, among which legitimacy in creating soft law (or a democratic soft law-making process) and “enforcement” mechanisms are very important. It is also possible that nexus standard-like soft law can be extended to other areas, such as tax competition using non-IP preferential tax regimes, taxation of the digital economy and so on. Soft law will likely become increasingly important in international tax relations due to its effectiveness and flexibilities.

## **1.4 Structure of the Dissertation**

This dissertation has six chapters. Chapter 1 introduces the subject and the scope of the dissertation research. Chapter 2 provides the context for the research by reviewing the pertinent literature on the BEPS project in terms of its objective, scope, process and outcomes. It also reviews the literature on patent box regimes in terms of their nature, design features and effectiveness, the literature on harmful tax competition in terms of the OECD and EU’s efforts in combating harmful tax competition, theories on limiting harmful tax competition, as well as literature on soft law,

including soft law in general, in international law and in international taxation. Chapter 3 discusses in detail what the nexus approach is, why it was developed, its importance for the use of the pre-BEPS patent box regimes in the Ten Countries without harming other countries, and how it was implemented by countries around the world in a general sense. Chapter 4 is the case study of the adoption of nexus approach in Ten Countries. It describes and explains the implementation of the nexus approach in the Ten Countries. Through a survey of the technical design of revised patent box regimes, Chapter 4 demonstrates the convergence and divergence in defining and quantifying “nexus” in these countries. Chapter 5 makes two major claims on the importance and effectiveness of the nexus standard and offers support for these claims. Chapter 6 concludes and discusses the contributions of this research to the literature.

# **Chapter 2 Literature Review**

## **2.1 Overview**

Chapter 2 reviews the relevant literature in order to provide some necessary context for discussing the nexus standard in Chapter 3 and for discussing the design of the case study in Chapter 4. Sections 2.2 to 2.4 review the literature on the BEPS project, patent box regimes and tax competition that is relevant to my discussion of the background, motivations for and design features of the nexus standard. Section 2.5 reviews the literature on soft law in general and soft law on international taxation specifically that helps explain the legal status of the nexus standard.

## **2.2 The Base Erosion and Profit Shifting (BEPS) Project**

Since the nexus approach was developed in Action 5 of the BEPS project and will be discussed in more detail in Chapter 3 of this dissertation, this section provides a high-level review of the literature on the BEPS project. It focuses on the BEPS Project in terms of its overall purpose and guiding principles, its processes and outcomes. It concludes with a note on the role of the G20 and the shifting norm-makers in international tax governance.

### **2.2.1 Tackling the Problem of Base Erosion and Profit Shifting**

The G20/OECD BEPS project is regarded as the “first substantial renovation of the international tax rules in almost a century” (OECD, 2015c), providing the international community an opportunity to “rebuild a healthy scheme for allocating taxation rights” (Vann, 2015, p. 367) and representing the “emergence of a new international tax regime” (Grinberg and Pauwelyn, 2015). This project aims to address the problem of base erosion and profit shifting or BEPS. Multinational enterprises minimize their tax liabilities through tax planning strategies that “exploit gaps and mismatches in national tax rules to artificially shift profits to low or no-tax locations where there is little or no economic activity.” (OECD, 2016) The governments of many countries regard BEPS as posing a severe risk to tax revenue, tax sovereignty, and tax fairness, and one that may undermine the confidence of the public regarding the integrity of corporate income tax systems (OECD, 2013, p. 8). Meanwhile, during the world financial crisis of 2008, deteriorating national

revenues, expensive fiscal stimulus packages and financial bailouts by government led to unprecedented budget deficits and public debts in OECD and G20 countries (Christians, 2010, p. 21). The BEPS project was initiated in 2013 when the media exposed MNE tax planning schemes, causing global outrage over BEPS and putting public pressure on governments to address it (Oei and Ring, 2018, pp. 544-568; Eccleston, 2013, p. 76, 82; Christians, 2010, p. 21).

The BEPS project identified key areas of the BEPS problem and proposed 15 action plans to tackle them (OECD, 2013). The goal is to realign the taxation of MNEs' profits with the location(s) where MNEs' substantial economic activities or value creation activities occur. Action 1 addresses the challenges of taxation in a digital economy. Action 2 deals with hybrid and mismatch arrangements that MNEs use to take advantage of the gaps between national tax systems. Action 3 is about the use of controlled foreign corporation rules to counter BEPS; Action 4 addresses the issue of interest deductibility. Action 5 addresses the problem of harmful tax practices, which introduces the nexus approach and a transparency framework that is discussed further in Chapter 3 of this dissertation. Action 6 (preventing tax treaty abuse) and Action 7 (preventing the avoidance of permanent establishment status) address the problem of profit shifting through taking advantage of tax treaties. Actions 8 to 10 cover transfer pricing rules, which are among the most relied upon rules by MNEs to shift profits. Actions 11 to 14 address the problem of taxpayer information asymmetry or transparency: Action 11 is about measuring and monitoring BEPS; Action 12 is about disclosure rules and Action 13 address country-by-country reporting (CbCR); Action 14 addresses tax dispute resolution through the mutual agreement procedure of tax treaties. Action 15 creates a multilateral instrument to amend existing tax treaties.

### **2.2.2 The Value Creation Principle**

The goal of the BEPS project is to ensure that “profits should be taxed where economic activities deriving the profits are performed and where value is created.”<sup>1</sup> According to this value creation principle, a profit is taxable in the country where it is earned, a country's “tax base” is defined by the value created in that country, which should not be artificially shifted (Li et al., 2019b, p. 1109). This supports the allocation of taxing rights and the use of anti-avoidance measures to prevent

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<sup>1</sup> G20 Leaders, *G20 Leaders' Declaration-Saint Petersburg Summit*, para. 50 (Saint Petersburg, 5-6 September 2013)([http://www.g20.utoronto.ca/2013/Saint\\_Petersburg\\_Declaration\\_ENG.pdf](http://www.g20.utoronto.ca/2013/Saint_Petersburg_Declaration_ENG.pdf)).

BEPS. It underpins the nexus approach, as a country should not attract mobile income through preferential tax regimes that has no nexus (or connection to substantial activity) in that country.

Guided by this principle, the BEPS Project re-worked technical taxation rules. For example, Action 5 establishes a nexus approach to limit the use of preferential tax regimes, such as patent boxes. Actions 8 to 10 emphasize economic substance and the allocation of MNEs' profits according to economic substance, as opposed to legal arrangements. The anti-abuse measures in Actions 6 and 7 seek to protect the tax base of the source country where profit is earned. To ensure that profits are taxed in the country where profits are generated, the BEPS Project includes transparency measures, such as a tax information exchange in Action 5 and CbCR in Action 13. Action 5 requires countries to engage in spontaneous exchange of relevant information on preferential patent box regime legislation and patent box tax rulings (*Action 5 Report*, pp. 45-46). Action 13 requires large MNEs to report annually, and for each tax jurisdiction in which they do business, on information related to the global allocation of income, profit, taxes paid, and economic activity in each country, etc.<sup>2</sup>

The value creation principle seems to have been widely accepted by countries (Christians, 2018; Devereux and Vella, 2018; Grinberg, 2018; Herzfeld, 2017; Hey, 2018; Li et al., 2019a; Morse, 2018; Vanistendael, 2018). It is modern, in speaking to new business models and global value chains, and more functional, in supporting both new anti-avoidance rules, as well as new taxing rights allocation rules. The value creation principle can be regarded as a profound elaboration of the doctrine of economic allegiance that is the theoretical basis for the current international tax system, meant to give effect to the economic allegiance principle in today's context (Langbein and Fuss, 2018; Li et al. 2019a).

### **2.2.3 Inclusive and Transparent Process**

The BEPS process is characterized by enhanced inclusiveness in terms of the range and number of countries and organizations participating (Grinberg, 2016, pp. 1193-1194). More than 125 countries participate and collaborate on the implementation of the BEPS packages. The G20, the

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<sup>2</sup> OECD, *BEPS Actions-Action 13 Country-by-Country Reporting* (Paris: OECD, 2019) (<https://www.oecd.org/tax/beps/beps-actions/action13/>).

OECD, and the collaboration on international tax policy established among the IMF, the OECD, the UN and the World Bank Group form the new inclusive framework to better implement the BEPS project outcome (Shay and Christians 2017, p. 51). According to Christians (2017), the development of the OECD/G20 Inclusive Framework is seen as a momentous milestone in international tax governance. It is also likely the key accomplishment of the BEPS Project, through which the OECD cemented its position as the core institution for promoting international tax policy development in the foreseeable future. This Inclusive Framework is a significant step toward and may evolve to become a supranational regime for developing international tax cooperation that was envisioned a century ago (Christians, 2017, p. 1644).

Such inclusiveness introduces a potential avenue for non-OECD countries to have a meaningful say in norm-building exercises undertaken by the OECD (Christians, 2017, p. 1645). More than 80 developing countries and G20 countries directly participated in developing, reviewing, and monitoring the implementation of the BEPS project. These G20 countries and non-OECD countries participated in different ways, for example, through meetings organized by OECD Committee on Fiscal Affairs, through global forums, through regional meetings in partnership with regional tax organizations, such as the African Tax Administration Forum, the Centre de rencontres et d'études des administrations fiscales, and the Centro Interamericano de Administraciones Tributarias, and through international organizations such as the IMF, OECD, the UN, and the WB, which acted and continue to act as observers within the BEPS Inclusive Framework, and through regional tax organizations.<sup>3</sup> The international organizations and regional tax organizations that participate in the BEPS project also assist developing countries in terms of capacity support and in terms of the design of technical rules that help in implementing BEPS actions. Joining the Inclusive Framework offers the opportunity for developing countries to participate in BEPS-related work on an equal footing with other OECD and G20 countries.<sup>4</sup>

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<sup>3</sup> For the full list of all countries and jurisdictions, see OECD, *Members of the Inclusive Framework on BEPS* (Paris: OECD, 2019) (<https://www.oecd.org/tax/beps/inclusive-framework-on-beps-composition.pdf>); for more sources on the BEPS inclusive framework, see OECD, *Composition of the 2019-2020 Steering Group of the Inclusive Framework on BEPS* (Paris: OECD, 2019) (<https://www.oecd.org/tax/beps/steering-group-of-the-inclusive-framework-on-beps.pdf>).

<sup>4</sup> These international organizations cooperate on tax issues and also play an essential role in providing technical advice to developing countries on how to implement the BEPS package better; see OECD, *Platform for Collaboration on Tax* (<http://www.oecd.org/tax/platform-for-collaboration-on-tax.htm>). These regional tax organizations provide targeted support to help developing countries implement the BEPS actions through regional tax meetings in Africa, in

The inclusiveness of the BEPS process also facilitates the participation of non-governmental stakeholders, such as business, civil societies and non-governmental organizations (NGOs). The BEPS project involves stakeholders through various means, including public consultations and the dissemination of requests for input, or discussion drafts soliciting public comments.<sup>5</sup> For example, the Tax Justice Network,<sup>6</sup> played an important role in creating the socio-political conditions that led the OECD to develop the BEPS initiatives (e.g., BEPS Action 13 CbCR), and the network will continue to participate in developing global tax governance (Christians, 2017, pp. 1646, 1647). The inclusive framework gives more stakeholders an opportunity to bring new ideas to the table for discussion and to raise new issues pertaining to international tax governance in the future (Christians, 2017, p. 1645).

The BEPS process is also characterized by enhanced transparency in sharing the progress of the work (Shay and Christians 2017, p. 19). According to Shay and Christians (2017), compared to pre-BEPS soft-law making, the Inclusive Framework has made significant organizational changes by adopting more transparent administrative procedures, such as publishing notice-comment invitations, holding public consultations, publishing drafts of proposed policy, publishing reviews and reports, and more. These practices improve transparency in the norm-making process.

#### **2.2.4 Minimum Standards and Other Outcomes**

The BEPS project generated important outcomes, such as the establishment of minimum standards, the development of recommendations, and the formulation of best practices, depending on the level of consensus reached. Minimum standards are in the nature of soft law. The four minimum standards coming out of the BEPS Project are: the nexus standard in Action 5; the principal purpose test to prevent tax treaty abuse in Action 6; CbCR in Action 13; and the mutual agreement

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Asia-Pacific, in Eastern Europe-Central Asia, and Latin America. See OECD, *Regional Meetings of the Inclusive Framework on BEPS* (<http://www.oecd.org/tax/beps/beps-regional-meetings.htm>).

<sup>5</sup> For more information, see OECD, *Planned stakeholder input in OECD tax matters* (<http://www.oecd.org/tax/planned-stakeholder-input-in-oecd-tax-matters.htm>).

<sup>6</sup> The Tax Justice Network is non-government organization, aims to push systemic changes relating to tax, tax havens and financial globalization. For more information on the tax justice network, see <https://www.taxjustice.net/about/who-we-are/goals/>.

procedure (MAP) standard in resolving tax disputes in Action 14.<sup>7</sup> These standards are expected to be implemented and are subject to peer review and ongoing monitoring. Participants of the BEPS Inclusive Framework are expected to implement these standards.

Recommendations have a lower level of hierarchy than minimum standards. BEPS Project recommendations are expected to be incorporated into practice or law. For example, recommendations on transfer pricing rules have been mostly included in the revised *OECD Transfer Pricing Guidelines 2017*, as well as the *UN Practical Manual on Transfer Pricing 2017*. Participants of the BEPS Inclusive Framework are expected to respect these revised OECD Transfer Pricing Guidelines. Even before the final report on BEPS Actions 8 to 10 in 2015, some countries, such as Germany, Australia and Ukraine, had explicitly incorporated the OECD Transfer Pricing Guidelines into domestic legislation.<sup>8</sup>

Recommendations on common approaches, such as those in Action 2 on hybrid mismatch arrangements and Action 4 on interest deductions, are for countries to adopt. In the case of interest deductibility, the recommended approach is based on a fixed ratio rule which limits an entity's net deductions for interest and payments economically equivalent to interest to a percentage of its earnings before interest, taxes, depreciation and amortisation (EBITDA). The recommended corridors of possible ratios are 10% and 30%. In the case of hybrid arrangements, the recommended approach is to eliminate gaps or mismatch by linking the domestic rules of different countries. There is an expectation that countries' policies will converge over time through the implementation of the agreed upon common approaches, thus enabling further consideration of whether such measures should become minimum standards in the future (Bradbury. et al., 2015).

Recommended best practices are the "lowest" and most flexible level of measures available to countries in terms of hierarchy. They provide flexibility to countries in implementing these best

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<sup>7</sup> For more information on these minimum standards, see OECD, *OECD/G20 Base Erosion and Profit Shifting Project Frequently Asked Questions* (Paris: OECD Publishing, 2015) (<http://www.oecd.org/ctp/beps-frequentlyaskedquestions.htm>). For an update on the implementation of the minimum standard, see BEPS Inclusive Framework website <https://www.oecd.org/tax/beps/inclusive-framework-on-beps-progress-report-july-2018-may-2019.pdf>.

<sup>8</sup> Ernst & Young, *Worldwide Transfer Pricing Reference Guide 2015-16* (Ernst & Young, 2016), pp. 26, 125, 331, 228([https://www.ey.com/Publication/vwLUAssets/EY-Worldwide-transfer-pricing-reference-guide-2015-16/\\$FILE/EY\\_Worldwide\\_Transfer\\_Pricing\\_Reference\\_Guide\\_2015-16.pdf](https://www.ey.com/Publication/vwLUAssets/EY-Worldwide-transfer-pricing-reference-guide-2015-16/$FILE/EY_Worldwide_Transfer_Pricing_Reference_Guide_2015-16.pdf)).

practices. Action 3 (Controlled Foreign Corporation (CFC) Rules) and Action 12 (Mandatory Disclosure Rules) are such examples. Action 3 only sets out recommendations in the form of building blocks in designing CFC rules. Countries have freedom in implementing CFC rules as long as they are consistent with the policy objectives of the overall tax system and the international legal obligations of the country concerned. Similarly, Action 12 provides recommendations on design principles and key objectives of a mandatory disclosure regime requiring taxpayers and advisors to disclose aggressive tax planning schemes for countries that do not have them. Countries are “free to choose whether or not to introduce mandatory disclosure regimes.” Action 12 recommendations aim to seek a balance between obtaining early information on aggressive tax planning arrangements and avoiding any undue compliance burdens on taxpayers.<sup>9</sup>

### **2.2.5 Implementation Mechanisms**

The mechanisms for implementing the minimum standards are largely consistent with the OECD’s “management model” of compliance, which emphasizes peer pressure, technical assistance and full transparency (Chaye and Handler, 1995). According to Chaye and Handler (1995), dialogue and peer pressure, threat of reputational loss and social exclusion are more effective and more desirable tools of policy compliance than hard law enforcement. Peer review is important because reputation is an important regulatory tool in the international tax regime, and countries take it seriously, especially countries that are typically used as tax havens (Sullivan, 2007, p. 334). Peer review is a more capable mechanism for compelling compliance than are hard law judicial or quasi-judicial enforcement mechanisms (Carroll and Kellow, 2011; pp. 31-34; Verdier, 2009, pp. 167-168).

The peer review standard is further strengthened through the BEPS Inclusive Framework. At the request of the G20, the Global Forum on Transparency and Administrative Cooperation in Tax Matters (Global Forum) transformed into a peer review organization. The Global Forum is affiliated with the OECD, and its peer review model and steps are instructive as policy precedents (Christians, 2017, p. 1619). This Inclusive Framework further brings countries together on an equal footing to implement the BEPS minimum standards. It has over 120 member countries which agree

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<sup>9</sup> OECD, *Mandatory Disclosure Rules, Action 12-2015 Final Reports* (Paris: OECD, 2015), p. 9. (<https://www.oecd.org/tax/beps/beps-actions/action12/>).

to monitor and peer review the implementation of minimum standards. International organizations, regional tax bodies, business, and civil society are also involved in the work of the Inclusive Framework. By publicizing non-compliance with a previously agreed upon standard, peer review through the BEPS Inclusive Framework compels compliance by countries that have incentives to defect by adding defection costs, while having little or no impact on others (2017, p. 1603). This peer review mechanism can also be a source of persuasive authority in achieving domestic legal reforms by helping countries to win broad-based political support at home.<sup>10</sup>

### **2.2.6 Significance of the BEPS Project**

The BEPS project has been seen by some as signaling the rise of a new international tax regime (Grinberg and Pauwelyn, 2014) and a new era of multilateralism (Grinberg, 2016, p. 1195). It represents a multilateral coordination in reforming international tax rules and processes, which is different from the previous bilateral coordination through bilateral tax treaty networks. It proposes a new soft law-making model and a global tax governance structure that enable multiple stakeholders to participate. Also, the soft law-making process signals a shift from a technocratic process to one of a combination of technocratic and political processes. The process of making and implementing the standards and best practices is more inclusive and transparent, which arguably, enhances the “enforceability” of such standards and best practices.

From a governance perspective, the BEPS Project signals that the G20 and the OECD are the norm makers: the former as the agenda setter of international tax policy and the latter as the norm setter. This represents a shift from the OECD being the main norm maker. The G20 is a loosely coordinated forum for international economic cooperation, comprising the European Union (EU) and 19 member countries, of which are some developing countries such as China, India, Brazil, Indonesia, South Africa and etc. It brings together developing and developed countries from every continent. It also invites participants such as the G20 group of developing countries (currently a group of 23 developing countries), international organizations like IMF, UN, WB etc., and regional

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<sup>10</sup> OECD, *The OECD's Peer Review Process: A Tool for Co-operation and Change* (Paris: OECD, 2003)(<https://www.oecd-ilibrary.org/docserver/dcr-2002-6-en.pdf?expires=1585443583&id=id&accname=guest&checksum=4E054D2A61CE1107C4967ED4D524FF07>).

organizations like Africa Union and Southeast Asian Nations etc. Collectively, the G20 represents two-thirds of the world's population, living on approximately half of the world's land area, producing around 80% of the world's economic product, and accounting for about three-quarters of world trade.<sup>11</sup>

The partnership between the G20 and the OECD occurred following the global financial crisis of 2008 and 2009. In context of the financial crisis, the G20 evolved from a ministerial-level forum to a leaders' forum in charge of coordinating and implementing the global response to the financial crisis (Porter, 2010, p. 3-8; Hillman, 2010). Since jurisdictions and their veil of secrecy are a hindrance to effective national and international financial regulation, facilitating tax evasion that further undermines the finances of states struggling with an escalated level of public debt (Eccleston, 2013, p. 87), the OECD and the G20 Leaders' Forum cooperated to promote an international tax agenda (Lesage, 2010). At the second G20 leaders' meeting in London in April 2009, the G20 enhanced its commitment to the OECD's tax transparency agenda. At the third G20 leaders' summit in Pittsburgh in September 2009, the G20 started to support the creation and funding of a newly expanded Global Forum on Tax Transparency and Information, which is organized through the OECD, to systematically evaluate the implementation and compliance of taxation policy with the new global standard (Eccleston, 2013, p. 88).

Due to the G20's political influence, the G20's role appears mainly to "be one of syndicating," setting the agenda and providing political backing for the norm-making in international taxation to ensure member countries agree upon, debate, and implement those norms (Christians, 2010, p. 39). Because of the G20's political backing, the OECD can elevate agenda-setting or specific issues (such as the harmful tax competition issue) identified by the OECD before the G20 entered the fray to a level where serious dialogue among countries can take place among international tax technocrats (Grinberg, 2016, p. 1158). The G20's political resources and supports also directly compel the enforcement and effectiveness of the newly made norms.

Despite acting as an agenda setter, the G20 lacks a secretariat to develop and implement specific policy solutions in a timely manner (Eccleston, 2013, p. 89). The OECD has almost unrivaled tax

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<sup>11</sup> For more information on the G20, see <https://g20.org/en/about/Pages/whatis.aspx>.

expertise and policy capability in international tax arenas. For example, in the area of tax competition, with respect to the need for international tax transparency and the need to eliminate tax havens and other harmful tax practices, the OECD has already made a commitment to identify non-cooperative jurisdictions, and further, has the ability to impose sanctions. These are important resources for the G20, given the political pressure on it to develop a timely response to the 2008 financial crisis.

By combining the OECD's technocratic expertise with the authority of political actors, the G20 and OECD can bolster one another's various claims to legitimacy (Brummer, 2015, p. 201). Although OECD-made soft law has a wide influence in the real world, previously, the OECD's non-inclusive and non-transparent soft-law making process has also been subject to criticism by scholars such as Rixen (2009), Carrero (2007), Klabbbers (1998), Christians (2010) and others. This will be discussed in detail in Chapter 5 in comparison to the nexus approach. The OECD's more recent collaboration with the G20 on collaborating on and disseminating the principles of international tax policy reduces this deficiency. The G20 provides enhanced legitimacy for the OECD's soft law-making. The G20 creates an institutional infrastructure from which developing countries may exert more influence on the OECD and other institutions where tax standards are created. The United States and Europe thus can extend their leadership power on global tax policy-making to some developing countries. As such, the BEPS Project has ushered in a new age of inclusion for previously marginalized countries (Christians, 2010). The marrying of the political efficacy of G20-convened soft law processes with OECD model-based enforcement mechanisms is powerful, providing a new tax policy norm that can have legal efficacy and widely regarded legitimacy (Grinberg, 2016, pp. 1193-1194).

## **2.3 Patent Box Regimes**

### **2.3.1 Preferential Tax Regimes**

The nexus approach applies to patent box regimes. As such, it is important to review the literature on patent box regimes. To begin with, patent box regimes are also called innovation boxes, knowledge development boxes, license boxes, and intellectual property boxes. They reduce

corporate tax rates for income from qualifying intangible property (IP), such as patents and patent-like IPs. As such, they are preferential tax regimes aiming to incentivize the earning of IP income.

The first patent box regime was adopted in Ireland in 1973, but abolished in 2010 (*Budget Summary 2011*). In chronological order, the Ten Countries included in the case study introduced a patent box regime in 2003 (Hungary), 2007 (the Netherlands and Belgium), 2008 (Luxembourg and Spain), 2012 (Cyprus), 2013 (UK), 2014 (Portugal), 2015 (Italy) and 2016 (Ireland).

Unlike tax incentives for research and development (R&D) expenditures, which are often referred to as “input tax incentives”, patent taxes are output tax incentives as they provide a back-end tax reduction for successful innovation (Merrill, 2016, p. 847; Atkinson and Andes, 2011, p. 12). Patent box regimes encourage R&D activities and R&D driven manufacturing. For example, the UK introduced a patent box to offer additional incentives for companies to continue to develop and exploit IP in the UK ((IFA, 2015, p.582, 590). Tax incentives for R&D activities can be justified on the grounds of market failure—the underinvestment of capital into R&D and the positive spillovers of R&D activities (Atkinson and Andes, 2011, pp. 4, 6, 7).

In addition to encouraging R&D activities, patent box regimes can also function to encourage domestic manufacturing or commercialization of corporate intangible assets. In the absence of such tax incentives, corporations may move the IP offshore and/or locate manufacturing activities in foreign countries. For example, the patent box in Quebec, Canada aimed to support the innovation efforts of Quebec’s local manufacturing industry.<sup>12</sup>

Thirdly, some pre-BEPS patent box regimes functioned as an inducement of foreign-created IP or as tools of competition for mobile IP income,<sup>13</sup> or preventing the shifting of IP income. For

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<sup>12</sup> The Quebec patent box provides a low 4 percent corporate tax rate on eligible income to encourage innovation manufacturing corporations to keep IP developed in Quebec in the province. For more information, see Canadian Tax Foundation, *Quebec Opens the Door to Patent Boxes*, (Toronto, CTF, 2016) ([https://www.ctf.ca/ctfweb/EN/Newsletters/Canadian\\_Tax\\_Focus/2016/3/160312.aspx](https://www.ctf.ca/ctfweb/EN/Newsletters/Canadian_Tax_Focus/2016/3/160312.aspx)).

<sup>13</sup> Germany’s Minister of Finance called patent boxes “going against the European spirit.” Later, Germany introduced anti-patent box rules that limit deductions of royalty payments to MNE subsidiaries that benefit from a non-nexus approach compliant patent box. See KPMG, “Germany: Anti-patent box legislation, other developments” (KPMG, 1 June 2017) (<https://home.kpmg/xx/en/home/insights/2017/06/tnf-germany-anti-patent-box-legislation-other-developments.html>).

example, Hungary introduced a patent box to replace the previous offshore regime benefits so that foreign investors can maintain their beneficial tax status in a different way (IFA, 2015, p. 374). Chapter 3 of this dissertation will discuss further this aspect of the patent box regimes.

### 2.3.2 Design Features

A typical patent box regime has rules to answer these questions: Preferential tax treatment? What types of IP income qualifies? How does one determine the amount of qualifying IP income? How can the regime be administered? Should the regime be elective or mandatory? Can taxpayers obtain tax rulings? Due to their different policy goals, different pre-BEPS patent box regimes had different answers to each of these questions.<sup>14</sup>

Pre-BEPS patent box regimes generally fall into two groups. One group aimed to attract substantial IP development activities. This group included the regime in the UK, France, Belgium, the Netherlands and Spain. These countries targeted IP creation activities, such as R&D activities and contained a development condition (or a nexus requirement), although they did not require applicants themselves to perform R&D activities such as outsourcing and R&D abroad was permitted. In the case of IP acquired from others, no further development of the acquired IP was required. However, specific conditions were defined slightly different. For instance, Belgium's patent box required adding some value domestically; the Netherlands' patent box required making important decisions in or taking risks in the country; France's patent box required holding any acquired IPs for two years; the UK's patent box required "further developing acquired IP for a certain period of time"; and Spain's patent box required bearing at least 25% of the assets' development costs.<sup>15</sup>

The other pre-BEPS patent box group aimed to attract or maintain mobile IP income. This group included Cyprus, Hungary, and Luxembourg. These regimes did not require IP development conditions. For example, to qualify for tax relief in Luxembourg, a taxpayer was not required to

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<sup>14</sup> The sources on Pre-BEPS patent box regimes in the EU include IFA, 2015 re Hungary p. 376, Netherlands p. 491, Italy p. 408, Spain p. 697, Belgium p.162, Luxembourg p.460, Portugal p.590, and UK p.804; IBFD *Tax Research Platform, Corporate Taxation, Country Surveys re* Cyprus, Luxembourg and Portugal; Evers, 2015; Merrill, 2016; Pwc, 2013; Deloitte, 2014.

<sup>15</sup> See the sources in footnote 14.

further develop any acquired IP.<sup>16</sup> The scope of qualifying IPs was broader than patent or patent-like IPs to include trademarks. The amount of income eligible for tax relief was based on gross income, so that related expenses were deducted from income taxable at the regular tax rate.

### 2.3.3 Policy Assessment

Patent box regimes can be assessed as tax expenditures to encourage R&D activities or as instruments of tax competition. As to the tax revenue implications of patent box regimes, the literature shows that these pre-BEPS regimes led to net revenue loss. Griffith et al. (2014, pp. 21, 22, 31) found that tax revenues in the UK, Belgium, Luxemburg and the Netherlands declined by 50 to 70 percent upon the introduction of patent box regimes of the pre-reform level: 70 percent in Belgium and Luxembourg; 60 percent in the UK; and 50 percent in the Netherlands (EC, 2014, p. 46).<sup>17</sup> It also found that the flow-on effect of patent box introduction in other countries is clear, that is, if one EU member country introduces a patent box, all member countries could suffer a tax revenue reduction from patent income. For example, when Belgium, Luxembourg and the Netherlands adopted patent box regimes, the UK's tax revenue from high earning potential patents dropped around 10 percent (Griffith et al. 2014, Table 5.2). Then, after the UK introduced a patent box, the share of new patents in the UK increased at the expense of the neighbouring Benelux countries (EC, 2014, p. 45). Furthermore, larger countries that have a significant innovation base and adopt patent box regimes can have significant revenue losses (TJN, 2019, p. 4).

The literature on the effectiveness of patent box regimes as tax expenditures or tax incentives reaches different conclusions. On the one hand, some researchers found these regimes to be largely ineffective. For example, using data for the period 2000-2011 for the top 2000 corporate R&D investors worldwide, Alstadsæter et al. (2015) found patent boxes failed to boost local R&D activity, as they exerted a significant effect on patent location without any change in real research activity. Similarly, Guenther (2017) found that most of the additional patent applications promoted by patent box regimes are likely to be opportunistic (i.e., inventions that would previously have

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<sup>16</sup> Geoffrey Scardoni, "Abolition of Luxembourg IP box Regimes," (UK: DLA PIPER, 2015) ([www.dlapiper.com/en/uk/insights/publications/2015/11/abolition-of-luxembourg-ip-box-regime/](http://www.dlapiper.com/en/uk/insights/publications/2015/11/abolition-of-luxembourg-ip-box-regime/)).

<sup>17</sup> More specifically, the tax revenue loss in Belgium is around 0.63 percent or 67,917,685 when firms subject to Belgium patent box enjoy around 7.5 percent decline in effective corporate tax rate (Bornemann et al., 2018, p.5). The Dutch patent box led to a tax revenue loss of 361 million in 2010, 743 million in 2012 (TJN, 2019, p. 4).

been kept secret will be patented). Rassenfosse (2014) found that additional patent applications did not tie to real economic activity (i.e., the R&D activity leading to patent applications was performed abroad). Others found that patent box regimes were inefficient in encouraging innovation in host countries because they benefited firms that had succeeded with invention (Gaessler et al., 2018, p.32), or they were not able to alleviate the ex-ante liquidity constraints faced by innovating firms (Hall and Lerner, 2010, pp. 609-639). Patent boxes were also found to be poorly targeted at research activity that generated spillovers, and this was especially the case when comparing them to R&D tax credits (Griffith and Miller, 2011, p. 231).

On the other hand, using a matched sample of European MNEs subsidiaries operating in Europe, Chen et al., (2017) found a higher amount of income and greater investment in fixed assets in countries that provided the largest patent box benefits and imposed IP development (nexus) conditions. The effectiveness of patent boxes in encouraging innovation may depend on the extent to which corporations would choose to co-locate real R&D activities alongside IP income streams, which further depends on patent box design and taxpayers' response to a low patent tax rate (Evers et al., 2015). In general, patent boxes were more likely to relocate corporate income than to encourage innovation (EC, 2014, p. 46). Owing to multiple ways in which the various designs of patent box regimes affect firms' responses, some researchers suggest that the overall effectiveness of patent boxes in attracting real R&D activities is unclear and more empirical evidence is needed (Evers et al., 2015, p. 523). Increased patenting activity only appears for inventions involving co-located (domestic) patent owners and inventors, not patents that are invented and owned in different jurisdictions (Bradley et al., 2015, p. 20). The impact of patent boxes on the choice of ownership is small, but present only when patent boxes have a development condition (Gaessler et al., 2018).

The assessment of patent boxes as instruments of attracting mobile IP income is generally positive (Alstadsæter et al., 2015; EC, 2014; Griffith et al., 2014). For example, Alstadsæter et al. (2015) found that patent box regimes have strong effects in attracting patents, especially patents with high earning potential. Bradley et al. (2015) found that the generosity of the patent box regime significantly affects patent activity, and that patent box regimes yielded a 3 percent increase in new patent applications for every percentage point reduction in the tax rate on patent income. In

Belgium, the patent box regime increased patent applications from 0.4 to 1.8 percent and patent grants from 0.4 to 5.1 percent (Bornemann et al., 2018). The effectiveness of patent box regimes in preventing mobile IP income from being shifted offshore is found to be insignificant. However, Chen et al. (2017) found that patent box regimes help retain mobile income that can otherwise be shifted out of the country to lower-tax jurisdictions and that they possibly attract mobile income from higher-tax jurisdictions when there is a nexus requirement.

## **2.4 International Tax Competition**

The literature on tax competition illuminates my research in terms of informing my theoretical and conceptual frameworks for understanding the evolution of combating harmful international tax practices. It helps my research to situate the analysis of the nexus approach within the broader context of a history of harmful tax competition. My review of the literature will look at tax competition in general, harmful tax competition, efforts by the OECD and the EU in combating harmful tax competition, and theories supporting the regulation of international tax competition in order to mitigate its harmful effects. Dagan's market theory of tax competition will be discussed in detail in order to lay theoretical foundations for my claims about the effectiveness of the nexus approach in Chapter 5.

### **2.4.1 Tax Competition in General**

There is a rich body of literature on tax competition, including the work of scholars such as Avi-Yonah (2000), Brooks and Hwong (2010), Cockfield (2011), Christians (2013), Dagan (2018); Devereux and Loretz (2013), Edwards and Keen (1996), Faulhaber (2017b), Hines (2006), Hines (2005), Keen (2001), Keen and Konrad (2012), Pinto (2003), Ring (2009), Roin (2000), Tanzi (1996), Tiebout (1956), Wilson (1986), Wilson (1999), and many others. Tax competition refers to the phenomenon whereby sovereign States use preferential tax policies to compete for portfolio and direct investment (Avi-Yonah, 2000). A country can use any feature of its tax system or the entire tax system to "enhance" its competitive advantage in the marketplace for capital, investment, or a nominal (not substantial) business presence (Ring, 2009, p. 560). Tailored preferential tax

regimes are the most common ones.<sup>18</sup> The effect of a preferential tax regime is to lower the tax costs of doing business in the host country. In general, there are two primary forms of tax competition: (1) preferential tax regimes, such as tax holidays, lower tax rates for certain types of income like patent box regimes, and special tax deductions from the tax base, such as super deductions or accelerated depreciation for R&D expenditures (Cotrut and Munyandi, 2018). (2) tax administrative activities, such as secret tax rulings on transfer pricing and other matters that give a country a competitive edge. Such rulings give specific taxpayers tax advantages that may entice them to invest in the host country, possibly leading to BEPS concerns and harmful tax competition practices (OECD, 2001, p. 25; *Action 5 Report*, p. 9; Faulhaber, 2017a, p. 54).<sup>19</sup> In addition, lax enforcement of tax rules (such as transfer pricing) can be another way that countries engage in tax competition (Mansori and Weichenrieder, 2001).

Attracting investment is the main reason for tax competition. Foreign investment is perceived to generate significant benefits for host countries (Blomstrom, 1991). It can help promote economic growth and increase tax revenue resulting from increased corporate profits, increased wages from new employment, increased demand for goods and services brought about by higher disposable income available to consumers, and increased economic welfare (Easson, 2004). Today, in the context of the knowledge economy, foreign investment in R&D becomes critically important in many countries. Patent box regimes are used to attract R&D activity and investment in generating intangible income.

The competition pressures from other countries, and especially from neighbouring countries, also leads to tax competition. When a country observes other countries achieving economic growth using preferential tax incentives, it will join the competition, even though the tax incentives may not be actually beneficial to it. Some patent boxes were enacted for that reason. For example,

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<sup>18</sup> Compelling examples include, the Irish International Financial Services Centre (IFSC) regime and the Portuguese Archipelago Madeira Zonal Franca Madeira (ZFM) regime, Belgian Coordination Centre (BCC) and Belgian Service Centre (BSC), the French Distribution Centre (FDC) regime, the Netherlands Distribution Zonal Franca Madeira(ZFM) regime, the Netherlands Distribution Centre (NDC) regime and Belgian Fistribution Centre (BSC) regime. See Pinto, 2003, pp. 219-262.

<sup>19</sup> EU tax rulings for FIAT in Luxembourg and Starbucks in the Netherlands are examples of such harmful tax competition practices. Norton Rose Fulbright Firm, *European Commission decides that tax advantages given to Fiat in Luxembourg and Starbucks in the Netherlands breach EU State Aid Law* (Amsterdam: Norton Rose Fulbright Firm, 2015).

Portugal adopted a patent box to improve Portugal's position in the EU competitive rankings in relation to corporate tax. The Portuguese R&D tax incentive system has benefited from an analysis of the experience of tax incentives in other countries, in particular, Spain (IFA, 2015, pp. 582, 590).

Tax competition is viewed to have both positive and negative effects. The positive effects of tax competition are seen by regarding tax competition as similar to other types of market competition (Wilson, 1999, p. 298). Through the downward pressure on corporate tax rates, tax competition can make governments more efficient and more responsive to the preferences of their citizens, can help determine optimal locations for business activities (Roin, 2000, pp. 545, 546), and can thus lead to the most efficient production of income and the most efficient use of positive spillovers (Hines, 2005, p. 270). At the same time, tax competition can have negative effects for a country engaged in tax competition. It can impair the progressiveness of the income tax systems of competing countries. Since tax competition mostly relies on corporate income tax cuts, the tax burden unavoidably falls more on immobile factors, such as labour, domestic consumers and real estate properties, rather than mobile factors (Avi-Yonah, 2000, p. 1625). Thus, tax competition forces countries to rely on revenue sources that are more distortionary and more regressive (Roin, 2000, pp. 546, 549). The cumulative impact of tax competition may impair the progressiveness of the income tax systems of competing states and the uneven allocation of the tax burden between the mobile and less mobile tax bases, ultimately reducing their ability to redistribute wealth from the rich to the poor (Avi-Yonah, 2000).

#### **2.4.2 Harmful Tax Competition**

Some types of tax competition are harmful due to their harmful effects on other countries. This primarily happens where the preferential tax regimes or tax practices target mobile income, capital or paper profits. In the area of individual taxation, rich individuals shift some of their wealth in the form of liquid capital (cash deposits, equity, and security holdings) off-shore to low-tax countries in order to avoid paying tax in their country of residence (Dietsch, 2015, p. 50). These low-tax countries (also called tax havens) often rely on a combination of bank secrecy laws and a nil or low tax rate to attract this mobile individual wealth. This type of tax competition is harmful to the tax base of the originating countries of residence (Dietsch, 2015, p. 40). In the area of corporate taxation, tax competition aimed at attracting the paper profits of MNEs is considered harmful to

the countries where the profit is created or where the value is created. These shifted corporate profits are “paper profits” in the sense that this profit shifting does not accompany substantial economic activity shifting, and the profits are not created in the countries where they are claimed. This type of tax competition is harmful because it erodes the source country’s tax base (Dietsch, 2015, pp. 41, 42).

A specific harmful effect of harmful tax competition is tax revenue loss in the countries that engage in tax competition (OECD 2000, p. 22). Revenue loss is a major issue, especially for developing countries, which possibly lose more revenue from harmful tax competition since they rely more on corporate tax as a source of tax revenue (Keen and Simone, 2004). A second harmful effect is the loss of global welfare when the economic benefits from tax competition are less than the loss other countries suffer as a result of tax base erosion (Dietsch, 2015; Ring, 2010b).

Harmful tax competition can infringe upon other countries’ tax sovereignty (Dietsch, 2015). Collecting tax revenue to fund the operations of government and then setting up that government with a certain scope, size and function in society are two core facets of a sovereign state (Ring, 2010b). Harmful tax competition undermines the choices political states can make regarding the size of the state and the level of tax resource redistribution. When the distributive autonomy of taxation, the state, and equality decline in a political community, ultimately, the legitimacy of the state as a political unit is undermined (Dagan, 2018, p. 41).

International efforts to curb harmful tax competition have been led by the OECD since the late 1990s. The OECD identified the emerging issue in the context of globalization in the 1990s – harmful tax competition. The proliferation of preferential tax regimes in response to tax competition from tax havens forms an unhealthy form of tax competition that can lead to a ‘race to the bottom’ (Arnold and McIntyre, 2002, p. 138). In May 1996, the OECD initiated the anti-harmful tax competition project with a goal to “develop measures to counter the distorting effects of harmful tax competition on investments and financing decisions and the consequences for national tax bases.” This project issued reports in 1998, 2000 and 2001 (OECD, 1998; OECD, 2000; OECD, 2001).

The “1998 Report” discussed the concept of harmful tax competition and gave criteria to identify

harmful tax competition. While it did not define harmful tax competition directly, it mentioned its harms in several places in the report. Overall, the concept of harmful tax competition is a subjective one. It seems that harmful tax competition is “a country’s intentional enactment of special tax provisions which principally erode the tax base of other countries.” The spillover effect on the other countries is not “a mere side effect, incidental to the implementation of a domestic policy”, but “effect for the country to redirect capital and financial flows and the corresponding revenue from the other jurisdictions by bidding aggressively for the tax base of other countries” (OECD, 1998, pp. 16). The potential harms by special tax incentives include distortion of investment, discouragement of taxpayer compliance, redesign of the distribution goal between revenue collected and public spending, change of the taxation structure through the shift of tax burdens to other immobile bases, increases in tax administration and tax compliance costs (OECD, 1998, pp. 14). The 1998 Report proposed two measures: identifying harmful preferential tax regimes based on 12 factors and labeling tax haven countries. These 12 key factors included four “key factors” and eight “other factors.” Compared to the four key factors, the eight other factors were not, on their own, sufficient to identify the harmfulness of preferential tax regimes. The four key factors included whether the regime: (i) had a lower foreign tax rate than the overall tax rate in the country, (ii) was ring-fenced such that it provided benefits only to foreign investors, (iii) lacked transparency, and (iv) lacked effective exchange of information with other interested countries. The other eight factors the 1998 Report identified were: (i) an artificial definition of the tax base, (ii) failure to adhere to international transfer pricing principles, (iii) foreign-source income exemptions from residential country tax, (iv) negotiable tax rates or tax bases, (v) the existence of secrecy provisions, (vi) access to a wide network of tax treaties, (vii) regimes being promoted as tax minimization vehicles, and (viii) the regime encouraging purely tax-driven operations or arrangements without requiring substantial local activity (OECD, 1998, pp. 25-34).

The “1998 Report” also contained defensive measures to counter harmful tax competition. It contained 19 recommendations on countermeasures for tax havens and harmful tax practices (OECD, 1998, p 40). The countermeasures generally fall into three categories: domestic legislation by individual member countries; tax treaties, and coordinated countermeasures. The first category of recommendations included: introduction or amendment of legislation on controlled foreign corporations and foreign investment funds; restrictions on the application of the participation exemption and other measures to relieve double taxation regarding dividends distributed out of

profits enjoying harmful tax practices or tax haven benefits; revision and tightening of foreign income information reporting rules; increased requirements for transparency and objectiveness of conditions for the issuing of tax rulings by tax administrations; more consistent application of transfer pricing legislation; increased access to bank information. The second category of countermeasures included: adequate provision of information exchange, or more efficient and effective use of existing provisions; a comprehensive commentary explaining countries' internal anti-avoidance doctrines and rules applicable to treaty provisions; and termination of tax treaties concluded with tax havens. The third category of countermeasures included, the creation of a FHTP, which is associated with the OECD committee on Fiscal Affairs to deal with harmful tax competition in a coordinated way. The FHTP mainly supervises the actual implementation of anti-harmful tax competition measures, such as restricting from broadening the scope of existing harmful tax practices (the standstill provision), and amending or abolishing harmful tax practices (the rollback provision). The FHTP also needed to issue a list of tax haven countries, to engage in a dialogue with non-member countries; and to discuss or organize coordinated study regarding harmful tax competition (OECD, 1998, pp. 52, 57-61). All OECD member countries adopted the "1998 Report" except for Luxembourg and Switzerland (OECD, 1998, pp. 73-75,76-78; Arnold and McIntyre, 2002, p141).

The "2000 Report" fulfilled the recommendations of the "1998 Report." Relying on self-review and peer review under the coordination of the FHTP, it notes that 47 potentially harmful preferential tax regimes were singled out. It warned that countries that failed to repeal or amend their preferential regimes could suffer countermeasures from other member countries. This report also blacklisted 35 tax haven countries. The report warned that countries that fail to be removed from the list could be subject to coordinated sanctions by OECD member countries (OECD, 2000, para 35).<sup>20</sup> Luxembourg and Switzerland abstained from approving the "2000 Report." The "2000

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<sup>20</sup> These sanction measures targeting transactions concluded with entities located in these jurisdictions. Most of them are similar to those listed in the 1998 report. They include, denial of deductions, exemptions, or credits relating to payments to these entities; comprehensive information reporting rules for transactions involving these jurisdictions; effective CFC legislation; denial of domestic exceptions able to avoid application of domestic sanctions; denial of foreign tax credits or of the participation exemption for distributions of profits arising in these jurisdictions; imposition of withholding taxes on payments to entities or residents located in these jurisdictions; enhancement of audit and enforcement procedures towards domestic taxpayers engaged in activities in these jurisdictions; denial of deductions and cost recovery for fees and other expenses incurred in establishing or acquiring entities located in these jurisdictions; imposition of transactional charges for transactions concluded therein; application of any other current

Report” and the subsequent Memorandum of Understanding generated considerable criticism from targeted tax havens, from its own OECD member countries and from legal scholars such as Mitchell (2000, p. 1799), Lang (2000, p. 2831), Zagaris (2001), Pinto (2003, p. 279) and others. These criticisms included the fact that the OECD campaign contradicted the advice from the World Bank and from the IMF in developing financial services industries through law tax policy (Sharman and Mistry, 2008). Critics noted that the OECD had double standards for its member countries and non-member tax havens in applying the obligations listed in the Memorandum of Understanding. The OECD also had double standards in the use of countermeasures toward harmful tax practices for OECD member countries versus tax haven countries (Pinto, 2003, pp. 279-80). Thus, the OECD had difficulty imposing sanction measures on its own defaulting member countries while also trying to impose them on non-OECD tax havens. Due to these well-founded criticisms, in 2001, the OECD became more engaged in communication and negotiation with tax haven countries and there was more emphasis on transparency and exchange of information. Further development of the criterion of substantial activity was stopped after 2000 due to the difficulty in ascertaining when and whether local activities could be deemed to be substantial (Pinto, 2003, pp. 282-283). In addition to Luxembourg and Switzerland, two more OECD countries, Portugal and Belgium, abstained from approving the “2001 Report” (Pinto, 2003, pp. 284-285). In 2003, the OECD was forced to abandon its harmful tax competition agenda when countries only made vague commitments to conduct peer reviews to make a definite assessment on harmful tax preferential tax regimes (Eccleston, 2013, p. 66). Countries that had committed to eliminating harmful preferential tax regimes under the criterion of substantial activity thus did not have to amend their preferential tax regimes.

Anti-harmful tax competition practices also occurred in the EU, a supranational institution. In 1997, the ECOFIN Council approved a “Package to Tackle Harmful Tax Competition (HTC) in the European Union” (hereafter, the “Package”). The “Package” included a Code of Conduct on business taxation, a set of guidelines in the area of taxing savings concerning a directive to be proposed by the Commission, and a directive on cross-border interest and royalty payments

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and future countermeasure adopted towards OECD member countries, harmful tax practices against the regimes of these jurisdictions. OECD, 2000, para.35.

between related enterprises.<sup>21</sup>

Like the OECD harmful tax competition initiatives in the 1990s, the EU did not clearly define harmful tax competition in its *Code of Conduct*. The Code seems to look at the harms from the perspective of the overall EU market, since the goal of the “Package” is “to reduce the distortions in the single market, to prevent tax revenue loss, and to develop tax structure in an environment-friendly way” (Pinto, 2003, p. 197). The *Code of Conduct* covers potentially harmful tax measures (PHTMs) and singled out seven criteria to assess whether a country’s practices were actually harmful and thus caught by the Code of Conduct (para. G). These criteria include, (i) availability of a tax measure only to non-resident taxpayers or transactions that concluded with non-resident taxpayers; (ii) ring-fencing; (iii) no substantial activity requirement for qualifying income; (iv) the computation of taxable income does not follow internationally accepted ones, such as the transfer pricing principle; (v) lack of transparency; (vi) negative spillover effects on other countries; and (vii) whether the underlying policy goal can be justified without hurting the integrity and coherence of the community legal order. These factors fall into categories of a subjective test and an objective test. The objective test (the first five factors) focuses on criteria of the deviation of preferential tax measures from an EU member country’s “benchmark” system, while the subjective test (the last two factors) looks at whether a tax measure will or may affect, in a significant way, the location of the business in EU.

The Code of Conduct group was in charge of assessment of the PHTM of member countries. The EU Council established the Code of Conduct Group in March 1998. It was chaired by the UK paymaster general, Ms. Dawn Primarolo, and comprised of experts of each member country of the commission. The Code of Conduct Group adopted its decisions based on majority voting rather than on unanimity. Thus, it could adopt the final report and blacklisting measures without agreement of the member countries concerned (Pinto, 2003, p. 207). It also adopted an implementation mechanism of the Code: “standstill” and “rollback” provisions. According to the “Standstill” rule, EU member countries should not introduce new tax measures which are harmful within the meaning of the Code. They should respect the principles underlying the code when determining their future tax policy. According to the “rollback” rule, EU member countries should

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<sup>21</sup> “Tax Package – Presidency Conclusions”, 2497th Council meeting – Economic and Financial Affairs - Brussels, 19 March 2003 (<http://ue/eu/int>).

re-examine their current tax laws or established practices and should amend them in order to eliminate any harmful tax measures as soon as possible (*Code of Conduct*, para. C). Peer review mechanisms enforced the *Code of conduct* by generating peer pressure to implement or comply with the *Code of Conduct*. Another aspect of peer pressure came from tax info exchange mechanism among EU member states.

The *Code of Conduct*, as soft law, was effective in combating harmful tax competition, as it was backed up by peer review and peer pressure, and reinforced by hard law, such as the State Aid rules, the EU treaty principle, and EU directives (Pinto, 2003, p. 197).<sup>22</sup> On 23 November 1999, the Code of Conduct Group, which was in charge of evaluating all potential harmful tax measures (PHTMs), submitted the “Primarolo Report” which contained a “black list” of 66 PHTMs based on criteria set out with regard to six categories of PHTMs. Although there was disagreement among EU members on this black list, they did not formally reject the Report after the Council adopted three guidelines that contain general criteria set out in the “Primarolo Report”, which also took into account the criticisms of EU member countries of the November 2000 Report. In 2003, EU member states finally agreed on the “Primarolo Report” and they also got extension of validity of old harmful measures (Pinto, 2003, p. 208, 209).

In early 2015, the EU Code of Conduct group endorsed the modified nexus approach in the OECD/G20 BEPS Action 5 and required patent box regimes in Europe to comply with the modified nexus approach.<sup>23</sup> EU directive 2011/16/EU<sup>24</sup> requires a generalized automatic exchange of information between tax authorities of an EU country in which interest is paid and the recipient’s EU country of residence. This requirement lays a foundation for implementing the transparency requirement of BEPS Action 5. In 2016, the EU proposed compiling a list of non-

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<sup>22</sup> The directives are the main legislative tool in the EU. Although they do not apply to EU member countries, they have a binding effect on EU member countries by setting a threshold or a general legal framework that needs to be achieved within a certain period. When the deadline for implementation is due, the EU directives produce direct, immediate, and mandatory legal effects. The defaulting countries can be brought in front of the ECJ. See Pinto, 2003, p. 66.

<sup>23</sup> OECD, *Tax policy Reforms 2017* (Paris: OECD, 2017), p. 64. Retrieved from: [https://books.google.nl/books?id=tG01DwAAQBAJ&pg=PA64&lpg=PA64&dq=code+of+conduct+group+ip+regime+nidwalden&source=bl&ots=NUeMB55ALx&sig=zN0cNLbnEPx\\_qOoG7DHuI3etpgc&hl=nl&sa=X&ved=0ahUKEwjQsrujgabbAhXECuwKHSf\\_CCwQ6AEITzAE#v=onepage&q=code%20of%20conduct%20group%20ip%20regime%20nidwalden&f=false](https://books.google.nl/books?id=tG01DwAAQBAJ&pg=PA64&lpg=PA64&dq=code+of+conduct+group+ip+regime+nidwalden&source=bl&ots=NUeMB55ALx&sig=zN0cNLbnEPx_qOoG7DHuI3etpgc&hl=nl&sa=X&ved=0ahUKEwjQsrujgabbAhXECuwKHSf_CCwQ6AEITzAE#v=onepage&q=code%20of%20conduct%20group%20ip%20regime%20nidwalden&f=false) (last visited 27-5-2018).

<sup>24</sup> Council Directive 2011/11/EU on administrative cooperation in the field of taxation and repealing Directive 77/799/EEC [2011] OJ L64/1.

cooperative, non-EU countries and to create a “neutral scoreboard of indicators,” targeting non-cooperative countries outside the EU.<sup>25</sup> It is essentially country-wide blacklisting of violating countries to combat harmful tax competition in non-EU countries (Faulhaber, 2017b, p. 33).

As to member states, the EU has proposed reforming the corporate tax system by introducing the Common Corporate Tax Base (CCTB) Directive and the Common Consolidated Corporate Tax Base (CCCTB) Directive.<sup>26</sup> The CCTB Directive will implement a common tax base for MNEs across the EU, while the CCCTB Directive will impose a consolidation system only after the application of the common base. Such proposals, if implemented, will restrict countries’ capabilities to engage in harmful tax competition.

The OECD and the EU share a lot in common in their anti-harmful tax competition initiatives. They have mutual compatibility and reinforce each other to some extent. Their criteria for identifying harmful tax regimes are similar. But there are also differences among these two projects. The OECD is an intergovernmental body, while the EU is a supranational body. The scope of the EU project is wider than that of the OECD, as the EU’s project deals with all of corporate taxation while the OECD’s project mainly targets income from mobile activities. More importantly, each body’s approaches to combating harmful tax competition is different. The OECD’s approach was more dramatic and was claimed to intervene into the tax sovereignty of countries, thereby garnering less political support than the EU’s approach. The EU’s approach was less dramatic and involved soft law instruments, which proved to be effective.

### **2.4.3 A “Market” View of International Taxation**

International tax competition can be assessed as “good” or “bad”, largely based on whether one’s emphasis is on “competition” or “tax”. When the emphasis is on competition, tax competition is analogized to market competition and the benefits associated with the free market such as

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<sup>25</sup> The first ever EU list of non-cooperative tax jurisdictions was agreed by Member States on 5 December 2017. see [https://ec.europa.eu/taxation\\_customs/tax-common-eu-list\\_en](https://ec.europa.eu/taxation_customs/tax-common-eu-list_en). For more information on the scoreboard; also see EC, Fair Taxation: Commission launches work to create first common EU list of non-cooperative tax jurisdictions, [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_16\\_2996](https://ec.europa.eu/commission/presscorner/detail/en/IP_16_2996).

<sup>26</sup> European Commission, *A Fair and Efficient Corporate Tax System in the European Union: 5 Key Areas for Action*, COM(2015) 302, 17 June 2015; European Commission, *Proposal for a Council directive on a common corporate tax base(CCTB)*, COM(2016) 685, 25 October 2016.

improving government efficiency (Hines, 2006; Wilson, 1996; Wilson, 1999, p. 298). By contrast, when the emphasis is on “tax” or the role of taxation, tax competition is generally viewed negatively because it erodes fiscal sovereignty (Dietsch, 2015, pp. 41-54; Christians, 2009, pp. 212-213; Ring, 2009, p. 576) and reduces the capacity of a state to redistribute social income (Roin, 2000, pp. 546, 549; Avi-Yonah, 2000, pp.1578, 1625).

Can international tax itself be viewed as a market and its shortcomings be corrected through regulation? Professor Dagan’s answer is yes (Dagan, 2018.) She points out the failures of the international tax market and recommends ways of addressing them. The rest of this section reviews Professor Dagan’s work.

#### **2.4.3.1 The Market of International Taxation**

Dagan’s work is built on previous market theories of tax competition, such as those advanced by Tiebout (1956) and Roin (2000). Tiebout’s work illustrates tax competition between local jurisdictions of a country and lays a theoretical foundation for the arguments in favour of tax competition. It draws an analogy between tax competition and market competition and argues that the advantages of market competition should apply to tax competition (Tiebout 1956, p. 419). Tiebout posits that tax competition is efficient under several key assumptions: (1) people can move freely among countries; (2) people have access to full information about all countries; (3) all countries have similar employment opportunities; and (4) and crucially, taxation (tax rates), and the extent to which it allows maximisation of utility, is the primary consideration of a person when s/he chooses which country to live in. For Tiebout, tax competition should produce the same positive effects as market competition, including reduced costs, reduced prices, and maximized social welfare that benefits everyone. Therefore, according to Tiebout, perfect tax competition will lead to the efficient allocation of global capital, to government becoming more efficient in spending, and to government becoming more responsive to the desires of its residents and to the most efficient production of income.

Roin posits that firms compete in an open market and that the competition among firms leads to the most efficient or equilibrium prices. On the market of tax competition, in Roin’s model, one can substitute governments for producers, and investment for customers, and tax for the price

(Roin, 2000, p. 552). According to Roin, governments compete for investment across borders through lower or preferential tax rates.

Dagan's work focuses on international taxation and analyzes it as a decentralized competitive market. She views the decentralized tax competition market to exist among 200 countries within a backdrop of economic globalization (Dagan, 2018, pp. 1, 71, 250). In this global tax market, countries compete for investments, residents and revenues through tax in the same way that firms compete for consumers and profits through price. In other words, taxation is the "currency" or "price" of this competition (Dagan, 2018, p. 3). Through lower prices in the form of tax incentives, countries lure foreign investments as well as residents inside their borders. They compete with one another for "profits" in the form of investments and the associated positive spillovers for the domestic economy, taxpayers and the resulting tax revenue increase. Just like private firms, governments seek to maximize their "profits" from the market (Dagan, 2018, p. 34).

Under the force of globalization, countries' tax policy-making almost inevitably becomes marketized when they attempt to tailor their tax regimes and preferential tax packages to the needs and requirements of the potential investors and residents that they value the most. Their resources for governance are increasingly affected by the global supply and demand for resources and the elasticity of taxpayers' choices (Dagan, 2018, p. 14).

#### **2.4.3.2 Market Failures**

In Dagan's view, the main problem is not the very existence of the decentralized market for international taxation, but that this decentralized market suffers from market failures. Dagan identifies four types of classic market failures: excessive transaction costs, information asymmetries, free-riding by taxpayers and anticompetitive collusion (Dagan, 2018, p. 220).

With respect to excessive transaction costs: The decentralized structure of international taxation increases transaction costs for both governments and taxpayers by engendering significant conflicts between jurisdictions, thereby creating tax loopholes and double taxation. For taxpayers, double taxation increases cross-border tax risks which need to be managed with resources. To take advantage of loopholes resulting from jurisdictional gaps and frictions, taxpayers must pay tax

planners, and such transaction costs can be excessive. For governments, they need to incur enforcement costs when challenging taxpayers' tax planning schemes and legislative costs when fixing the loopholes by enacting anti-abuse rules. In welfare terms, these are pure transaction costs that reduce social welfare, and they are also net losses for governments, even though governments leave tax loopholes on purpose. The effective solution lies in decreasing tax planning opportunities, thus reducing enforcement costs and the domestic legislation costs of proofing tax planning opportunities (Dagan, 2018, p. 217).

With respect to the second market failure, information asymmetries (Dagan, 2018, p. 218): Countries can use secrecy legislation or opaque tax administration practices to compete for investments, which are often employed by tax haven countries in conducting harmful tax competition. That leads to asymmetric information among governments. Countries often lack the information they need to enforce their tax laws and therefore, operate half-blindly (Dagan, 2018, pp. 218, 232). Instead of directing their enforcement efforts at hidden tax evaders and avoiders, countries are forced to cast a wide net and over-invest in auditing law-abiding taxpayers. This leads to inefficient spending of limited government resources. If no action is taken or the enforcement action is ineffective, the government may be forced to increase taxes on taxpayers who have no capability to conduct tax planning and who therefore already strictly obey the law. Governments thus end up taxing ordinary taxpayers rather than targeting tax planners or tax evaders. Sharing information and increasing transparency will help governments better target tax avoiders, have more freedom to tax the group of taxpayers they prefer to tax, and set the level of taxation of public goods and services (Dagan, 2018, pp. 218, 219, 231, 232).

With respect to the third market failure, free-riding by certain taxpayers (mainly MNEs) (Dagan, 2018, p. 219): Free riding occurs when tax avoiders or evaders manage to enjoy public goods and services without paying their fair share to finance such goods and services. This undermines governments' capacity to provide public goods and services. Generally speaking, governments decide which public goods to offer to their constituents and impose taxes on constituents to pay for them. Because a decentralized international system provides tax planning opportunities for MNEs, MNEs can take advantage of the gaps between national tax systems to avoid paying taxes in countries where they operate. Since countries cannot separately price each feature of public goods and services, or exclude certain taxpayers from benefiting from public goods and services,

MNEs that are engaged in base erosion and profit shifting practices can free-ride in these countries – benefiting from public goods or services without paying (through tax) for them.

With respect to the fourth market failure, the potential for cartel-like tendencies or anticompetitive collusion between and/or among countries. When certain countries cooperate and thereby enable the promotion of initiatives that help them increase their market share of residents and investors, they can raise the “prices” they charge – that is, the taxes they collect. These countries’ cartel-like activities can also lead to insufficient tax competition, creating externalities for other countries or taxpayers, and undercutting market efficiency. This market failure can happen among overly successfully coordination of tax policies among closed groups of countries with corresponding interests (Dagan, 2018, p. 220).

### **2.4.3.3 Addressing Market Failures**

Analysing international tax problems based on a market analogy may provide directions for reform. Dagan proposes to introduce a standard at a global level to target and overcome the above-mentioned market failures. This standard should be transparent and set the “price” that governments can offer in the tax market (Dagan, 2018, p. 230).

According to Dagan, a transparent global standard can reduce information asymmetries, thereby reducing the problems of free riding and excessive transaction costs. The transparency requirement should stipulate information sharing among countries through cooperation.

The standard should be set to limit the deals or options that can be offered by countries to enable taxpayers to opt out of paying taxes or to free ride the welfare system of host countries. In order to promote efficiency in reducing market failures, the standard should have compatible definitions of tax bases and enforcement mechanisms across countries. For example, when this standard is built on the current source-residence paradigm, it should contain unified definitions, categorization of taxable income, taxable entities, timing rules, residency tests, geographical sources of income, dispute resolution models, transition rules, and so on. The standard should function as a comprehensive manual for the operation of international taxation in each cooperating country. At the same time, countries can still compete through different tax rates and the combination of the same elements under the standard. The more detailed the standard, the more efficient it will be in

reducing tax planning opportunities (Dagan, 2018, pp. 237, 238).

Dagan maintains that streamlining tax rules and tax “deals” through a global standard offers several benefits. For example, it would reduce free riding as well a reduction of transaction costs in enforcement and legislation (Dagan, 2018, p. 231). It can reduce tax planning and arbitrage opportunities and tax competition through the use of secret tax administration practices. It could also increase distribution justice by improving governments’ distribution capability through the national income taxation system, and by improving the political legitimacy of countries as political units (Dagan, 2018, pp. 242, 240, 221-222).

In theory, a global tax standard can be self-enforcing and stable when a mass of countries adopts it (Dagan, 2018, p.238). The current international tax system is a network and the proposed global tax standard is built on that. Once a standard is adopted by a substantial number of countries, it will create a network around that standard. The network will generate positive network effects for participating countries, such as being consistent with other countries’ tax systems and making it easier to distinguish between good and bad tax rules. Such positive effects may entice more countries to participate. When more countries join and stay in the network, the value of the standard to its users increases.

However, developing a global tax standard has serious challenges. Dagan suggests two main reasons. First, a supranational institution that gains enough power to affect the inter-national distribution consequences is needed, but unlikely to be established because of concerns about participation and accountability. Forgoing decision-making power to a supranational process can significantly reduce political participation and accountability to local citizens (Dagan, 2018, p. 239). Also, enforcing the standard would be challenging owing to the different capacities of countries to do so and potential undercutting actions from tax haven countries. Countries may fear losing out to tax haven countries by enforcing the standard as the benefits of using a tax haven would increase (Dagan, 2018, p. 240).

## 2.5 Soft Law

The literature on soft law in general and international tax law in particular provides important context for my research. This section reviews the literature in terms of the notion of soft law, theories on the legal effects of soft law and the effectiveness of soft law in international taxation.

### 2.5.1 The Notion of Soft Law

There is no universal definition of soft law in the legal literature. Soft law is defined as “rules of conduct which, in principle, have no legally binding force but which nevertheless may have practical effects” (Snyder, 1994, p. 198). It is described as “commitments which are more than policy statements but less than law” and while without being binding as a matter of law, it has a certain proximity to the law or a certain legal relevance (Thurer, 2004, p. 132). Another definition of soft law refers it as “rules of conduct that are laid down in instruments which have not been attributed legally binding force as such, but may have certain – indirect – legal effects, and that are aimed at and may produce practical effects” (Senden, 2005, p. 17).<sup>27</sup>

Soft law has three core elements: it consists of normative rules of conduct; it is not legally binding; and it influences behaviour in practice. Normative rules stipulate or invite their addressees to adopt certain behaviours or measures related to specific or general commitments. They differ from political statements or instruments aimed at providing information. They lack legally binding force and are thus “soft”, but are intended to produce practical effects or changes in the behaviour of addressees (Senden, 2004, pp. 112-113).

Soft law is different from hard law in terms of its communication model.<sup>28</sup> In general, law guides people's behaviours in reality through legal rules (hard law) or norms (soft law) which deliver normative standards and which lead to expectations of appropriate behaviours. Law performs this

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<sup>27</sup> Boarchardt and Wellens (1989) particularly focuses on community soft law and define it as “rules of conduct which find themselves on the legally non-binding level (in the sense of enforceable and sanctionable) but which according to their drafters have to be awarded a legal scope that has to be specified at every turn and therefore do not show a uniform value of intensity with regard to their legal scope, but do have in common that they are directed at (intention of the drafters) and have as effect (through the medium of the Community legal order) that they influence the conduct of member states, institutions, undertakings and individuals, however without containing Community rights and obligations” (p.285).

<sup>28</sup> For a detailed comparison, see Table 5 placed at the end of this dissertation.

function through a hierarchical and one-way command-and-control model or a two-way (mutual) dialogue model emphasizing persuasion rather than punishment. Hard law reflects the command-and-control model while soft law reflects the dialogue model. Soft law depends on reciprocal interaction and enables the establishment of a community of “discourse,” “talk” or “debates” and ultimately, builds consensus (Gribnau, 2008, 107).

The soft law-making process requires a broad participation of stakeholders. The makers of soft law often identify a fundamental value (for example, equality, fair competition, efficiency) in order to build consensus (Witteveen and Klink, 1999, p. 126). The value lays a foundation for debates, development of agreements and taking action. Communicative-based implementation of soft law can further compel compliance through ongoing dialogue (Witteveen and Klink, 1999, pp. 320-325). In some cases, soft law can turn into international law principles or customary international law, thereby moving into hard law. In the process of making soft law and building consensus, the danger lies in superficial communications, lack of meaningful open debates and lack of equal participation, and manipulation by a few interests (Gribnau, 2008, 107). This is about the democracy in the decision-making process or legitimacy issue of soft law which will be discussed further in the next section. In the area of international law, soft law does not rely on the formal authority and power of the state, and its effect depends on consensus-based decision-making and legitimacy (Kirton and Trebilcock, 2004). Soft law can supplement a hard law instrument or act as a precursor to hard law (Gribnau, 2007, 297).

### **2.5.2 Soft Law as Law**

Soft law is not law according to legal positivists (Kelsen, 1989; Weil, 1983; Klabbers, 1996). According to legal positivists, international law means hard law because for them, law is what states have consented to in agreements or treaties or conventions. For legal positivists, there is a dichotomy between hard law and soft law, as soft law is not law at all. For positivists, it is only possible to distinguish between norms and non-norms based on their legally binding nature (legality), not on a more or less binding force (Weil, 1983, 416; Klabbers, 1996, p. 182). According to legal realists, who see hard law-soft law as a continuum rather than a dichotomy, soft law can be in the nature of law (Baxer, 1980; Gribnau, 2008, 95). According to international legal realists, there is a spectrum and a hierarchy of sources of international law, including international treaties

and conventions, international customary law, and soft sources, such as voluntary standards, codes, and recommendations. Some soft codes, recommendations and best practices can effectively communicate or guide what should to be done even without putting compliance obligations on countries. Some forms of soft law may even have a “specific content that is ‘harder’ than the commitments of treaties” (Shelton, 2003, p. 4; Chinkin, 2003, p. 24). For example, the United Nations Minimum Standard for the Treatment of Prisoners (*the Nelson Mandela Rules*) are widely considered to have become part of customary law (Alston 1995, pp. 1, 12). Therefore, it would be “excessively simplistic to divide norms into those that are binding and those that are not” since even those which are not binding could have certain legal effects (Baxter, 1980, p. 564). Indeed, international law can become disconnected from the real world and unable to guide the behaviour of international actors if it is obsessed with the mechanical application of international norms in a binary “legal” or “illegal” fashion (Duplessis, 2007, p. 268). Further, soft laws can evolve into customary international law when more states adopt them.

### **2.5.3 Legitimacy**

The fact that in the international arena soft law is closely connected to hard law or has influence on the conduct of countries does not mean that it is always legitimate. For example, the legitimacy of soft laws in the international economic system has been a subject of academic and policy debates over the past few decades. International institutions that have generated soft laws, such as the World Trade Organization, the International Monetary Fund and the World Bank are often criticized for producing soft laws that are not consonant with democratic principles (Brummer 2015, p. 183). Critiques of soft law assert that in contradistinction to hard law, it is legislation through the back door devoid of the corresponding public scrutiny and accountability that accompanies the process of enacting hard law (Rose and Page, 2001). This is the legitimacy issue of soft law. Legitimacy deals with the decisions that bind community members and the acceptance by these members of the rules by answering the question, “what gives them the right to that?” (Staden, 2003, p. 20). Legitimacy provides the justification for power (Gribnau, 2007, p. 298; Vega, 2012, p. 8; McLaren, 2009, p. 447; Brummer, 2015, p. 184), distinguishing from legality which provides the validity of power (Gribnau, 2007, p. 297). International legal positivists think legality and legitimacy are identical (Kelsen, 1989). That means they only recognize formal legitimacy (legality) that only derives from hard law that is created and enforced by competent

authorities appointed by the legal system (or formal legal force) (Kelsen, 1989, p. 276). If soft laws are illegitimate and unaccountable, they will not be persuasive and will fail to solve problems for which they were promulgated even if they impose sanctions (Brummer, 2015, p. 184). Countries should obey soft laws that are made through a legitimate process (Franck, 1990; Franck, 2006; Bodansky, 1999; Petersen, 2008)). Legitimacy is thus both the premise and limitation of soft law.

#### **2.5.4 Soft Law Theories**

The literature on soft law includes theories that seek to explain the advantages of soft law and what gives rise to the practical “hard law” effects of soft law. In the international law arena, these theories include the “contractarian analysis” theory, the “soft power” theory, and the “compliance-based theory.”

According to the contractarian analysis theory, soft law serves as a risk-mitigation device in reaching international agreements (Abbott and Snidal, 2000; Lipson, 1991). Drawing on both law and economics frameworks, this theory analogizes the making of international agreements to that of contracts, and conducts a cost-benefit analysis of soft law and hard law. Soft law is dominant in international law practices because of three advantages over hard law. First, making soft law is more efficient and quicker than enacting formal legislation. Negotiation of hard law, such as treaties, often takes years to conclude. Even after reaching agreement, it has to receive the approval of the domestic legislature, which is often time-consuming. Soft laws, by contrast, can avoid some of these lengthy processes because they can be agreed on at the highest levels of governments, administrative agencies, or technocrats.

The second advantage of soft law over hard law is that soft law involves fewer sovereignty costs in the case of non-compliance, such as attracting sanctions, reciprocal noncompliance and damage to a country’s reputation. These costs arising from defaulting on hard laws may restrict a country’s autonomy in critical areas. In other words, empowering supranational institutions to make hard laws in those critical areas undermines the autonomy of states in making their own choices and decisions that would best serve the interests of their peoples (Abbott and Snidal, 2000, pp. 421,

437).<sup>29</sup> In contrast, soft law does not penalise defaulters, respects the autonomy of countries and leave them flexibility to manage their affairs.

The third advantage of soft law over hard law is that soft law can reduce the risk of uncertainty by responding to a regulatory issue in a timely, flexible manner and on a continuous learning curve. Reaching a long-term binding treaty can involve serious sovereignty costs because parties to the negotiations may never fully understand the nature of the problem and the impact of the proposed solution (Abbott and Snidal, 2000, p. 441). Even if parties to the final agreement express reservations about certain provisions, these in themselves could be costly because reservations limit the scope of the application of the treaty to the specific provision. Soft law, on the other hand, provides a collective learning opportunity through which countries can gradually work out the solutions. It allows for experimentation and enables countries to change direction to avoid unpleasant outcomes based on the information that they gather collectively (Abbott and Snidal, 2000, pp. 442).

To sum up, contractarian theory focuses on the efficiency of soft law in addressing emerging issues through informal legislation or cooperation among parties with congruent interests. It argues that soft law is more efficient than hard law by mitigating the legislation risk and other negative effects regarding the time it takes to draft and enact legislation and the lack of sovereignty different countries may have over the resulting hard legislation.

Soft power theory posits that soft law is a force in its own right, originating from the power of persuasion and attraction (Abbott and Snidal, 2000, p. 442). Soft power, unlike coercive military force or economic coercion force, features a non-coercive process and stresses peer to peer collaboration and communication. This key to successful collaboration is the non-coercive process. Since soft law facilitates ongoing productive coordination and cooperation, it should be an alternative model of international rule making (Slaughter and Zaring, 2006, pp. 211, 217). The soft law-making process requires the broad participation of governments and stakeholders, such as international institutions, public agencies, civil society and citizens. Institutional regulators can

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<sup>29</sup> For example, some international investment treaties can restrain countries' regulation capability even if they are beneficial. Some multinational companies based on the investor protections in bilateral investment treaties have sued the Argentina government for its regulatory response to the 2008 financial crisis. William W. Burke-White, *The Argentine Financial Crisis: State Liability Under BITs and the Legitimacy of the ICSID System*, (2008)3 *Asian Journal WTO & International Health Law & Policy*. see Brummer, 2015, p. 130.

leverage this soft power to shape collective policy goals and policy agendas in response to emerging global challenges. Effective dialogue between various participants in a discursive practice may lead to compromise or even consensus, which enables convergence in decision and action (Pollitt, 2001). Soft law based upon consensus on new and complex global challenges that cannot be solved by individual countries tends to have tremendous soft power. Soft law theory emphasizes the reciprocal commitments by countries to one another (Gribnau, 2008, pp. 107, 108, 112).

“Compliance-based theory” emphasizes the importance of enforcement in achieving soft law’s hard law effects (Brummer, 2015, pp.119-182). It sees enforcement as an independent variable in achieving soft law’s legal effects, especially for areas with deep distribution consequences such as international financial law. Compliance-based theory identifies a range of built-in enforcement and disciplinary mechanisms in the area of international financial law. One enforcement mechanism is monitoring of the implementation of standards through formal peer review and informal peer review (non-government monitoring). The disciplines imbued with soft international financial standards include reputational discipline, market disciplines, and institutional disciplines. Examples of built-in mechanisms in soft law are financial assistance, naming and shaming, capital market sanctions, and membership sanctions (Brummer, 2015, pp. 145-161). Therefore, the degree of the “hard edge of soft law” is less a matter of obligation than enforcement (Brummer, 2015, p. 5). This is different from “contractarian analysis” theory that is premised on the idea of efficiency and the relatively congruent interests of the parties, which fosters effective cooperation, and the “soft power” theory that is based on the idea of reciprocal commitments by similarly situated, albeit decentralized countries. Compliance-based theory requires more disciplinary measures and sees imposing costs for defection or enforcement as particularly important (Brummer, 2015, p.132).

## **2.6 Soft Law in International Taxation**

### **2.6.1 Significance**

International taxation deals with “the tax treatment of international transactions and other arrangements that give rise to intersecting tax claims by more than one country based on the proximity of a taxpayer or an income-earning activity (nexus) to those countries” ( Li et al., 2018,

p. 102). The central question that the international tax regime needs to answer is how to conduct “the fair and efficient division of international income between sovereign nations” (Li et al., 2018, p. 102). This core question comes down further into when, whether, and to what extent countries should have jurisdiction to assert tax claims concerning other nations. However, there is no supranational body that imposes income taxes ( Li et al., 2018, p. 102). The real international tax law lies in the international aspect of domestic tax laws and bilateral tax treaties. For example, Canadian international tax rules exist in the *Income Tax Act* (R.S.C., 1985, c. 1(5<sup>th</sup> Supp.)) and in over 90 bilateral tax treaties that Canada has concluded with other countries.

Soft law plays a significant role in addressing international tax matters. In fact, most of the outcomes of the BEPS Project are in the nature of soft law. Soft law has a long history. For example, the solution for the central problem of international taxation – double taxation – was explored by the League of Nations in the form of soft law as early as the 1920s – the 1923 report (League of Nations, 1923) and model conventions. At present, common forms of soft law in international taxation include the model tax conventions developed by the OECD and UN,<sup>30</sup> the OECD Commentaries on the OECD Model Convention, Transfer Pricing Guidelines,<sup>31</sup> the OECD recommendations, best practices and standards.

## 2.6.2 Soft Law Makers

The OECD is considered as the foremost authority on international tax matters (Saw, 2018, ll. 7969-7973) or the “purveyor” of soft law in international taxation (Christians, 2017, p. 1614). It has claimed itself as “a market leader in developing standards and guidelines” based on its logic of appropriateness (OECD, 2008, pp. 74-75). The OECD plays an important role in assisting member countries in collecting revenue or in safeguarding existing revenue through soft law. Since the 1960s, the OECD has been the main forum for transnational tax collaboration and tax norm-

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<sup>30</sup> OECD, *Model Tax Convention on Income and on Capital: Condensed Version 2017* (OECD: Paris, 2017) ([https://www.oecd-ilibrary.org/taxation/model-tax-convention-on-income-and-on-capital-condensed-version\\_20745419](https://www.oecd-ilibrary.org/taxation/model-tax-convention-on-income-and-on-capital-condensed-version_20745419)); United Nations, *Model Double Taxation Convention between Developed and Developing Countries* (New York: UN, 2017) ([https://www.un.org/esa/ffd/wp-content/uploads/2018/05/MDT\\_2017.pdf](https://www.un.org/esa/ffd/wp-content/uploads/2018/05/MDT_2017.pdf)).

<sup>31</sup> OECD, *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations* (OECD: Paris, 2017) (<https://www.oecd.org/tax/transfer-pricing/oecd-transfer-pricing-guidelines-for-multinational-enterprises-and-tax-administrations-20769717.htm>).

making.<sup>32</sup> Given their highly technical nature, international tax problems are often beyond a state's capability to address. This is especially the case with the development of economic globalization. Its high-level technical expertise enables the OECD to create or exercise soft power (Ring, 2010a). OECD-made soft laws, such as the OECD Model Tax Convention has been widely adopted into bilateral tax treaties, thus turning it into hard law.

However, as a soft law provider, the OECD faces some challenges, especially in areas involving highly political, complex, and divergent interests or having distribution consequences. Its processes are sometimes criticized for being opaque and exclusive (Rixen, 2009, p. 6). One example is the 1990s OECD HTC Project (Marcussen, 2004, p. 112; Massanet, 2005, pp. 16-17). The opacity of the OECD's soft law-making processes has raised transparency issues, the issue of the absence of public participation, and the issue of the marked lack of democratic control, reminiscent of national legislation (Carrero, 2007; Christians 2010).

Given its membership, in spite of its efforts to include non-member countries, the OECD often suffers from lack of sufficient legitimacy in creating soft laws that have global implications or that directly affect the interests of emerging and developing countries (Marcussen, 2004, p. 112). Since the inception of the BEPS project, the G20 has joined the OECD as makers of soft laws, which has mitigated the legitimacy issue as discussed in the BEPS project literature.

## **2.6.3 Main Sources**

### **2.6.3.1 The OECD Model Convention and Commentaries**

The OECD Model Convention is the basis for the existing 4,000 or so bilateral tax treaties worldwide. The Model Convention facilitates the negotiation of bilateral tax treaties among countries. It originated from the earlier League of Nations model conventions. The idea of using a model tax convention was meant to achieve two objectives: to create a uniformity of treaty

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<sup>32</sup> OECD originated from Organization for European Economic Cooperation ("OEEC") which was formed in 1948 with the aim to design and implement the economic recovery of Europe in the aftermath of World War II. In 1960, OECD was formed when the US and Canada joined with 18 members of OEEC in signing a multilateral treaty titled "OECD convention" (entered into force on September 30, 1961). Congress of the US Joint Committee on Taxation, *Background, Summary, and Implications of The OECD/G20 Base Erosion and Profit Shifting Project* (Washington: Congress of the US, 2015), p. 2.

practices by providing the basis or model for bilateral agreements; and to allow sufficient flexibility to treaty negotiators to make modifications that are needed to adapt to the different conditions in different countries (League of Nations, 1935, p. 4). In 1956, the Fiscal Committee of Organisation (the predecessor of the Committee on Fiscal Affairs) for the European Economic Co-operation (OEEC) (the predecessor of the OECD) took over the task of drafting a new model treaty to deal with the double taxation issue that increasingly occurred among member countries as the backdrop of increasing economic interdependence and cooperation of member countries in the post-war period. By referring to the London model tax convention as well as the OECD member countries' bilateral treaty practices, a draft OECD model was published in 1963. The OECD published a revised model in 1977. In 1992, the publication of the model and commentaries was converted to loose-leaf format to enable more frequent revisions.<sup>33</sup> The latest 2017 version incorporates the recommendations from the BEPS Project. Despite its constant updates, the general structure of the OECD Model Convention has not changed since 1967.<sup>34</sup>

As soft law, the OECD Model Convention is incredibly successful. Virtually all modern treaties are based in substantial part on the OECD Model (Li et al., 2011, p. 36; Arnold and McIntyre 2002, p. 7). The UN Model Convention follows the same structure and incorporates many provisions of the OECD Model.<sup>35</sup> About 75 percent of the language of all existing bilateral tax treaties is identical to the language of the OECD Model Convention (Avi-Yonah, 2017). Non-OECD member countries have indirectly adopted the OECD model in treaty negotiations through the UN Model Convention, which is heavily based on the OECD Model Convention. These countries often refer to the OECD Model Convention when negotiating and concluding tax treaties (Arnold and

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<sup>33</sup> So far, the OECD model has a 1997 version, 1992 version, 1998 version, 2000 version, 2003 version, 2005 version, 2008 version, 2010 version, 2014 version, 2017 version. Organisation for Economic Co-operation and Development, *Model Tax Convention on Income and on Capital: Condensed Version 2017*, (OECD: Paris, 2017). ([https://www.oecd-ilibrary.org/taxation/model-tax-convention-on-income-and-on-capital-condensed-version\\_20745419](https://www.oecd-ilibrary.org/taxation/model-tax-convention-on-income-and-on-capital-condensed-version_20745419)).

<sup>34</sup> The OECD model treaty includes four parts, 1) the general introduction which includes coverage, scope and general definition; 2) assignment of taxing rights over main categories of income among countries; 3) methods to eliminate double taxation, and 4) special provisions on cooperation. Li, 2003, p. 46.

<sup>35</sup> The UN model was firstly published in 1980, and so far, the UN model has a 1980 version, 2001 version, 2011 version, to most current 2017 version. United Nations, *Model Double Taxation Convention between Developed and Developing Countries* (New York: UN, 2017) ([https://www.un.org/esa/ffd/wp-content/uploads/2018/05/MDT\\_2017.pdf](https://www.un.org/esa/ffd/wp-content/uploads/2018/05/MDT_2017.pdf)). United Nations, *United Nations Model Double Taxation Convention between Developed and Developing Countries* (UN, 2011) (<https://www.un.org/development/desa/capacity-development/tools/tool/united-nations-model-double-taxation-convention-between-developed-and-developing-countries-2011>).

McIntyre, 2002, p. 46).

The OECD Commentary on Model Tax Convention provides explanations about the meaning of each Article of the Model. The commentary has been widely accepted as a guide to interpreting tax treaty provisions. For example, in *Crown Forest Industries v. Canada* (1995), the Supreme Court of Canada deemed the OECD commentary to be “of high persuasive value” in interpreting and applying a tax treaty (para. 55). The Federal Court of Appeal stated in *Canada v. Prévost Car Inc.* (2009),

“The worldwide recognition of the Model Convention...has made the Commentaries on the provisions of the OECD Model a wide guide to the interpretation and application of provisions of existing bilateral conventions... The same may be said with later commentaries, when they represent a fair interpretation of the words of the Model Convention and do not conflict with Commentaries in existence at the time a specific treaty was entered and when, of course, neither treaty partner has registered an objection to the new Commentaries” (para 10-11).

Through making changes to the Commentaries to illuminate (as opposed to change) the meaning of provisions of the Model, the OECD makes it easier to keep the Model current without actually changing the Model itself and without triggering the renegotiation of existing tax treaties. The ambulatory approach to treaty interpretation makes the OECD Model and the OECD Commentary particularly effective as a form of soft law (Grinberg, 2016, p. 1191).

### **2.6.3.2 The Arm’s Length Principle and the OECD Transfer Pricing Guidelines**

The OECD Transfer Pricing Guidelines interpret the arm’s length standard in article 9 of the OECD Model Convention and provide detailed guidance to taxpayers and tax administrations. An empirical study shows that the arm’s length principle and the Transfer Pricing Guidelines are in effect, almost hard law in their impact on national transfer pricing laws, tax administrative practices and case law (Vega, 2012). The arm's length principle can be considered as part of customary international law based on its wide acceptance by OECD and non-OECD countries (Avi-Yonah, 2004, pp. 499, 500) or its serving as “a practical and balanced standard” for both tax authorities and taxpayers (OECD, 2015b, p. 9).

The OECD Transfer Pricing Guidelines are explicitly referred to in domestic legislation in Australia, Belgium, Canada, Germany, Namibia, New Zealand, South Africa, Switzerland and the

UK and in case law in Canada, Germany, Italy, Kenya, Spain and Switzerland (Vega, 2012, p. 24). In Canada, case law such as *GE Capital*, *GlaxoSmithKline*, *Smithkline Beecham Animal Health Inc* indicate Canadian courts' deference to the OECD Transfer Pricing Guidelines.<sup>36</sup> The Canada Revenue Agency (CRA) adopted the OECD Transfer Pricing Guideline in its administrative rules – such as *CRA Income Tax Information Circular C87-2R*, of 27 September 1999 that covers transfer pricing methods recommended in the OECD guidelines. The latest 2017 version of the OECD Transfer Pricing Guideline that incorporated BEPS Actions 8 to 10 on transfer pricing were adopted by Canada in *the 2018 Canadian Federal Budget* of February 27 2018.

### 2.6.3.3 OECD Recommendations and Standards

OECD publishes reports on tax matters, such as the reports on harmful tax competition as part of the 1990s OECD HTC Project and the reports published as part of the BEPS Project. These reports often contain recommendations, norms or standards for countries to adopt, and thus function as soft laws.<sup>37</sup>

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<sup>36</sup> In *Smithkline Beecham Animal Health Inc.* (para. 8), the court mentioned, “It appears to be common ground that the OECD Guidelines inform or should inform the interpretation and application of subsection 69(2) of *Income Tax Act* (predecessor provision of section 247 of *Income Tax Act*).” See *Canada v. General Electric Capital Canada Inc.* (2010); *Canada v. GlaxoSmithKline Inc.*, (2012); *Smithkline Beecham Animal Health Inc. v. Canada*, (2002).

<sup>37</sup> The “1998 report,” the “2000 report,” and the “2001 report” from 1990s OECD HTC Project which were discussed earlier, are such examples. However, these reports, failed at the consensus building phase when some countries abstain from approving these reports, the efforts to develop an approach to fulfill the substantial activity requirement were also abandoned. The reasons for the failure, lie in the democratic deficit in consensus building process and some implementation problems, which will be discussed in detail in Chapter 5.

## **Chapter 3 The Nexus Standard**

### **3.1 Overview**

This chapter examines the nexus standard in terms of the notion of nexus, the development of the nexus approach in the process of BEPS Action 5, and the adopting of the nexus approach as a minimum global standard. It uses the design and effect of pre-BEPS patent box regimes in the Ten Countries as part of the background to illustrate the need for the nexus standard to address harmful international tax competition.

### **3.2 Nexus: The Idea and Technical Design**

#### **3.2.1 Substantial Activity and Nexus**

The nexus approach was adopted in the BEPS Action 5 Final Report on Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance” (*Action 5 Report*, p. 9). Action 5 addresses harmful tax practices associated with intellectual property (IP) preferential tax regimes, such as patent boxes, by requiring patent box regimes to incorporate a substantial activity test and to adopt a transparency framework. Its stated goal is to realign taxation (or preferential taxation) of profits with substantial activities (*Action 5 Report*, p. 9). A country’s patent box regime is not harmful if it applies to income derived from substantial activities conducted in that country – the nexus approach. In other words, a taxpayer cannot benefit from an IP preferential tax regime unless it has conducted substantial activities in the country that gave rise to the IP income. As such, the term “nexus” describes the substantial activity test, denoting a connection or linkage between a taxpayer’s income and the patent box country. It is designed “to describe the outer limits of a preferential IP regime that grants benefits to R&D, but does not have harmful effects on other countries” (*Action 5 Report*, p. 24).

The nexus approach revamped the substantial activity requirement in the 1998 OECD Report (OECD, 1998) on harmful tax practices. That earlier requirement focuses on whether a regime “encourages purely tax-driven operations or arrangements”, but insufficient guidance was given

in the 1998 Report as to how this requirement was to be applied (OECD, 1998, pp. 25-34). The *Action 5 Report* elaborates on the meaning and scope of the nexus approach, such as defining qualifying taxpayers, qualifying IP assets, qualifying income and determining the nexus and the amount of qualifying income that is attributed to the nexus. Some of these elements will be discussed further in Chapter 4 of this dissertation.

### **3.2.2 R&D Expenditures as Proxy**

The nexus approach uses qualifying research and development (R&D) expenditures that gave rise to the IP income to measure the extent of nexus. This approach entails two aspects: a scoping or qualitative nexus and a quantitative nexus. The qualitative nexus uses the *amount* of R&D expenditures as a proxy. This is consistent with the concept that the purpose of IP regimes is to encourage R&D activities and to foster growth and employment (*Action 5 Report*, pp. 9, 24). Such a proxy ensures that taxpayers benefiting from these regimes have actually engaged in such activities and that they have incurred actual expenditures on such activities. The quantitative nexus is measured by the proportion of qualifying R&D expenditures to overall R&D expenditures, and that proportion determines the proportion of IP income that may benefit from the IP regime. In other words, the quantitative nexus applies a proportionate analysis to income and the underlying expenditures that generate the income (*Action 5 Report*, p. 25). The proportion of qualifying IP income to a taxpayer's overall IP income equals the proportion of R&D tax expenditure and the overall R&D expenditure.

Qualifying expenditures are not defined directly in the *Action 5 Report*. Instead, countries are allowed to use their own definitions under domestic R&D tax incentive legislation (*Action 5 Report*, p. 27). However, qualifying expenditures “must have been incurred by a qualifying taxpayer, and they must be directly connected to the IP asset.” (*Action 5 Report*, p. 27). Generally speaking, these expenditures include R&D personnel wages, direct costs, indirect costs, supply costs and depreciation, and other expenditures that help advance the understanding of science, tackle science difficulties, and develop science programs.

The overall R&D expenditures “must be the sum of all expenditures that would count as qualifying expenditures if they were undertaken by the taxpayer itself” (*Action 5 Report*, p. 28). Where a

qualifying taxpayer purchases an IP asset or outsources R&D activities, the acquisition costs and expenditures for outsourcing are a proxy for expenditures incurred by a non-qualifying or different taxpayer. As such, such acquisition costs and outsourcing payments do not count as qualifying R&D expenditures of the qualifying taxpayer. They are, however, included in the “overall expenditures”. It is this difference between “qualifying expenditures” and “overall expenditures” that makes the proportionate analysis important in the nexus approach.

### **3.2.3 The Modified Nexus Approach**

Outsourced R&D expenditures and acquired R&D expenditures among related parties are treated differently under the nexus approach in EU and non-EU contexts. EU countries, especially the UK, expressed concerns about this disparity. In order to reach a consensus, a modified nexus approach was adopted for application in the EU context. Under this approach, acquisition costs and expenditures for outsourcing to related parties are included in a 30% uplift (*Action 5 Report*, p. 27). This 30% uplift allows a qualifying taxpayer to include in its qualifying expenditures the acquisition cost and outsourced expenditures as long as such expenditures do not exceed 30% of self-incurred qualifying expenditures. The purpose of the uplift is to avoid taxpayers being excessively penalised for acquiring IP or outsourcing R&D activities to related parties under the nexus approach (*Action 5 Report*, p. 28).

### **3.2.4 Tracking of Qualifying Income and Expenditures**

The nexus between qualifying expenditures and qualifying income must also be established. Such tracking is critical. *Action 5 Report* notes that:

“Since the nexus approach depends on there being a nexus between expenditures and income, it requires jurisdictions wishing to introduce an IP regime to mandate that taxpayers that want to benefit from an IP regime must track expenditures, IP assets, and income to ensure that the income receiving benefits did in fact arise from the expenditures that qualified for those benefits” (p. 30).

The *Action 5 Report* allows flexibility for countries to adopt specific methods of tracking. It provides some details about a product-based approach and imposes a documentation requirement to trace IP income to products that are, in turn, traced to qualifying R&D expenditures.

In determining whether qualifying R&D expenditures occur in a country, there is an “entity approach” adopted by EU countries and a “location approach” applicable to other countries (*Action 5 Report*, p. 42; Faulhaber, 2017a, p. 1646). The EU approach defines qualifying R&D expenditures by focusing on which entity undertook the R&D activities, rather than where the qualifying R&D expenditures occurred. Under this approach, the qualifying R&D expenditures do not have to occur within the territory of the EU country providing a patent box as long as they occur within the EU. This is because EU law prohibits a territorial restriction on tax benefits in the single EU market (*Action 5 Report*, pp. 16, 19; Sanz-Gomez, 2015). The entity approach views all EU countries as a single EU economic block and applies the location requirement to the whole EU, rather than individual EU countries. Since the entity version of nexus allows qualifying R&D expenditures to occur abroad in the EU context, it excludes expenditures for outsourcing R&D activity to related parties as qualifying R&D expenditures. It also excludes intellectual property acquisition costs among associated companies from qualifying R&D expenditures. Only R&D expenditures occurring after acquisition are qualifying R&D expenditures. At the same time, allowing 30 percent uplift of these expenditures as discussed in the last section *The Modified Nexus Approach*.

The location approach requires qualifying R&D expenditures to occur within patent box countries. If a patent box regime has a location requirement and does not allow offshore outsourcing R&D activities among related parties, it allows outsourcing R&D expenditures to related parties in the same country as qualifying R&D expenditures because there is no chance of eroding other countries’ tax bases when outsourcing R&D expenditures occurring within the same country. The location approach is seen as the most logical and intuitive way to restrict the harmful effects of patent box regimes by being more consistent with host countries’ stated goal of encouraging R&D (Faulhaber, 2017a, p.1644).

To sum up, under the nexus approach, a patent box regime is not a harmful tax practice if taxpayers who receive patent box benefits have conducted the required level of R&D activities. By setting common criteria for patent box regimes, the nexus approach standardizes the design of all patent box regimes.

### 3.2.5 Minimum Standard

The nexus approach was adopted as a minimum standard by the BEPS Action 5 to be implemented by countries that participate in the BEPS Inclusive Framework. As a minimum standard, the nexus approach was intended “to tackle issues in cases where actions by some countries would have created negative spillovers (including adverse impacts on competitiveness) on other countries.”<sup>38</sup> Because patent box tax benefits can be granted only to taxpayers that performed in-country qualifying R&D activities, such tax benefits do not erode other countries’ tax base. This distinguishes a nexus-based patent box regime from a preferential tax regime designed to attract mobile income created in other countries. In essence, the nexus principle is to level the playing field with a substance requirement, according to which all countries grant preferential tax treatment to “profits where economic activities generating those profits are performed and where value is created” (*Action 5 Report*, p. 3).

More importantly, the nexus standard is expected to have broader applications beyond preferential IP regimes. The *Action 5 Report* states: “This same principle can also be applied to other preferential regimes, so that such regimes would be found to require substantial activities where they grant benefits to a taxpayer to the extent that the taxpayer undertook the core income-generating activities required to produce the type of income covered by the preferential regime” (p. 37).

## 3.3 Motivations for Creating the Standard

There were several motivations for developing the nexus standard. The most important one was to counter the harmful tax practices exemplified by the existing patent box regimes through revamping the OECD’s earlier work. Other motivations were to prevent a ‘race to the bottom’ problem as more countries were contemplating joining international tax competition, as well as to prevent countries from taking unilateral actions that would damage the economies of neighbouring countries.

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<sup>38</sup> OECD, *OECD/G20 Base Erosion and Profit Shifting Project 2015 Final Reports, Top 10 Questions about BEPS Existing Standards* (Paris: OECD, 2015), at 5 ([www.oecd.org/ctp/beps-frequentlyaskedquestions.htm](http://www.oecd.org/ctp/beps-frequentlyaskedquestions.htm)).

### 3.3.1 The Problem of Harmful Tax Competition

As discussed in Chapter 2 regarding the patent box literature, pre-BEPS patent box regimes were designed very differently. One group of patent box regimes, such as those adopted by Cyprus, Hungary, and Luxembourg, were designed to attract mobile IP income. For example, Cyprus' patent box regime had a 2% patent box tax rate, applied to almost all IP including marketing intangibles such as trademarks, which had the least connection to innovation or R&D activities (Evers, 2015, pp. 52, 55). There is also no nexus or R&D activity requirement when granting generous tax benefits. Such regimes provided taxpayers with tax planning opportunities to shift mobile IP income without shifting substantial R&D activities to patent box jurisdictions. Under such regimes, there would be no need to interpose a Dutch conduit company such as the one in the well-known Google "Double-Irish-Dutch Sandwich" scheme (Fuest, 2013, p. 7). An MNE operating in the EU would not need to shift IP profits outside the EU in order to minimize tax. For example, an operating company could shift IP income to an IP holding company in a patent box jurisdiction without attracting royalty withholding tax<sup>39</sup> in the operating country, while benefiting from the patent box treatment in the holding country.

Research shows that if one European country introduces a patent box, other EU countries can suffer a tax revenue reduction from patent income (Griffith et al, 2011, p. 31). For example, when France introduced a patent box, the patent share of the UK, which did not have a patent box at that time, fell from 16.81% to 13.42% (Griffith and Miller, 2011). So, these neighbouring countries also introduced patent boxes. The UK introduced one in 2013, which apparently led to an increase in the UK's share of new patents, at the expense of the neighbouring countries (EC, 2014, p. 45).

Countries competed with one another in enacting patent boxes and increasing the level of generosity in tax benefits. For example, in 2010, the Dutch patent box rate dropped from 10% to

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<sup>39</sup> EU directive repeal withholding taxes on intra-group payments of interest and royalties among EU member countries. See *Council Directive 2003/49/EC* of 3 June 2003 on a Common System of Taxation Applicable to Interest and Royalty and Royalty Payments Made between Associated Companies and Different Member at <https://eur-lex.europa.eu/eli/dir/2003/49/2013-07-01>.

5%. In 2013, Spain increased its percentage of exempt income from 50% to 60%, equivalent to a change in the patent box rate from 15% to 12% (Ibanez and Velasco, 2013; Evers, 2015, pp. 52-53). In 2008, the qualifying IP scope was widened and allowed non-patented, intangible assets for which an R&D certificate had been granted to benefit from the regime.<sup>40</sup> For example, in 2008, the scope of qualifying income under the French patent box regime was extended to capital gains from the disposal of a qualifying IP (Taieb, 2008, p. 14). In 2012, Hungary introduced a 100% exemption of capital gains from the disposal of a qualifying IP under its patent box regime. In 2013, Spain's patent box expanded to capital gains from the disposal of a qualifying IP to unrelated parties and switched from a net income to a gross income approach, which led to a lower effective patent box tax rate (Eynatten and Brauns, 2010; Felder (2013), p. 89; Hohage et al., 2010, p. 50; Evers, 2015, p. 54). The caps on tax benefits of patent box regimes in the Netherlands and Spain became more beneficial. In 2010, the patent box cap that limits the amount of qualifying income to four-times the R&D investment expenditure was abolished in the Netherlands (Sunderman, 2007, p. 227; Evers, 2015, p. 53). In 2013, the cap on the patent box benefit that was six-times the costs of the IP was abolished in Spain (IFA, 2015, p. 699; Evers, 2015, p. 53). At the same time, some patent box regimes, such as Spain, relaxed IP development conditions to allow more IP income to qualify.<sup>41</sup>

Clearly, the risk of a race to the bottom became significant between 2010 to 2013 and it could ultimately drive applicable tax rates on IP income to zero for all countries (*Action 5 Report*, p. 12). Germany called on the EU to abolish UK patent box on the grounds that the UK regime could lead to unfair competition for foreign investment.<sup>42</sup> France, Germany and Italy called on EU members to align tax policies to ensure that MNEs could not escape taxation by relocating to other nations.<sup>43</sup>

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<sup>40</sup> In Luxembourg, the first version of a patent box applied to income derived from copyright on software, patents, trademarks, design models; the eligible IP scope was extended to domain names in 2008 (*Law* dated 19 December 2008). In Malta, the patent box regime originally applied to patents only. As of January 2012, the regime additionally applies to copyrights and trademarks (Arts. 13 of the *Budget Measures Implement Act 2012*, Art. 22 of the *Budget Measures Implement Act 2013*).

<sup>41</sup> Spain relaxed the R&D development condition through reform. For example, Spain extended the scope of its patent box regime to intangible assets substantially generated by the entity, only requiring that the transferor entity must have developed the intangible asset at up to 25% of its total cost (IFA, 2015, p. 699).

<sup>42</sup> CMS Cameron McKenna Nabarro Olswang LLP, "EC to review UK Patent Box Regime (again)," *Lexology*, April 29 2014. ([www.lexology.com/library/detail.aspx?g=e09b1037-4274-46ac-b21e-55c5fa30e930](http://www.lexology.com/library/detail.aspx?g=e09b1037-4274-46ac-b21e-55c5fa30e930)).

<sup>43</sup> Rebecca Christie, "EU Tax Working Group to Propose Retool of Patent Boxes", *Bloomberg Business* (5 December 2014) ([www.bloomberg.com/news/articles/2014-12-05/eu-tax-working-group-to-propose-retool-of-patent-boxes](http://www.bloomberg.com/news/articles/2014-12-05/eu-tax-working-group-to-propose-retool-of-patent-boxes)).

Coordinating tax settings under patent box regimes was seen as beneficial to the EU, as IP income would be less mobile between the block of EU countries as an economic union and the rest of the world (Griffith and Miller, 2011).

### 3.3.2 Revamping OECD's Work on Harmful Tax Competition

The problems associated with patent box regimes had not been part of the OECD's previous work on harmful tax competition. Members of the FHTP including EU members, such as Germany, France, the UK, and Italy expressed concerns about some features of patent box regimes and supported the issues to be addressed as part of the BEPS Project. Action 5 committing the FHTP to,

“Revamp the work on harmful tax practices with a priority on improving transparency, including compulsory spontaneous exchange on rulings related to preferential regimes, and on requiring substantial activity for any preferential regime. It will take a holistic approach to evaluate preferential tax regimes in the BEPS context. It will engage with non-OECD members on the basis of the existing framework and consider revisions or additions to the existing framework.”<sup>44</sup>

The Forum on Harmful Tax Practices delivered a progress report in 2014, negotiated an agreement on the modified approach in 2015 and produced the final *Action 5 Report* in 2015.

As stated in the *Action 5 Report*, both the transparency requirement and the substantial activity requirement of the 1998 Report were revamped.<sup>45</sup> The nexus standard is a more elaborate articulation of what constitutes substantial activity, and the exchange of information mechanism strengthens the earlier transparency framework.

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<sup>44</sup>OECD, Resumption of Application of Substantial Activities for No or Nominal Tax Jurisdictions- Action 5 (Paris, OEC, 2018), p. 7. (<https://www.oecd.org/tax/beps/resumption-of-application-of-substantial-activities-factor.pdf>)

<sup>45</sup> These 12 key factors include four “key factors” and eight “other factors.” Compared to the four key factors, the eight other factors were not, on their own, sufficient to identify the harmfulness of preferential tax regimes. The four key factors included whether the regime: (i) had a lower tax rate than the overall tax rate in the country, (ii) was ring-fenced such that it provided benefits only to foreign investors, (iii) lacked transparency, and (iv) lacked effective exchange of information with other interested countries. The other factors were: (I) an artificial definition of the tax base, (ii) failure to adhere to international transfer pricing principles, (iii) foreign source income exempt from residence country tax, (iv) negotiable tax rate or tax base, (v) existence of secrecy provisions, (vi) access to a wide network of tax treaties, (vii) regimes which are promoted as tax minimization vehicles, and (viii) the regime encouraging purely tax-driven operations or arrangements.

### 3.3.3 Preventing Unilateral Actions

A major motivation for BEPS Action 5 was to have a coordinated approach as opposed to a unilateral approach to counter harmful tax practices (OECD, 2014, pp. 6-8). Countries that suffered from the harmful effects of pre-BEPS patent box regimes were motivated to take countermeasures. For example, in May 2013, Germany's Finance Minister called on the EU to bar the UK patent box that was introduced in April 2013 on the grounds that it would result in unfair competition for foreign investment and to ensure protection of its tax base. With high R&D intensity and government spending on R&D,<sup>46</sup> Germany started to lose to patent box regimes and strongly advocated restricting other EU countries' use of such regimes designed to attract mobile income. In the same year, the EU Code of Conduct Group restarted its examination of patent box regimes by putting the UK and Cyprus patent box regimes on its agenda.<sup>47</sup>

Subsequently, Germany successfully mobilized its position against patent box regimes in the OECD and the G20 and facilitated the formation of the nexus approach under the *Action 5 Report*. Germany also worked with the United Kingdom in developing the modified nexus approach (OECD, 2015a, p. 3). The modified nexus approach contributed to the successful negotiations ultimately leading to the adoption of the nexus approach. The nexus approach, representing a multilateral standard, prevents countries from taking unilateral measures.

## 3.4 Inclusive Process of Standard-making

Inclusiveness in the process of developing the nexus standard is considered important in enhancing the legitimacy of the standard. Such inclusiveness is evident by the number and range of participants engaged in an open and consultative format.

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<sup>46</sup> See Eurostat, "R&D expenditure in the EU remained stable in 2016 at just over 2% of GDP-" *Eurostat News Release*, 183/2017 - 1 December 2017) (<http://ec.europa.eu/eurostat/documents/2995521/8493770/9-01122017-AP-EN.pdf/94cc03d5-693b-4c1d-b5ca-8d32703591e7>).

<sup>47</sup> The Code of Conduct group focuses on two aspects in reviewing patent box regimes: how economic substance in the context of patent box regimes is defined and whether patent box regimes can, in principle, support and promote real economic activity. CMS Cameron McKenna Nabarro Olswang LLP, "EC to review UK Patent Box Regime (again)," *Lexology*, April 29, 2014. ([www.lexology.com/library/detail.aspx?g=e09b1037-4274-46ac-b21e-55c5fa30e930](http://www.lexology.com/library/detail.aspx?g=e09b1037-4274-46ac-b21e-55c5fa30e930)).

Forty-four countries participated on “an equal footing” in BEPS Action 5. These included OECD members, OECD associate countries, G20 countries, as well as developing countries. For example, Brazil and India participated in the creation of BEPS Action 5. Singapore, Ukraine, Uruguay, Colombia and Brazil saw BEPS Action 5 as priority items. Developing countries engaged in the process of developing the standard through direct participation in the meetings organized by the Committee on Fiscal Affairs of the OECD or indirect participation through international organizations (such as the International Monetary Fund, the World Bank and the United Nations) or regional tax organizations (such as, the African Tax Administration Forum, the Centre de rencontre des administrations fiscales and the Centro Interamericano de Administraciones Tributarias) (Shay and Christians, 2017, pp. 39-61).

Non-governmental stakeholders such as industry advisors, NGOs and academics were also consulted. Views from these stakeholders were solicited through 14 public consultations. In addition, discussion drafts of the standard were made available on the OECD website for comment (*Action 5 Report*; OECD, 2015a).

The process resulting in a consensus on the nexus approach was inclusive. The Forum on Harmful Tax Practices suggested three approaches to meeting the substantial activity requirements in a patent box regime; namely, the value creation approach, the transfer pricing approach and the nexus approach. The value creation approach would require taxpayers to undertake a set number of significant IP development activities in order to be eligible for the patent box regime. None of the participating countries supported this approach. The transfer pricing approach would allow a patent box regime to provide tax relief for all income generated by the IP, as long as taxpayers located a set level of important functions in the patent box country. Taxpayers would need to be the legal owner of IP assets and to bear the economic risks of IP assets. Only four countries, namely Luxembourg, the Netherlands, Spain and the UK supported this approach. The nexus approach received support from 40 participating countries and became the approach adopted in Action 5 (*Action 5 Report*, pp. 9, 24).

Furthermore, among the participating countries, negotiations and “bargaining” took place in the process of building consensus (Simmons and Elexica, 2014). For example, the EU, Germany and

the UK proposed a modified nexus approach in November 2014 (OECD, 2015a), which was eventually agreed to by other countries. The process also allowed discussions about other concerns to be expressed by various countries, such as the compatibility of the nexus approach with the EU law, the definition of qualifying R&D expenditures, transitional measures, and the methods of tracking and tracing R&D expenditures. Germany and the UK jointly proposed a compromise that would allow existing regimes to continue until 2021, while new entrants would adopt the nexus approach in 2016 (OECD, 2015a, pp. 3-4).

### 3.5 Transparency

Transparency is the other pillar in the twin-pillar of Action 5. It ensures the nexus approach is implemented and that harmful tax practices based on secrecy are prevented. The transparency framework includes the compulsory spontaneous exchange of information on certain patent box rulings and certain report obligations for monitoring patent box regimes' purposes. The Forum on Harmful Tax Practices (FHTP) oversees this framework.

The Forum employs a filter approach<sup>48</sup> to spontaneous exchange of information on taxpayer-specific rulings. Countries are expected to report the cases where they do not have sufficient information to identify all the countries that they needed to exchange information with and therefore, need to apply a best efforts approach (*Action 5 Report*, p. 68). Through the exchange of information on their patent box regimes and the implementation of such regimes, countries are expected not to use secret tax rulings to engage in harmful tax competition.

This transparency requirement is important to the FHTP in monitoring and enforcing the nexus standard. It helps to ensure that the nexus standard is not only implemented through legislation, but also in administrative practice. It is also subject to peer review (see below). Countries need to establish monitoring procedures and notify the Forum on the legislative progress and implementation of the patent box involving the third category of qualifying IP (other patents, like

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<sup>48</sup> If the patent box regime is: (1) within the scope work of FHTP, (2) the regime is preferential, (3) and it meets the low or no effective tax rate criterion, then there will be an obligation for patent box countries to exchange information spontaneously.

IP).<sup>49</sup> Countries also need to establish monitoring procedures and notify the Forum of the circumstances in which they would allow the nexus ratio to be treated as a rebuttable presumption.<sup>50</sup> The transparency framework of Acton 5 defers to the Global Forum on Transparency and Exchange of Information for Tax Purposes with regard to the confidentiality aspect (OECD, 2018, p. 26).

### 3.6 Implementation

Implementation of the nexus standard takes place within the BEPS Inclusive Framework. All participating jurisdictions in the Inclusive Framework are committed to implementing the minimum standards, including the nexus standard. In practice, the nexus standard has been incorporated into in 24 IP regimes worldwide (OECD, 2019, pp.18-19, 21-23). These 24 IP regimes include the patent box regimes in the Ten Countries discussed in more detail in Chapter 4 of this dissertation.

The other 14 IP regimes include some from European countries, Asia, North America, South America as well as transcontinental jurisdictions. In Europe, France (2019)<sup>51</sup> and Switzerland (2018)<sup>52</sup> modified their patent boxes to align with the nexus standard. According to OECD (2019), other European IP regimes, such as Andorra's Special Regime for Exploitation of certain

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<sup>49</sup> They should also provide FHTP with information on the number of each type of IP asset included in this category of IP, the number of taxpayers benefiting from this category; and the aggregate amount of IP income arising from this category of IP assets. The Ten Countries also must spontaneously exchange information on the taxpayers benefiting from the third category of IP assets. *Action 5 Report*, p. 67.

<sup>50</sup> The determination of the application of the rebuttable presumption should be reviewed on an annual basis to determine the continued presence of exceptional circumstances and disclosure of other aspects of tax rulings associated with patent box regimes. Patent box countries need to report the legal and administrative framework used to permit taxpayers to rebut the nexus ratio. On an annual basis, they also need to report other important information which including, the overall number of companies benefiting from the patent box regimes; the number of cases in which the rebuttable presumption is used; the number of such cases in which the jurisdiction spontaneously exchanges information; the aggregated value of income receiving benefits under the patent box regime (differentiated between income deriving from the nexus ratio and income deriving from the rebuttable presumption); and a list of exceptional circumstances, described in generic terms and without disclosing the identity of the taxpayer, that permitted taxpayers to rebut the nexus ratio in each case. *Action 5 Report*, p. 36.

<sup>51</sup> Terence Wilhelm, CARA Avocats and Lyon, "France's 2019 Draft Finance Bill Adds New Rules for Patent Boxes, Interest Deductions, Tax Consolidation" (Oct 2, 2018) *MNE Tax* (<https://mnetax.com/frances-2019-draft-finance-bill-adds-new-rules-for-patent-boxes-interest-deductions-tax-consolidation-30067>); KPMG, *France: Draft Budget for 2019 Unveiled, Includes Tax Proposals* (28 September 2018) (<https://home.kpmg/xx/en/home/insights/2018/09/tnf-france-draft-budget-2019-tax-measures.html>).

<sup>52</sup> Robert Sledz, "Swiss Parliament Passes Patent Box Incentive Regime" (October 11, 2018) *Thomson Reuters* (<https://tax.thomsonreuters.com/blog/swiss-parliament-passes-patent-box-incentive-regime/>); and Davide Anghileri, "Switzerland: Tax Proposal 17 Consultation initiated" (September 7, 2017) *MNE Tax*, (<https://mnetax.com/switzerland-tax-proposal-17-consultation-initiated-23363>).

intangibles (p. 21), Curacao’s investment company regime (p. 22), and San Marino’s New Companies Regime provided by art. 73 no. 166/2013 and Regime for High-tech Start-up Companies under law no. 71/2013 and delegated decree no. 116/2014 (p. 21), all have nexus approach in place. In North America, the province of Quebec in Canada adopted a patent box regime based on the nexus approach.<sup>53</sup> In South America, two IP regimes in Uruguay, namely Benefits under Lit S Art. 52 for Biotechnology and for Software, and Free Zones, are currently consistent with the nexus approach (p. 23). In Asia, in 2016, China changed its High and New Technology Enterprises Regime to strengthen the nexus requirement.<sup>54</sup> In 2016, India also adopted a patent box regime.<sup>55</sup> According to OECD (2019), other Asian IP regimes, such as Israel Preferred Enterprise Regime (p. 18) and Korea Special Taxation for Transfer, Acquisition etc. of Technology (p.21), are nexus approach compliant. For transcontinental countries, such as Turkey’s Technology Development Zone Regime (p.19); and Panama’s City of Knowledge Technical Zone (p.21) also have nexus approach in place.

### 3.7 Enforcement and Sanctions

The BEPS Inclusive Framework seeks to ensure a consistent and coordinated implementation of the nexus standard. The Forum on Harmful Tax Practices was tasked to “enforce” the implementation of the standard through conducting peer reviews, monitoring and imposing

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<sup>53</sup> It allows income from qualifying innovation to be taxed at a 4% corporate tax rate instead of the regular rate 11.8%. The qualifying income derived from patents embodied in the products a firm sells is determined by the firm’s R&D expenditures including labor, and expenditure in developing or acquiring the patents. It applies only to manufacturing and processing firms in respect of R&D activity in Quebec. See Finn Poschmann, “Quebec’s new ‘patent box’ tax break should be an example for Ottawa,” (March 24, 2017) *The Globe and Mail* (<https://www.theglobeandmail.com/report-on-business/rob-commentary/quebecs-new-patent-box-tax-break-should-be-an-example-for-ottawa/article29305632/>).

<sup>54</sup> In order to qualify for the tax benefits, qualifying R&D expenditure in China should be at least 60% of total R&D expenditure, the qualifying IP income should be at least 60% of total income occurring at the same period, the portion of total R&D expenditure of total sales income in the past three years need reach certain percentage, and the R&D employees should be at least 10% of total employment. The percentage of total R&D expenditure out of total sales income should be no less than 3% if the sales income in the last year is above RMB 200 million, no less than 4% if the sales income in the last year is between RMB 50 million and RMB 200 million, no less than 5% if the sales income in the last year is less than RMB 50 million. See Office of the Ministry of Science and Technology, the Ministry of Finance and the State Administration of Taxation (SAT), *Notice on Revising and Issuing the Measures for the Administration of the Certification of High-tech Enterprises No. 32*, ( Beijing: China SAT, 2016)([http://www.most.gov.cn/tztg/201602/t20160204\\_123994](http://www.most.gov.cn/tztg/201602/t20160204_123994)).

<sup>55</sup> The nexus standard was inserted as an amendment to section 115BBF of the *India Income Tax Act* 1961. Under this provision, qualifying IP income is taxed at a lower rate of 10%. Qualifying IP income must be derived from patents need to be developed and registered in India. “Developed” means that at least 75% of the R&D expenditure was incurred in India.

sanctions.

### **3.7.1 Peer Review and Monitoring**

Implementation of the nexus standard is subject to peer review and vertical review (monitoring). Peer review is a mechanism in which each participating country's implementation is reviewed by its fellow countries. It is thus a horizontal supervision of participating countries on an equal footing. Peer pressure for compliance is also generated by requiring compulsory spontaneous exchange of information on certain patent box rulings and through certain report obligations for the purpose of monitoring patent box regimes (*Action 5 Report*, p. 13).

In terms of procedures, the Forum on Harmful Tax Practices introduced a two-stage peer-review process. Stage 1 assesses whether the country has established an appropriate legal and regulatory framework. Stage 2 assesses the extent to which the nexus standard is implemented in practice. The Stage 2 assessment includes a rating system, with jurisdictions under review being assessed as compliant (or unharmful patent box regimes); largely compliant (or potentially harmful, but not actually harmful patent box regimes); partially compliant (potentially harmful patent box regimes); or non-compliant (harmful patent box regimes).

Vertical review is performed by the Forum on Harmful Tax Practices. The Forum follows established criteria and procedures to review preferential tax regimes. These criteria are based on the factors contained in the OECD 1998 Report, including: zero or low effective tax rate on mobile income; ring-fencing from the country's domestic economy; lack of transparency; lack of exchange of information regarding the preferential regime; and no substantial activity in the host country. In addition, to help inform and identify these key factors, there are five secondary factors FHTP considers, namely, artificial definition of tax base; not following transfer pricing principles; tax exemption of foreign source income; presence of a negotiable tax rate or tax base; and presence of a secrecy provision (OECD, 2019, pp. 3, 13, 51, 52).

In conducting a vertical review, if the Forum finds that a preferential tax regime has a zero or low effective tax rate, it will then apply the other factors to determine if it is potentially harmful. If a regime is reviewed as potentially harmful, the Forum will assess the harmful economic effects of the regime in order to determine if it will be categorised as a harmful preferential regime.

If a country's regime is found to be actually harmful, it is given an opportunity to remove the harmful feature(s) or to abolish the whole regime according to the timeline set by the Forum. At the same time, other countries can use defensive measures to counter the harmful effects of this preferential tax regime. The Forum conducts a post-assessment follow-up process to ensure that countries continue to honour their commitments and to keep the other countries informed of policy changes that may influence their ability to comply with the nexus approach standard (*Action 5 Report*, p.21; OECD, 2019, pp. 15, 17-20).

### **3.7.2 Consequences of Non-compliance**

When countries default on implementing the nexus standard, such as by violating the reporting and monitoring obligations, other countries or institutions including the G20, the OECD and the EU can adopt countermeasures toward those countries. These countermeasures function as sanctions. As an example of individual country's countermeasure, Germany adopted a "patent box blocker rule" to restrict the deduction of payments to entities in non-nexus standard compliant patent box countries.<sup>56</sup> This countermeasure effectively taxes the IP income shifted to a patent box country at Germany's tax rate. As an example of a countermeasure adopted by the G20, the 2009 London summit suggested the possibility of using countermeasures in the context of the implementation of tax transparency standards,<sup>57</sup> which can include the transparency requirements in BEPS Action 5 (Schoueri, 2017).

In addition, public naming and shaming may function as sanctions. The Forum issues public reports on progress and review outcomes in order to impose pressure on countries to comply with the nexus standard by heightening the potential reputational cost of non-compliance (OECD 2014; *Action 5 Report*; OECD, 2017a; OECD, 2018; OECD, 2019). Similarly, in 2016, the EU proposed publicly listing non-cooperative, non-EU countries to cause reputational risk for these countries.<sup>58</sup>

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<sup>56</sup> KPMG, 2017 Germany.

<sup>57</sup> The G20 Leaders, *Declaration on Strengthening the Financial System — London Summit* (London, 2009)([www.g20.utoronto.ca/2009/2009ifi.pdf](http://www.g20.utoronto.ca/2009/2009ifi.pdf)).

<sup>58</sup> A. Brodzka and S.Garufi, "International - The Era of Exchange of Information and Fiscal Transparency: The Use of Soft Law Instruments and the Enhancement of Good Governance in Tax Matters"(2012)52:8 *European Taxation*, p. 401.

It appears that these sanctions have produced some results. In 2015, the Forum initiated a review of patent box regimes and found nine regimes (France, Hungary, the Netherlands, Belgium, Luxembourg, Spain, the UK, Portugal, and Italy) were inconsistent, in whole or in part, with the nexus standard. Among these nine regimes, it found the regimes in France, Luxembourg and Spain were harmful. The 2017 Action 5 progress report announced another two regimes, namely in Liechtenstein and Malta, were harmful (OECD, 2017a, pp. 15-18). Subsequently, France, Luxembourg and Spain became nexus-compliant. Liechtenstein and Malta abolished harmful patent box regimes (OECD, 2019, p. 21).<sup>59</sup> Switzerland was not reviewed, but voluntarily amended its patent box in 2018.<sup>60</sup> Some countries, such as Portugal, whose patent box regime was deemed non-harmful, nonetheless improved their patent box designs to be more compliant with the nexus standard. By the end of 2018, in the OECD (2019, p. 4), all but one patent box regimes worldwide are nexus approach compliant.<sup>61</sup>

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<sup>59</sup> Jack Schickler, “France Unveils Tax Changes on Dividends, Patent Incentives” (September 2018) *Law 360 Tax Authority*([www.law360.com/tax-authority/articles/1085523/-france-unveils-tax-changes-on-dividends-patent-incentives](http://www.law360.com/tax-authority/articles/1085523/-france-unveils-tax-changes-on-dividends-patent-incentives)).

<sup>60</sup> Akin Gump Strauss Hauer & Feld LLP, “Swiss Tax Law Changes: Federal Act on Tax Reform and AHV Financing (TRAF)” (October 2018)*JDSUPRA* ([www.jdsupra.com/legalnews/swiss-tax-law-changes-federal-act-on-92493/](http://www.jdsupra.com/legalnews/swiss-tax-law-changes-federal-act-on-92493/)).

<sup>61</sup> Jordan Development Zone is still potentially harmful as the incorporation of the nexus approach is not yet addressed. See OECD, 2019, p. 22.

# Chapter 4 A Case Study of Ten European Countries Adopting the Nexus Standard

## 4.1 Overview

Chapter 4 reports on the adoption of the nexus standard by Belgium, Cyprus, Hungary, Luxembourg, Ireland, Italy, Portugal, Spain, the Netherlands and the United Kingdom (the “Ten Countries”) as a case study. The purpose of this case study is to seek to understand the following questions: Why did each country opt to adopt the nexus standard? How did each country design its nexus standard? and Where do these countries’ practices converge or diverge? Because the Ten Countries are all members of the Europe Union (EU), EU law’s influence on the nexus standard is covered where necessary.

This case study relies on patent box legislation, as well as secondary sources of information, such as government reports, literature and the publications of professional accounting and/or law firms.<sup>62</sup> The data sources have some limitations. For example, some most recent legislative amendments using the nexus standard are not yet available in English. The level of detail in the information I review varies from country to country, and data on some countries may not be very detailed. To manage these limitations, this research relies on and compares multiple sources to ensure the validity of the sources cited.

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<sup>62</sup> The information on the patent box regimes in the Ten Countries in the post-BEPS period mainly draws on the following sources: **Belgium** -- Brantsandpatents, 2019 Belgium; Royalty Range, 2018 Belgium; IBFD Research Platform, 2019 Belgium; **Cyprus** -- EY, 2016c Cyprus; SCL, 2018 Cyprus; **Hungary** -- EY, 2016b Hungary; Royalty Range, 2016 Hungary; **Ireland** -- Deloitte, 2018 Ireland; Ireland ORC, 2017; IBFD Research Platform, 2019 Ireland; **Italy** -- Cipollini, 2016; KPMG, 2017a Italy; PwC, 2018 Italy; Pappalardo, 2015; Valente and Vincent, 2015; IBFD Research Platform, 2019 Italy; **Luxembourg** -- KPMG, 2017b Luxembourg; KPMG, 2018 Luxembourg; PwC, 2018 Luxembourg; **Portugal** -- PwC, 2019 Portugal; IBFD Research Platform, 2019 Portugal; Neves, 2013; **Spain** -- Baker Tilly, 2018 Spain; Deloitte, 2018 Spain; PBS, 2018 Spain; IBFD Research Platform, 2019 Spain; **The Netherlands** -- Baker Tilly, 2017 the Netherlands; Deloitte, 2017 the Netherlands; EY, 2016a the Netherlands; PTFS, 2017 the Netherlands; TCI, 2018 the Netherlands; IBFD Research Platform, 2019 the Netherlands; **UK** -- HMRC, 2016; HMRC, 2016 *CIRD 210150*; HMRC, 2016 *CIRD 220170*; HMRC, 2016 *CIRD 220190*; HMRC, 2016 *CIRD 271500*; HMRC, 2016 *CIRD 220260*; HMRC, 2016 *CIRD 220470*; HMRC, 2016 *CIRD 230130*; HMRC, 2016 *CIRD 272000*; HMRC, 2016 *CIRD 273100*; HMRC, 2016 *CIRD 273200*; HMRC, 2016 *CIRD 272100*; Hughes, 2017; IBFD Research Platform, 2019 UK.

This chapter first provides an overview of the implementation of the nexus standard in the Ten Countries in terms of the factors that motivated each country to adopt the standard and the general design features to nexus compliant patent boxes in the Ten Countries. It focuses on the nexus standard in terms of specific design features including qualifying taxpayers, the types of intellectual property (IP) that can qualify for the preferential tax treatment, qualifying income, the proxy for nexus, and the transparency requirement.<sup>63</sup> It summarizes the main findings of the case study at the end.

## 4.2 Motivating Factors

The Ten Countries were motivated to adopt the nexus standard for slightly different reasons, but two main factors are likely common across countries. One is the desire to “legalize” patent box regimes. As discussed in Chapter 3 of this dissertation, some pre-BEPS patent box regimes were controversial and were widely viewed to be harmful tax practices. Adopting the nexus standard allowed the Ten Countries to repair their reputation by undertaking actions that would address the harm their pre-BEPS regimes were causing and to stop their harmful tax practices (*Action 5 Report*). Adopting the nexus standard permitted these countries to remedy a harmful situation rather than eliminate their patent box regimes entirely. This is important as they already input significant political capital into the adoption of patent box regimes (Faulhaber, 2017a, p. 1660).

The other factor is that the nexus standard was designed to be easy to apply and to accommodate EU patent box practices. The fact that the standard allows some freedom for countries to design their patent box regimes in a way that permits them to pursue their individual policy goals made it easier for the Ten Countries to adopt the standard. Eight of the 10 countries needed to modify their existing regimes, while two countries introduced new regimes to be in compliant with the nexus standard. More importantly, these countries can continue to compete for mobile income, although under more constraints than previously. Further, as discussed in Chapter 3, the nexus standard accommodates EU concerns in several respects. First, EU countries can apply the entity

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<sup>63</sup> The nexus standard mainly focuses on patent box tax base design rather than patent box tax rate, therefore the preferred tax rates in the Ten Countries will be briefly discussed as part of divergence at the end of this section.

approach to determining nexus (*Action 5 Report*, p. 42). Under this approach, an EU patent box country can offer preferential tax treatment to IP income derived from substantial R&D activities in another EU country. Second, EU countries can use the 30% uplift rule in determining qualifying R&D expenditures with respect to acquired costs and outsourcing expenditures to related parties (OECD, 2015a). Third, EU countries were allowed an extension of the validity of pre-BEPS patent box regimes through a grandfathering provision.

At a high level, the Ten Countries met the nexus standard by requiring the qualifying income of a qualifying taxpayer to be income derived from substantial R&D activities. Qualifying income is limited to income from qualifying IP. Meanwhile, the Ten countries adopted different patent box rates and retained many features of pre-existing patent box design features.

### 4.3 Qualifying Taxpayers

The Ten Countries are consistent in defining who qualifies for preferential tax treatment. Like pre-BEPS regimes, the post-BEPS regimes grant resident companies and non-resident companies with a permanent establishment right to claim preferential tax treatment. Under the general corporate tax laws, the income of resident companies and non-resident companies with a permanent establishment in the taxing jurisdiction is taxable. As such, if a portion of that taxable income is derived from qualifying IP income, it is eligible for preferential tax treatment.

Some countries have additional conditions for non-resident claimants. For example, in Italy, non-resident companies that have permanent establishments in Italy to which the relevant IP asset is attributed are able to enjoy the benefit of the regime, provided that Italy has signed a double taxation treaty with the resident country of the foreign company and that the treaty has a provision on information exchange (Cipollini, 2016). Similarly, Spain requires the qualifying non-resident claimant not to be a resident of a country or territory considered as a “Zero-taxation country or territory (Act 36/2006, 29 November)” or “tax haven (Royal Decree 1080/1991, 5 July).”<sup>64</sup> The requirement seeks to avoid double non-taxation (IFA, 2015, p. 695).

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<sup>64</sup> A zero-taxation country or territory is one jurisdiction that does not apply a tax identical or similar tax to Personal Income Tax or Corporate Income Tax. But when this country or territory has signed a double tax convention with Spain, an identical or similar tax is seen to have applied. See *Act 36/2006*, 29 November. A “tax haven” is one of

## 4.4 Qualifying Intellectual Property

Income from qualifying IP is eligible for the patent box treatment. In the pre-BEPS regimes, Ireland, the UK, Belgium, the Netherlands and Portugal had a narrow scope in qualifying IP to include only patents and patent-like IP or R&D with a supplementary protection certificate. But regimes in Cyprus, Hungary, and Luxembourg had a broader scope to include non-patent-related IP, such as trademarks and domain names, in addition to patents and patent-like IP; for example, non-innovation-related IP.

The nexus approach in BEPS Action 5 limits qualifying IP to patents and other legally protected and registered patent-like IP, such as software, designs, models or methods, and trade secrets to qualify. Marketing-related IP, such as trademarks, cannot qualify for patent box tax relief. To implement the nexus standard, the Ten Countries generally adopted the definition in BEPS Action 5. For example, Hungary and Luxembourg removed trademarks that have little relation to R&D activities from the qualifying IP assets. Spain removed know-how from the list of qualifying IPs. As a result, the qualifying IP in the Ten Countries generally falls into three categories: legally protected patents; copyrighted software or regulatory data, and non-obvious, useful, and novel patent-like IP certified in a transparent certification process by a competent government agency independent from tax authorities (or the third category of patent-like IPs).

Patents are the most notable type of qualifying IP in the Ten Countries.<sup>65</sup> The meaning of patents is found in the patent laws or other relevant legislation. For example, under the UK's patent box regime, patents mean patents granted by the UK Intellectual Property Office under *The Patents Act (1977)*, or a patent granted by the European Patent Office, or a patent that is granted under the law of a specified European Economic Area, or rights similar to patents relating to human and veterinary medicines, plant breeding and plant varieties (HMRC, 2016 CIRD 210150). Furthermore, patents that cannot be granted and inventions that cannot be disclosed by the UK

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countries or territories listed in a Royal Decree approved for this specific purpose (*Royal Decree 1080/1991*, 5 July). These countries and territories will not be seen as tax havens when they have signed a double tax convention with Spain with an exchange of information clause.

<sup>65</sup> Among the eight countries, Belgium covers regulatory data as qualifying IP in addition to copyrighted software. See Royalty Range, 2018 Belgium.

Intellectual Property Office due to national security or public safety concerns are also eligible IP for patent box purposes. The preferential tax regimes are called patent boxes because they often grant preferential tax treatment to income from patents and patents are closely related to innovation, the creation of which requires risky and costly R&D activities.<sup>66</sup> The R&D activities and their positive spill-overs are often the traditional policy rationale for R&D tax incentives, including the patent box regime (see Chapter 2).

Copyrighted software is qualifying IP in all Ten countries except for the UK and Portugal. The reason the majority of the Ten Countries cover copyrighted software is that copyrighted software is often closely associated with patents, and shares similar features with patents, such as being novel, useful, and legally protected. Belgium thereby allows both copyrighted software and protected data as qualifying IP. But there are exceptions. The UK focuses on rights similar to patents which relate to human and veterinary medicines, plant breeding, and plant varieties rather than copyrighted software. Portugal excluding software can be viewed as a policy choice which is adjusted to the Portuguese innovation ecosystem. The Portuguese patent box is seen as a defensive move to preserve IP assets in Portugal (Neves, 2013, pp. 1239, 1240).

Patent-like property is defined differently across the Ten Countries. Italy and Portugal define patent-like property very generally. Italy defines it as protectable designs, models, and know-how, which are defined as legally protectable processes, secret formulas, and industrial, commercial or scientific knowledge. Portugal defines it as protected industrial designs or models or other IP rights, which are protected and related to R&D activity. The other eight countries define patent-like property more specifically by targeting R&D business activities in specific sectors. Luxembourg, Belgium, the Netherlands, Cyprus, and Hungary target IP and R&D in medicine and

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<sup>66</sup> OECD categorizes intangible properties into trading IP and marketing IP based on the type of R&D activity involved in their creation. The creation of trading IP (product-trading IP and process-trading IP), such as patents, software, designs, models or methods, and trade secrets usually require risky and costly research and development (R&D). These trading IP can reduce the cost of products and services. By contrast, marketing IP, such as trademarks, trade names, trade images, customer lists, and distribution channels, as well as unique names, symbols or pictures, often require less risky and costly R&D activities because they, as marketing IP, focus on increasing the promotion values. OECD, *Frascati Manual 2002: Proposed Standard Practice for Surveys on Research and Experimental Development* (Paris: OECD, 2002) (<http://dx.doi.org/10.1787/9789264199040-en>).

the gene science sector<sup>67</sup> and define patent-like property to be a registered utility model, supplementary patent protection for pharmaceutical production products, for protected orphan drug designations, supplementary patent protection for plant products including plant variety rights or plant breeders' rights. Luxembourg goes further to list protected products for paediatric use and protected biological pesticides as qualifying IP. Hungary lists semiconductor topography as a qualifying IP.

In addition to targeting the R&D activities in particular sectors, some countries, such as Cyprus, the Netherlands, and Ireland also target small and medium enterprises' business innovation through defining the third group of patent-like IP. Both Cyprus and the Netherlands allow IP rights with an R&D certificate or R&D statements from small and medium enterprises (SMEs) as qualifying IP. Ireland allows certified non-obvious, novel IP by SMEs as qualifying IP (Irish TCORC, 2017).<sup>68</sup>

Despite these differences in defining the "patent-like property", all qualifying IP has to be legally protected or registered domestically or in the EU regionally. The legally protected and registered requirement of qualifying IP helps countries build another link between the patent box country and taxpayers, in addition to the nexus requirement. The nexus link is built by requiring domestic R&D certification or an R&D declaration for the patent-like IP from SMEs. For example, SME patent-like IPs need to be certified in Ireland. The Netherlands and Cyprus also require SME patent-like IP to have an R&D certificate. In the Netherlands, the SME patent-like IP needs have an R&D declaration from the Dutch government, which requires certain R&D activities to be performed in the Netherlands (Merrill et al., 2012). Similarly, UK-based patent-like R&D or IP needs a special protection certificate or other form of special protection (UK HMRC, 2016).<sup>69</sup>

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<sup>67</sup> Belgium only allows special protection certificate (SPC) on patents for plant products (plant variety rights or plant breeder's rights) requested or acquired on or before July 1st, 2016, protected orphan drug designations requested or acquired on or before July 1st, 2016 to qualify. See Neves (2013), pp. 1239, 1240.

<sup>68</sup> Small taxpayers in Ireland are defined as companies with worldwide net group sales less than EUR 50 million per year and a gross benefit from IP not exceeding a total of EUR 37.5 million in 5 consecutive years (an average of EUR 7.5 million per year. See Irish TCORC, 2017.

<sup>69</sup> Know-how, trade secrets and some software copyrights that are closely associated with a qualifying patent or other qualifying right are also generally included within the regime and need special protection certificate.

The differences concerning the qualifying IP in the Ten Countries (especially the patent-like category) can be largely explained by the fact that different countries pursue different economic and industrial policies, and strategically compete for different types of IP and IP-intensive MNEs. For example, eight of the Ten Countries (all except the UK and Portugal) list copyrighted software or regulatory data as qualifying IP for their patent box regimes. High tech companies from the IT sector may find these European patent boxes in these eight countries more attractive. Pharmaceutical MNEs may find the UK to be an attractive location because the UK patent box covers supplementary patent protection for pharmaceutical products, regulatory data protection for pharmaceutical, veterinary and plant protection products, and plant variety rights as qualifying IP. MNEs in clothing and footwear may see Italy as an attractive location as its patent box allows industry design and drawing as qualifying IP. Countries also target the innovation manufacturing sector by defining the patent-like IP. For example, the UK includes supplementary patent protection that is often involved in innovation manufacturing. This is a means of boosting productivity for drug manufacturing. Similarly, Luxembourg, Cyprus, Hungary, and Spain promote innovation manufacturing by including design as qualifying IP since almost all manufactured products involve some element of design. As summarized above, Ireland, Cyprus and the Netherlands encourage SMEs' business innovation by allowing their certified IP rights as qualifying IP. For a summary of the types of qualifying IP in the Ten Countries, see attached Table 1.

## 4.5 Qualifying Income

BEPS Action 5 allows income directly derived from qualified IP to be considered. Under the nexus standard, such income includes royalties, gain on the sale of qualifying IP, and embedded IP income "from the sale of products or use of processes directly related to the IP asset" (*Action 5 Report*, p. 29). This policy was adopted by the Ten Countries. Six out of the Ten Countries (Luxembourg, Belgium, Cyprus, Spain, UK, and Ireland) further include infringement payment, damages, insurance and other forms of compensation of qualifying IP. Some variations exist across the countries.

### 4.5.1 Royalties or Licensing Fees

Royalties or license fees are the major type of qualifying income. However, most countries do not use the concept of “royalties” in the patent box regime legislation (except for Cyprus, the Netherlands, and Ireland), but instead use a broad term to capture the essence of this type of income indicating the income deriving from the transfer the right to use or exploit IP. For example, Belgium refers to what we think of as the concept of ‘royalties’ as license fees, Spain refers to income resulting from the license of the qualifying IP assets; Luxembourg refers to fees earned from the use of the eligible IP assets; Italy and Hungary refer to profit deriving from business activities where the IP is used or exploited.

For countries that use the concept of royalties, the definition is quite consistent as countries refer to the definition in their tax treaties, which often follow the definition in Article 12 of the OECD Model Convention. For example, the concept of “royalties” in Irish patent box is generally consistent with that defined in tax treaties. A typical definition can be found in Art. 10 (2) of *Double Taxation Treaty between Ireland and the Netherlands* (1969) (in force):

“The term ‘royalties’ as used in this Article means payments of any kind received as consideration for the use of, or the right to use, any copyright of literary, artistic or scientific work (including cinematograph films and films or tapes for radio or television broadcasting), any patent, trade mark, trade name, design or model, plan, secret formula or process, or for the use of, or the right to use, industrial, commercial or scientific equipment, or for information concerning industrial, commercial or scientific experience” (p. 12).

These definitions are consistent with the definition of royalties in the OECD Model Convention: “Payments of any kind received as a consideration for the use of, or the right to use, any copyright of literary, artistic or scientific work including cinematograph films, any patent, trade mark, design or model, plan, secret formula or process, or for information concerning industrial, commercial or scientific experience” (OECD Model, 2017, Art. 12).

### 4.5.2 Gains from Trading Qualifying Intellectual Property

Instead of licensing, the owner of qualifying IP may sell the IP. Such gains qualify for patent box

relief. They can be in the nature of capital gains or trading profits. Belgium, the Netherlands and Cyprus explicitly include capital gains. Other countries generally include sales profits. For example, Portugal includes income derived from the sale of industrial property rights, such as patents and industrial drawings and models. Hungary includes business profits from the disposal of qualifying assets.

In an economic sense, whether the value of the qualifying IP is realized through licensing over a period of time or upfront, from an outright disposition, can be the same, as it is largely a matter of time value of money. For that reason, all Ten Countries include gains from the sales of qualifying IP as qualifying income. If capital gains from qualifying IP were not covered as eligible income, companies would have an incentive to license the qualifying IP rather than selling it. Including gains from the trading of IP as qualifying IP income, the patent box regimes ensure tax neutrality and may encourage mobility of IP ownership across borders.

### **4.5.3 Embedded Royalties**

Embedded royalties generally refer to IP income attributable qualifying intellectual property that is bundled with or embedded in the sale of products or service transactions. In other words, the form of a transaction is a sale of products or services, but the substance of the transaction includes the use or transfer of intellectual property. This typically occurs when intellectual property is embedded in a product or a process, such as software installed in a computer or the provision of services using patented technology. Embedded royalties are treated as qualifying income in the Ten Countries. The level of detail in defining embedded royalties differs in each of the Ten Countries.

The UK provides the most comprehensive definition of embedded royalties. UK law distinguishes income from the sale of products or services embodying the patents and income from internal use of patented procedures or processes. The sale of products involves three situations (HMRC, 2016 CIRD 220170): the sale of a qualifying patented item, such as the sale of a patented printer cartridge; the sale of items incorporating one or more qualifying patented items, such as the sale of a printer, where the printer cartridge is a patented invention and the printer is not (HMRC, 2016 CIRD 220190); and the sale of items that are wholly or mainly designed to be incorporated into a

qualifying patented item, such as a specific type of printer cartridge where the cartridge is mainly designed to be installed into a certain type of printer, and the sales of the printer cartridge is a bespoke spare part (HMRC, 2016 CIRD 220260). The income from using a manufacturing process that is patented or providing a service using a patented tool is also embedded as royalties (HMRC, 2016). Put together, embedded royalties refer to income from selling a patented product, a product family (range of products) that incorporate the patented invention or bespoke spare parts, or using the patented process or procedures.

Similarly, the Netherlands defines embedded royalties as a portion of the proceeds from the sale of a patented item, or the sale of an item that physically incorporates a patented item for its whole operating life, or the sale of spare parts and items designed to be incorporated into a patented item (if the patent holder sells them) (IFA, 2015 the Netherlands, p. 491). Cyprus mentions the embedded income of a qualifying intangible asset arising from the sale of products or by using procedures that are directly related to the qualifying intangible asset(s). Ireland includes the portion of the income from the sale of assets or services with embedded qualifying intellectual property (Section 769G(2a) of the TCA 1997). Treating embedded royalties as royalties ensures that taxpayers who exploit their intellectual property through manufacturing products for sale or the provision of services can qualify for the preferential tax treatment.

#### **4.5.4 Infringement Payment and Insurance Compensation**

The nexus standard does not explicitly mention whether the infringement income or other insurance income of qualifying IP is qualifying IP income. Six out of the Ten Countries, namely, Luxembourg, Belgium, Cyprus, Spain, the UK, and Ireland include them. For example, the UK broadly defines infringement income to include other compensation relating to the qualifying IP assets, payments received in respect of infringement of qualifying IP, including the portion that represents punitive damages, damages, insurance, or other compensation related to patent rights to benefit from its patent box. Luxembourg lists indemnities from judicial or arbitration proceedings related to qualifying IP assets as qualifying IP income. Portugal allows “any amount received by the company in respect of an infringement, or alleged infringement” of relevant IP rights held by the company at the time of the infringement or alleged infringement. Cyprus allows payment

received from insurance or as compensation concerning the qualifying intangible assets to qualify for patent box tax relief.

The other four countries do not mention whether or not infringement or insurance income qualifies for their patent box tax relief, due to some concerns around the potential for abusive IP litigation, such as through so-called patent trolls.<sup>70</sup> This type of litigation is often criticized for misusing and manipulating the patent system in a way that limits, impedes and hurts both trade and innovation by leveraging patents without actually advancing science or technology.<sup>71</sup> Allowing IP infringement income to qualify for patent box tax benefits may encourage IP litigation, such as through patent trolls that threaten other companies with litigation. Even where infringement income is eligible, it is still a controversial issue determining whether the punitive part of the infringement should qualify.

The Ten Countries' qualifying IP income is based on the guidelines of the nexus standard. All the countries require qualifying income directly from qualifying IP, including income from using IP, trading IP, and licensing out IP. All Ten Countries allow royalties or capital gains, and embedded royalties to qualify. Six out of the Ten countries also allow qualifying IP-related infringement payments, compensation, damages, and insurance to qualify. For a summary of the qualifying IP Income in each of the Ten Countries, see attached Table 2.

## **4.6 Net Qualifying Income**

### **4.6.1 Deductible Expenditures and Loss-carryovers**

Some pre-BEPS patent box regimes' (Spain, Cyprus, Belgium, Hungary, and Portugal) tax relief applies to gross IP income. The gross income calculation that allows IP income to be taxed at a

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<sup>70</sup> Patent trolls are one of the recent and pervasive concerns in the intellectual property community. Patent trolls seek refuge under the shelter of a shell company and are armed with an arsenal of issued, but non-practiced patents. They are often related to some non-practicing entity(NPE), patent assertion entity(PAE) and patent privateers that are considered to be variant of a typical patent assertion entity who are authorized by a patent owner or are sold patent rights with the intention of attacking another company, often a competitor of the original patent holder. See Kravets, 2014, Ewing, 2012.

<sup>71</sup> See Chan and Fawcett, 2006.

lower patent box rate and permits IP expenses to be taxed or deducted at higher regular corporate income tax rate can lead to generous tax relief or even negative effective tax rates (amounting to a tax subsidy for unprofitable R&D projects) for claimants (Evers and Spengel, 2015).

BEPS Action 5 states that patent box tax relief applies to net qualified IP income for the taxable year (*Action 5 Report*, p. 29). Countries can define deductible expenditures such as R&D expenditures allocable to IP income in a way that is consistent with existing domestic tax rules. The key is connecting the expenditures to the qualified IP income. In general, the expenditures must directly relate to generating IP income. For example, Spain limits qualifying income to “profit,” which is determined by subtracting the costs and expenditures related to the creation of the qualifying intellectual property from the qualifying income (i.e., royalties and royalty-like amounts) derived from qualifying intellectual property. These amendments to the legislation on the net income requirement ensure that the IP cost is deducted at the patent box tax rates rather than the regular corporate tax rate.

Where deductible expenditures exceed the qualified IP income, the losses can be carried over to other years. That is to say, for the purposes of the patent box regimes, net qualifying income is also the net income of loss-carryovers. The patent box relief applies only when the IP income is otherwise taxable.

#### **4.6.2 Track and Trace**

The nexus approach depends on there being a nexus between IP expenditures and IP income. Therefore, tracking and attribution of the expenditures and the income of qualifying IP is essential. The BEPS Action 5 nexus standard suggests an asset-by-asset approach. Under the asset-by-asset approach, income and expenses should be attributed to each qualifying intellectual property, and this attribution approach should be consistent, reasonable and just (*Action 5 Report*, p. 30). The transfer pricing approach defers to the method used for conducting transfer pricing analysis. In light of the fact that R&D activities and exploitation of intellectual property are often conducted by members of MNE groups through intra-group transactions, transfer pricing rules are critical to determining the amount of income eligible for patent box regimes in relevant countries. The nexus standard suggests taxpayers follow a consistent and coherent method, such as the transfer pricing

method, to split up and calculate the amount of the income related to the qualifying IP. The asset-by-asset approach can work together with transfer pricing rules.

In the case of bundled transactions where a qualifying IP is bundled with other assets, such as non-qualifying IP, tangible assets, or service, BEPS Action 5 allows the amount attributable to the qualifying intellectual property to be determined by reference to each final product or product family (*Action 5 Report*, p. 31). The product or product family approach requires tracking and attribution of all qualifying and overall expenditures at the product level, and benefits expire at a fair and reasonable point, such as at the end of the average life span of all IP assets. For example, an R&D project can lead to multiple IPs at one time, as they often focus on answering one question or solving one problem. In this case, it will not be appropriate to require taxpayers to track and attribute R&D expenditure to each IP using an asset-by-asset approach, as it will force taxpayers to arbitrarily divide research lines (*Action 5 Report*, p. 31). An example in terms of product family is medicines produced in different colours, dosages or sizes; it is not practical to track each individual medicine if these medicines have minor variations among products but contain the same IP. It will be more appropriate to track and attribute to the product family as a whole (*Action 5 Report*, p. 32).

The Ten Countries are consistent in adopting the IP asset-based approach as the main approach, supplementing it with the product-based approach. There are some variations in practices. For example, UK law allows the streaming of income at a single qualifying IP right level, product and process level, and product family level (HMRC, 2016 CIRD 271500). It adopts a transfer pricing approach and a simpler formulaic method for some companies to select when calculating the amount of qualifying IP income. The transfer pricing approach is often employed for calculation of the notional royalty among group firms—the royalty that would be paid to an independent owner of the relevant qualifying IP rights for the firm’s exclusive use of those rights to generate the IP-derived income (HMRC, 2016 CIRD 220260). For example, the calculation of the notional royalty in the UK shall be consistent with Article 9 of the July 2010 OECD Model Tax Convention and the OECD’s Transfer Pricing Guidelines, or any successor documents. The arm’s length price shall fall between the minimum the seller/licensor is prepared to accept and the minimum that the buyer/licensee is prepared to pay (HMRC, 2016 CIRD 220260). The formulaic method will rely

on an appropriate percentage of IP-derived profit—a proportion of the total profits—to calculate the relevant IP income included in the patent box. Then, a pro-rata apportionment of the IP expenses between the relevant IP income and non-relevant IP income will be the just and reasonable way to allocate the expenses (HMRC, 2016 CIRD 230130).<sup>72</sup> The simpler formulaic approach is recommended for the small claims of corporations. Companies qualifying for small claims treatment can take 75% as an appropriate percentage of their embedded royalties' percentage (HMRC, 2016 CIRD 273100). Luxembourg has adopted an IP-asset-by-IP asset approach as the general approach and allows the use of the product-based approach only in circumstances where tracking a qualifying IP asset is not feasible, such as the non-patentable and hard-to-split IP. In Belgium, the product-based approach is adopted for the calculation of the remuneration for know-how that is inherently linked to a patent product or process. but does not qualify on a stand-alone basis.

### 4.6.3 Documentation Requirements

Documentation is required to ensure the integrity of the nexus standard. When adopting a transfer pricing approach, standard documentation is required to show that income is not overstated and that expenses are not understated. When using a product-based approach, taxpayers are required to provide documentation to justify the appropriateness of using such an approach (*Action 5 Report*, p. 32).

To satisfy those documentation requirements, the nexus approach requires tracking and tracing of eligible R&D expenditures and IP income. There must be a nexus between R&D expenditures, products arising from IP assets, and IP income. By requiring the justification of the nexus with documentation, the nexus approach ensures that the IP income that the entailing patent box tax benefits arises from the qualifying R&D expenditure that represents substantial R&D activities (*Action 5 Report*, pp. 30-31). Thus, the nexus approach standard requires the link or nexus between qualifying R&D expenditure, qualifying IP, and qualifying income must be recorded and demonstrated by taxpayers in order to support the patent box tax relief claim. Documentation

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<sup>72</sup> The small claims treatment entry criteria is the qualifying residual profit does not exceed 1,000,000; for other conditions, see HMRC, 2016 CIRD 220470.

requirements and tracking IP income and expense are especially necessary when taxpayers have multiple IP assets and engage in outsourcing R&D or IP acquisition among related firms.<sup>73</sup>

The Ten Countries have adopted the documentation requirements of the nexus standard. For example, the UK published detailed rules on documentation. It requires any claimant to track and trace their IP income and IP expenses in order to benefit from patent box tax relief. It lists tracking and tracing requirements for income from license fees, product patents, process patents, product family patents, and from small claims treatment (HMRC, 2016 CIRD 272000). The extent of records kept in terms of tracking and tracing R&D expenditures varies among firms depending on the extent of the R&D they undertake and the amount of IP they hold.<sup>74</sup> The general principle is that taxpayers need to demonstrate how an R&D expenditure has been tracked to each fraction of a decimal and justify any significant adjustments to their methodology when changes occur (HMRC, 2016 CIRD 272100).

Cyprus also clarifies that the obligation of taxpayers to maintain proper books of account and records of income and expenses for each intangible asset is essential in providing proof to support taxpayers' patent box tax relief claims. Luxembourg requires taxpayers to track the total expenditures, eligible expenditures and eligible gross income per IP asset (or asset group), demonstrating the link between income and expenditures. When tracking on an asset-by-asset basis is not achievable, the taxpayer may use a product-based approach for tracking.

Under the Irish patent box regime, in order to ensure certain transactions are at market value or apportioned on a just and reasonable basis, various documentation requirements apply. Transfer

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<sup>73</sup> More specifically, guidance on documentation requirements for each tracking approach is provided. For example, for the product-based approach, claimants are required to track and trace their documents that show the complexity of IP business models and justify the use of the product-based approach; to provide documentation of all relevant deductions and other tax reductions that show why such tax benefits (deduction) are not used to reduce the amount of IP income benefiting from patent box regimes when calculating net IP income; to provide documents showing a link between such R&D expenditures and IP assets or IP products, or to provide an explanation of how such R&D expenditures were divided pro rata across IP assets or IP products; to provide documents substantiating the arm's length price and on the overall expenditure that the related party transfer incurred (*Action 5 Report*, pp. 33-34).

<sup>74</sup> Small claims treatments apply to companies with a smaller amount of IP income, where all income is included in one stream according to S357BNC. Companies usually have two streams, IP relevant income stream and non-relevant income stream, and avoids sub-stream of process patents, can thus bring all relevant income stream into new patent box regime. These companies can thus combine their R&D expenditure for different qualifying IP rights into one stream. See HMRC, 2016 CIRD 273200.

pricing standard documentation must also show that income is not overstated and that expenses are not understated. When following the tracking requirement of the nexus approach standard, Ireland places a far lower burden of proof on smaller, simpler enterprises than it does on larger, more complex ones. For example, a reasonable apportionment by the directors identifying the various IPs which are involved (e.g., trade secrets, brand, patents, the third category of assets), based on stated and sound assumptions, will be accepted from smaller companies, whereas larger companies will require expert reports to support any apportionments (Irish TCORC, 2017, p. 62). By following the nexus standard, the patent box regimes in the Ten Countries became less generous compared to the pre-BEPS ones. The documentation requirements are also in place to ensure the integrity of patent box regimes. Taxpayers have obligations to provide relevant documentation to prove the nexus in order to enjoy the patent box tax benefits.

## **4.7 Attributing Qualifying Income to the Nexus**

Once the amount of qualifying net income is determined, the next step is to define the “nexus” in order to establish the proportion of such income eligible for the preferential tax treatment. As discussed in Chapter 3, the nexus is defined as a ratio or proportion of the qualifying R&D expenditure and the overall R&D expenditure. This ratio serves as a proxy for R&D activities, or “development conditions” in the country that generate qualifying income.

### **4.7.1 The Ratio of Qualifying Expenditures/Overall Expenditures**

Some pre-BEPS patent box regimes (e.g., Luxembourg, Hungary, and Cyprus), do not always have a development conditions or R&D activity requirement, even some of them (e.g., the UK, Belgium, the Netherlands, and Spain) have IP development requirements, and the development conditions are set quite differently.<sup>75</sup>

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<sup>75</sup> As reviewed in Chapter 2 regarding the design features of the pre-BEPS patent box regimes (under 2.3.2 *Design Features*), for the countries in the case study, Luxembourg, Hungary, and Cyprus target mobile IP income and do not have a development condition or R&D activity requirement at all. The UK, Belgium, the Netherlands, and Spain target IP creation activities and set development conditions. But the development conditions are quite different, for example, as discussed under heading 2.3.2 *Design Features*; in Belgium’s patent box, the development condition means “add some values”; the Netherlands, “making important decisions in or take risks” in further development of acquired IP; UK, “further developing acquired IP for certain period of time”; and Spain, “bear at least 25% of the assets’ development cost R&D Expenditures as Proxy for R&D Activity.”

The nexus standard requires the benefit permitted by any preferential IP regime to depend on the extent of the R&D activities carried on by the taxpayer in its own jurisdiction (*Action 5 Report*, p. 9). The nexus approach thus effectively limits the amount of income that may be relieved under a patent box regime to the proportion of income that is directly attributable to qualifying R&D expenditures incurred by that taxpayer in that jurisdiction.

The Ten Countries adopted the nexus approach, which means some countries added the nexus test into their existing patent box regimes (e.g., Luxembourg, Hungary, and Cyprus) and some countries (e.g., the UK, Belgium, the Netherlands, and Spain) strengthened their nexus requirements.

#### **4.7.2 Qualifying R&D Expenditures**

According to the nexus standard, two conditions must be met for the qualifying R&D expenditures (*Action 5 Report*, p. 27). First, the qualifying R&D expenditures must be incurred by taxpayers themselves. The R&D expenditures on contracting out R&D activities to related parties are excluded in the “entity version” of the nexus approach in the Ten Countries. Second, the qualifying R&D expenditures must be directly related to qualifying IP assets, such as R&D expenditures for IP creation, IP development, and IP maintenance. Interest payments, building costs, or any costs that cannot be directly linked to a specific IP asset are excluded as qualifying R&D expenditures (*Action 5 Report*, p. 27). Furthermore, the qualifying R&D expenditures must be included at the time they occurred.

The qualifying R&D expenditures can include “salary and wages, direct costs, overhead costs directly associated with R&D facilities, and cost of supplies so long as all of these costs arise out of activities undertaken to advance the understanding of scientific relations or technologies, address known scientific or technological obstacles, or otherwise increase knowledge or develop new applications” (pp. 41-42). The definition is generally the same as the one under R&D tax credit provisions. For example, Ireland’s definition of qualifying R&D expenditures in section 769G (2) is very similar to the definition of “expenditure on research and development” concerning the R&D tax credit in section 766(1)(a). But following the loss deduction requirement of the nexus

standard, the qualifying R&D expenditures for the patent box regime excludes unsuccessful R&D, buildings, and charges (Ireland ORC, 2017, pp.27-29).

The Ten Countries strictly follow the above requirements. Luxembourg requires that qualifying R&D expenses must have been incurred for actual R&D activities undertaken by the taxpayer itself and must be directly related to IP creation, development, and improvement. Interest and financing expenses, property-related costs, and other expenditures that are not directly linked to qualifying IP are excluded (KPMG, 2018 Luxembourg; PwC, 2018 Luxembourg). Hungary requires qualifying expenditures to be incurred by taxpayers and excludes acquisition costs paid for already-developed IP or R&D costs incurred by other related companies (EY, 2016b Hungary). Cyprus does not include R&D costs incurred by related companies and the costs of acquiring IP rights, interest paid, and other costs that cannot be proven as directly relating to specific available intangible assets (SCL, 2018 Cyprus). UK qualifying R&D expenditures refer to in-house R&D expenditures incurred on the particular patent (or other qualifying IP rights) plus third-party sub-contracted R&D (HMRC, 2016 CIRD 220260).

### **4.7.3 The Overall R&D Expenditures**

For the purposes of the nexus requirement, the overall R&D expenditure refers to qualifying expenditures, plus acquisition costs and R&D expenditures outsourced to related parties. It is “the sum of all expenditures that count as qualifying expenditures if the taxpayer itself undertook them” (*Action 5 Report*, p. 28). If the taxpayer acquires qualifying IP, this is included in the overall R&D expenditures, the acquisition cost is a proxy for overall expenditures incurred before acquisition by another taxpayer. If the R&D activities are conducted by related companies on a contractual basis on behalf a specific taxpayer, the outsourcing expenditures are also included in the overall R&D expenditures. In essence, the economic cost of the qualifying IP is taken into account.

The Ten Countries follow the above definition. For example, Luxembourg defines overall expenditures as qualifying expenditures plus “acquisition costs” plus necessary R&D expenditures directly linked to the IP asset being created or developed, payable to any related party (KPMG, 2018 Luxembourg). The UK defines the overall R&D expenditure as qualifying R&D expenditures plus connected party subcontracted R&D and any relevant IP acquisition costs (HMRC, 2016).

#### 4.7.4 “Locating” R&D Expenditures

In the pre-BEPS period, most European countries did not always have an IP development condition or an R&D activity requirement, not mention requiring the R&D activities relating to the qualifying IP to be performed in the country providing patent box regimes or in the EU.

Under the “entity-version” of the nexus approach, a company can directly undertake the qualifying R&D activity to develop an IP, or further develop an acquired IP itself, or outsource the R&D activity to another EU country. R&D activities can occur beyond the patent box country either via contracting out and/or subcontracting out. For example, according to the Luxembourg patent box regime, foreign permanent establishment (PE) R&D expenditures can be qualifying R&D expenditures when certain conditions are met (KPMG, 2018 Luxembourg).<sup>76</sup> However, two countries (the Netherlands and Belgium) attempt to add some local activities requirements. In the Dutch patent box, for patent-like IP to qualify for patent box tax benefits, companies need an R&D declaration from the Netherlands government, and an R&D declaration is issued only when at least 50 percent of the R&D activity is performed in the Netherlands (WBSO, 2019).<sup>77</sup> Similarly, the Belgian patent box regime requires a condition that the qualifying research centres promote R&D and innovation in Belgium.<sup>78</sup>

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<sup>76</sup> These conditions include: (1) The expenditures are allocated to the head office of the foreign permanent establishment (PE) according to the provisions of a double tax treaty; and (2) the foreign permanent establishment is situated in the European Economic Area (i.e., EU Member States plus Iceland, Liechtenstein, and Norway) and not Luxembourg; (3) the foreign permanent establishment is operational at the time the qualifying IP income is generated; (4) the foreign establishment does not benefit from a similar IP regime in the country where it is situated; and (5) the Luxembourg head office must perform and control all significant functions (e.g., DEMPE functions—development, enhancement, maintenance, protection and exploitation) related to the R&D activities carried out by the foreign permanent establishment.

<sup>77</sup> R&D certificates seem to be an entry ticket for the non-patentable IP to the Dutch patent box, as R&D certificates are only granted to companies that pay Dutch wage tax and social security contributions in relation to R&D employees. That means that the granting of an R&D declaration actually depends on the presence of employees in the Netherlands. However, the Dutch patent box further stipulates that if less than 50% of the R&D activity is performed in the Netherlands, taxpayers need to demonstrate that they can coordinate and manage R&D activities performed abroad. In addition, R&D conducted outside the EU in full does not qualify for an R&D certificate. See WBSO (the *Dutch Promotion of Research and Development Act*) Manual, 2019, at WBSO Netherlands website, <https://english.rvo.nl/subsidies-programmes/wbso>.

<sup>78</sup> The Belgian regime allows research centers to be located abroad. During the policy-making process, the question of why the patent should be developed in an R&D center was raised. The Finance Minister answered by saying that this condition was put in place because it was necessary to create employment using patent box tax incentives. A Belgian taxpayer operating as a serving hatch or conduit company for patent income is not eligible for tax benefits. See Belgium Parliamentary Documents 51, 3058/015, p. 15.

The Ten Countries do not require the qualifying R&D expenditures to be performed in the patent box country, but they need to be performed within the EU. The way to limit R&D expenditures in the EU is through the location requirement of IP registration.

#### **4.7.5 Modified Nexus**

Under the modified nexus approach, a 30% uplift can apply to acquired costs and outsourced expenditures. The Ten Countries consistently restrict the cost for outsourcing R&D activities among group companies as qualifying R&D expenditures through domestic legislation, but allow 30 percent uplift of the qualifying R&D expenditures. For example, the UK, which allowed only outsourced IP among group companies in the pre-BEPS period, requires eligible R&D expenditures to be R&D expenditures directly undertaken by the taxpayer, plus any relevant R&D expenditure subcontracted to an unconnected third party and 30% of R&D expenditures outsourced to a related company (HMRC, 2016 CIRD 274100). In Belgium, only R&D costs outsourced to external, unrelated companies are eligible for the Belgian patent box, while 30% of R&D expenditures contracted out to related parties are qualifying R&D expenditures (Brantsandpatents, 2019 Belgium).

The 30 percent uplift also applies to certain acquisition cost. The Ten Countries all require claimants to bear R&D tax expenditures to further develop acquired IP in order to qualify for patent box tax relief. For example, Cyprus and Luxembourg, which do not require claimants to further develop acquired IP, exclude acquisition costs as qualifying R&D expenditures (EY, 2016c Cyprus). Both Cyprus and Luxembourg only allow the total amount of the cost of acquisition as an eligible cost when it is not more than 30% of the qualifying cost. Other countries which had different conditions on acquired IP in their pre-BEPS regimes follow the requirements of the nexus standard.

Therefore, although the modified nexus approach in the Ten Countries allows taxpayers to acquire IP or contracting-out R&D among related parties, it does not encourage these activities, as it only allows 30% of these costs as qualifying R&D expenditure.

## 4.8 Transparency

As discussed in Chapter 3, the nexus approach has a transparency requirement, requiring compulsory spontaneous exchange of information on certain patent box rulings and certain reporting obligations for monitoring patent box regimes purposes. The Ten Countries seem to over comply with the BEPS Action 5 requirement because the EU standard is higher<sup>79</sup> (Lang, 2013, p. 158). They have been self-evaluating and monitoring their compliance with the nexus standard by providing and exchanging information on patent box rulings. Due to complexities associated with allocating IP income to the nexus (or allocating IP income and expenditures to qualifying IP assets), nine out of the ten EU patent box regimes (except for Portugal) allow tax rulings.<sup>80</sup> The scope of tax rulings associated with patent box regimes involves almost all aspects of a patent box design, including qualified IP, the allocation of expenses and income to a single IP asset, qualifying IP income, a cap on patent box tax benefits, excess returns, the amount of qualifying IP income, and even the nexus ratio. The Netherlands has the most developed ruling practices among all EU member countries.<sup>81</sup> Spain has advance pricing agreements and qualifying agreements, both of

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<sup>79</sup> The EU Code of Conduct group actively monitors the implementation of the nexus approach standard in the EU. The amendments of the Code of Conduct group on the directive on automatic exchange of information were adopted in 2015. EU finance ministers reached an agreement on the amendment of *EU Mutual Assistance Directive* 2011/16/EU as regards the mandatory, automatic exchange of tax rulings on 6 October 2015 (EC, 2015). The amended Directive requires EU member states including the Ten Countries to automatically exchange information on cross-border tax rulings and advance pricing arrangements (“APAs”) among all EU member countries (EC, 2015).

<sup>80</sup> In fact, EU member states have a long tradition of formal or informal tax rulings. This is true of those countries operating patent box regimes, such as Belgium, Spain, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and the UK. In Finland, for example, the tax legislation has permitted taxpayers to request advance binding rulings since 1 January 1940. Also, in EU advance tax ruling basically deals with all kind of tax topics including transfer pricing. See The European Parliament’s committee on Economic and Monetary Affairs (ECON), *Tax rulings in the EU member states* (Brussel: European Parliament, 2015), pp. 38, 43. ([https://www.europarl.europa.eu/RegData/etudes/IDAN/2015/563447/IPOL\\_IDA\(2015\)563447\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2015/563447/IPOL_IDA(2015)563447_EN.pdf))

<sup>81</sup> The Netherlands offers the most developed ruling practice of all EU member states. Supported by the Ministry of Finance, the Netherlands created internationally well-known and well-received tax ruling practices, which govern MNEs who seek advance certainty on tax treatment of large investments. There is a distinction between “Advanced Pricing Agreement” (APA) and “Advance Tax Ruling” (ATR) practice. APAs are bilateral or multilateral agreements between taxpayers and tax authorities of the Netherlands on the transfer pricing method applicable to intra-group transactions. ATRs provide legal certainty on 1) the application of the Dutch participation exemption for international structures and top-holding companies, insofar as none of the subsidiaries of the top-holding company conducts any business in the Netherlands; 2) the tax treatment of hybrid entities and/or hybrid financial instruments in cross-border transactions; and 3) the assessment on the existence in the Netherlands of a permanent foreign entity. See *Decree IFZ 2001/292* on APAs; *Decree IFZ2001/293M* on ATRs (available in English on the website of the Netherlands Ministry of Finance (<http://www.minfin.nl>)).

which apply to the patent box regime.<sup>82</sup> Similarly, in Italy, determining the economic contribution that the related intangible assets bring to total income requires the prior activation of a ruling.<sup>83</sup>

The Ten Countries follow implementation procedures and criteria set by the FHTP to gather and exchange relevant enforcement information on patent box rulings. They amended domestic rules or practices in order to implement the information exchange requirement. For example, Ireland will redesign their tax return forms in order to collect and exchange information on new IP income under the patent box regime (OECD, 2018, p. 219). Portugal amended its domestic issuing procedure in order to establish a legal basis as of January 2018 for information exchange on patent box tax rulings with the G20 (OECD, 2018, p. 194).

The Ten Countries show willingness in adopting the FHTP recommendations regarding the implementation of the transparency framework. For example, the OECD's (2018) latest peer review report by the BEPS Inclusive Framework identified minor delays in the UK, Italy, "Portugal", and the Netherlands in responding to tax rulings on patent box regimes (OECD, 2018, pp. 458, 236, 381, 329). The OECD (2018) also suggests countries agreed to address the problems by following the best practices recommended by the FHTP. For instance, the UK will allocate more trained staff to prevent delays in providing tax ruling information. Hungary also agreed on the best approach to identifying new entrants to grandfathered patent box regimes (OECD, 2018, pp. 458, 194).

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<sup>82</sup> Article 23(6) CITRT (*Corporate Income Tax Law*) of Spain stipulates that: "In order to apply the reduction, before the realizing of the operations in question, the taxpayer may request from the tax authorities the adoption of an advance agreement on the pricing for the revenue derived from the transfer of assets and the associated expenses, as well as for the income generated in their transmission. Such application shall be accompanied by a proposed assessment, which will be based on market value. The proposal could be considered rejected once the deadline resolution has passed."; Article 23(7) CITRT of Spain states that: "before the realizing of the operations in question, the taxpayer may request from the tax authorities the adoption of an advance agreement on the qualifying assets as belonging to one of the categories, and on the pricing for the revenue derived from transfer of assets and associated expenses, as well as for the income generated in the transmission. Such application shall be accompanied by a proposed assessment, which will be based on market value. The proposal could be considered rejected once the deadline resolution has passed, the issuance of this agreement requires a binding report issued by the tax authority about qualifying assets. If it is deemed appropriate, the tax authority may request a non-binding opinion on the matter from the Ministry of Economy and Competition." Also, see IFA, 2007, p. 697.

<sup>83</sup> Naturally, the tax ruling procedure also applies when determining the amount of income relevant to the patent box in the case of income arising in the context of intra-group transactions. The ruling of tax administrations in Italy is, most of the time, so pre-emptive that its patent box does not have (or need) a specific anti-abuse rule. See Article 8 of the *Decree-Law 269/2003* of 30 September, Italy.

## **4.9 Key Findings**

The case study in this chapter is a comparative survey of patent box regimes in the Ten Countries. It shows similarities and differences in terms of their design after incorporating the nexus standard. The similarities reflect the nexus approach standard as a minimum standard, being implemented by the Ten Countries. The differences show that the minimum standard leaves room for countries to design patent boxes based on their own circumstances, priorities and preferences, such as the patent box tax rate, the scope of qualifying IP, the scope of IP income, and qualifying R&D expenditures and so on. These findings will be discussed below in detail.

### **4.9.1 Convergence**

The similarities of patent box regimes in the Ten Countries are mainly about patent box tax base design, which involves qualifying taxpayers, eligible IP types, qualifying income, design of nexus based on R&D expenditures that serve as proxy for R&D activities, the tracking and tracing of qualifying IP income to the nexus, documentation requirements for taxpayers, and information exchange and sharing on patent box legislation and patent box tax rulings for governments.

Adopting the minimum standard means that some countries had to incorporate the standard into domestic legislation. For example, the UK, Spain, and the Netherlands changed their transfer pricing approaches in pre-BEPS patent box regimes to the nexus approach in the post-BEPS patent box regimes. As a result, the UK patent box that was identified as a harmful tax practice by the OECD 2015 report is considered unarmful after introducing the modified nexus approach standard on 1 July 2016 through a change in legislation. Adopting the minimum standard reduces the generosity of patent box regimes in some countries, as IP income not attributable to a nexus is no longer eligible for tax relief, thereby reducing the risk of eroding tax bases of other countries.

### **4.9.2 Divergence**

The differences among the Ten Countries relating to patent box regimes are patent box tax rates and some aspects of tax base design, indicating that following up the minimum standard does not amount to giving up tax sovereignty. Since the nexus standard is about coordinating the tax base,

not the tax rate, countries can set the rates of patent box regimes. The actual average tax reduction in the Ten Countries is around 50% of the regular tax base. The UK, Hungary, Portugal, Ireland and Italy grant a 50% tax exemption of qualifying income. Spain excludes 60% qualified net IP income; Belgium, Luxembourg, the Netherlands and Cyprus exclude 80% of qualifying IP income. The effective patent box tax rates (see attached Table 3 ) range from 2.5% in Cyprus, 4.35% in Belgium, 5% in the Netherlands, 5.84% in the Luxembourg, 6.25% in Ireland, 5% or 9.5% in Hungary, 10% in the UK, 10.5% in Portugal, 12% in Spain and Italy ((IBFD Research Platform, 2019 UK, Italy, Portugal, Belgium, the Netherlands, Ireland, Spain; EY, 2016c Cyprus, Hungary; KPMG, 2018 Luxembourg). The variety of patent box rates in the Ten Countries indicates the nexus standard respects tax sovereignty as tax rate setting is the one of most important aspects of a country's tax sovereignty.

The Ten Countries also differ in terms of tax reduction methods. They either reduce the statutory tax rate or exclude qualifying income from the corporate tax base. That is to say, patent box tax relief in these countries is achieved by taxing qualifying IP income at a lower statutory tax rate or by altering the tax base. For the tax base exclusion method, countries further differ in the ways they reduce the tax base, either by offering a partial exemption or a notional deduction of a percentage of IP income. The UK and Ireland adopted a reduced tax rate approach, and the other eight countries chose a tax base reduction approach primarily because these eight countries adopt the exemption method in general.

To the extent that the nexus standard allows room for flexibility, the Ten Countries took advantage of that leeway, and preserved certain pre-BEPS features. This can be seen in their different definitions of the scope of patent-like IPs, the scope of embedded royalties, and whether or not relevant infringement income is qualifying income. The divergence in ten patent box regimes shows that the nexus standard does not aim to harmonize countries' tax laws or limit tax competition using preferential tax regimes. Instead, it leaves it to countries to conduct substantial tax competition strategically using different patent box designs based on their own circumstances, priorities and preferences. For an overall summary of the key features of patent box regimes in the Ten Countries, see attached Table 4.

# Chapter 5 Implications for International Tax Competition and Soft Law Development

## 5.1 Overview

This chapter considers the implications of the nexus standard for curbing harmful tax competition and international tax law development. After examining the adoption of the nexus approach in countries, I describe the use of preferential tax regimes by these countries as standardized tax competition. I argue that this new type of tax competition is better than the earlier OECD-led measures to counter harmful tax practices in the late 1990s and early 2000s (hereinafter referred to as “1990s OECD HTC Project”). The occurrence of this type of tax competition demonstrates that Professor Dagan’s tax competition theory (Dagan, 2018) has some explanatory power.

As to the implications of implementation of the nexus standard for international soft law, I argue that its wide adoption by OECD and non-OECD countries and its “coercive” nature suggest that the standard is a new type of international soft law.

I explain that the key to generating these two major implications (for international tax competition and soft law development) is the enforcement feature built into the nexus standard and the enhanced level of legitimacy it enjoys among countries that adopt it. A range of complex enforcement strategies makes the nexus standard more coercive. The inclusive consensus-building process of creating and implementing it makes the nexus standard more legitimate and more widely accepted by countries. More importantly, it justifies and also makes the coercive enforcement more effective.

The international experience with the nexus standard seems to suggest that this new form of soft law, that is soft law with some hard law effects in terms of enforcement, may be used in areas beyond patent box regimes. For example, in areas of harmful tax competition in general, and more specifically, in the taxation of the digital economy in which unified international standards or approaches to taxation are being discussed and negotiated. The nexus standard may have paved the way for the eventual adoption of these standards worldwide.

## 5.2 Standardizing Tax Competition

Tax competition through patent box regimes became standardized through implementing the nexus standard. In other words, the nexus approach standardizes tax competition among patent box regimes. This is illustrated by the case study in Chapter 4. Although allowing countries to preserve some “local” features, the nexus standard removes those features of pre-BEPS regimes that contributed to harmful tax competition, such as income that was mobile and not necessarily connected to the patent box jurisdiction.

### 5.2.1 A Better Outcome Than Non-Standardized Approaches

My research shows that the standardized tax competition approach achieved better results than the ad hoc approaches of the 1990s OECD HTC Project in terms of the number of countries willing to participate in adopting the standard and the short period of time in which countries came on board to adopt the standard. The nexus standard has been supported by both OECD countries and non-OECD countries, such as China and India. In contrast, while OECD member countries like Luxembourg, Switzerland, Portugal and Belgium abstained from approving the recommendations of the 1990s OECD HTC Project,<sup>84</sup> however, all of these countries adopted the nexus standard.

As shown in Chapter 3 of this dissertation, the implementation of the nexus standard was quick. As explained in Chapter 2, the FHTP and patent box countries agreed upon the nexus approach in their progress report of September 2014. In November 2014, Germany and the UK put forward a proposal for a modified nexus approach to adapt it to the EU context. This approach was endorsed by G20 leaders in Brisbane in 2015. Beginning in 2015, and within four years, more than 24 IP preferential regimes including patent box regimes incorporated the nexus standard into their preferential IP regimes (OECD, 2019, pp. 18-19, 21-23). These regimes include those of some developing countries that have previously participated in the BEPS Inclusive Framework.

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<sup>84</sup> Portugal and Belgium abstained from approving the recommendations in 2001, while the others abstained in 1998 and 2000. Luxembourg and Switzerland abstained from approving OECD (1998) and OECD (2000), and Luxembourg, Switzerland, Portugal and Belgium, abstained from approving OECD (2001). For more information, see OECD anti-harmful tax competition efforts under Heading 2.4.2 *Harmful Tax Competition* in Chapter 2.

More tellingly, pre-BEPS style patent box regimes no longer exist. As shown in Chapter 4, the pre-BEPS patent box in Cyprus allowed the widest scope of eligible intellectual property (including trademark) to benefit from tax relief, whether or not the income was generated from any substantial activity in Cyprus. The Cyprus regime also adopted a gross income approach to calculate eligible income so that expenses could be used to reduce corporate income assessed for regular corporate tax purposes. The standardized Cyprus patent box regime now applies only to net income from in-country R&D activity and qualifying IP is limited to patents and patent-like property. Luxembourg, Spain and the UK also eliminated their harmful patent box design features. As a result, the patent box regimes encourage in-country business innovation activities, while minimizing the harmful tax effects on other countries.

### **5.2.2 More Efficient in Curbing Harmful Tax Competition**

My research shows that standardized tax competition is more capable of curbing harmful tax competition. It is theoretically sound, at least in terms of the theory advanced by Professor Dagan (Dagan, 2018). According to Dagan's theory, a common and transparent global tax standard can improve international tax competition by overcoming the typical market failures. When more and more countries enact a patent box regime, "a global (patent box) tax competition market" is forming. In this market, countries lure IP-intensive MNEs and their R&D investment with patent box regimes and compete for the "profits" (positive spillovers from R&D investment and tax revenues) with attractive "prices" (preferential tax treatments for qualifying IP income). (For Dagan's original description regarding this market, see Dagan, 2018, pp. 3, 10) Countries compete to maximize their "profits" from the market (Dagan, 2018, p. 34). In the pre-BEPS world, patent box regimes were designed very differently; some of them attracted paper profits, and there was also a tendency of a 'race to the bottom'. In Dagan's words, those regimes led to "market failures" in the patent box tax competition market, such as, asymmetric information, high transaction costs, free-riding (Dagan, 2018, p.126). MNEs could shift IP profits generated in high-tax countries without patent boxes to tax havens or countries with patent boxes, thereby opting out the R&D tax incentives that subsidize the creation of IP and free riding the welfare system in high-tax countries. The asymmetric information between governments and MNEs made this situation worse. According to Dagan, to solve a global problem and achieve a global market, only a multilateral approach will be successful (Dagan, 2018, p. 224). The specific solution is to intervene with a

common standard or “standardized competition” at a global level, targeting and overcoming the above-mentioned market failures in a decentralised international taxation policy (Dagan, 2018, p. 230). The nexus standard is such a solution.

The nexus standard limits the “price” that countries can offer on the market. It limits opportunities for taxpayers to opt out of countries’ R&D tax incentives including some patent box regimes, thereby limiting the opportunities of taxpayers to free-ride countries by exploiting a tax welfare system without paying their fair shares of tax. The standardized design features of nexus enforcement help reduce countries’ transaction costs associated with the administration and legislative costs of closing tax loopholes (Dagan, 2018, pp 237, 231). The transparency requirement of the nexus standard helps to reduce “unfair” taxation practices based on secrecy and “asymmetric information” among countries in the decentralized international taxation market (Dagan, 2018, p. 231). At the same time, countries can still use nexus-compliant patent box regimes to compete, thus in Dagan’s words, they can avoid “collusion against tax competition” or insufficient tax competition in the international tax competition market (Dagan, 2018, p. 220).

Moreover, standardized tax competition generates a network effect, which helps to curb harmful tax competition in a stable way. The decentralized international tax regime is built on “a network of countries in a strategic interaction with each other” (Dagan, 2018, p. 119). When it comes to international tax cooperation, it is all about creating “a domino effect” (Fensby, 2018, p. 2). Once certain patent box countries cooperate and adopt the nexus standard, other countries may be incentivized to join and to remain in the network due to positive network externalities, such as accessibility, familiarity and compatibility, and the recognition and reputation that characterize membership in the network (Dagan, 2018, p. 89). The globalization of the standard through the BEPS Inclusive Framework further strengthens this network effect and increases the costs of staying outside the network. The network effect is likely to result in more countries adopting the standard.

### **5.3 A New Type of Soft Law**

Compared to existing soft laws in international taxation, the nexus standard is a new type of soft law because of its coercive enforcement mechanism and enhanced international legitimacy. The

coercive enforcement mechanisms move the soft law standard closer to hard law. Its enhanced legitimacy makes the nexus standard more widely acceptable and implemented while justifying the coercive enforcement mechanism.

### 5.3.1 “Enforceable” Soft Law

The fact that countries have adopted the nexus standard demonstrates the influence of the standard. The standard falls easily within the notion of soft law in international taxation (Avi-Yonah, 2004; Christians, 2007; McLaren, 2009; Vega, 2012). As shown in Chapter 4, countries are willing to give up some tax sovereignty and economic interests in order to meet the standard. For example, Belgium, Switzerland, Luxembourg, the Netherlands and Cyprus gave up some “competitive” aspects of their pre-BEPS patent box regimes in attracting mobile IP income. The transparency requirement regarding the exchange of patent box rulings further eliminates their competitive advantages, including providing competitive tax rulings. Belgium, the Netherlands and Luxembourg are countries that provide attractive advanced rulings.<sup>85</sup>

The nexus standard is accompanied by a built-in enforcement mechanism. This distinguishes it from pre-BEPS international tax soft laws. One can say that the standard is “enforceable”. The enforcement mechanism comprises enforcement and monitoring strategies and a range of extralegal sanction measures. Peer review mechanisms are the central review and enforcement mechanism of the nexus approach standard. Monitoring of the implementation of the nexus standard takes the form of formal peer review (peer countries monitoring) and informal peer review (non-governmental monitoring). All member countries implement the nexus standard on an equal footing and the implementation of the nexus standard is reviewed and monitored through the BEPS inclusive framework. More importantly, there are extralegal disciplinary mechanisms that operate as sources of enforcement. These disciplinary measures serve as sticks in achieving a long-term compliance goal by imposing defection costs on countries that might abandon the standard.

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<sup>85</sup>Belgium granted 602 APAs in 2015. Luxembourg granted 145 APAs and the Netherlands granted 236 when Spain grants 16, France 18, Germany granted 9 APAs, Ireland 2, Italy 27, Cyprus 0, Hungary 11, Malta 0, in 2015. See EC, *EU Joint Transfer Pricing Forum, Statistics on APAs in the EU at the End of 2015*(Brussels: European Commission, October 2016)( [ec.europa.eu/taxation\\_customs/sites/taxation/files/jtpf0152016enapa.pdf](http://ec.europa.eu/taxation_customs/sites/taxation/files/jtpf0152016enapa.pdf)). Also see Ronen Palan, Richard Murphy, Christian Chavagneux, *Tax Havens: How Globalization Really Works*, (New York: Cornell University Press, 2010), pp.11,12.

Enforcing disciplinary measures on an equal footing is key to building trust among countries. As the compliance-based theory (Brummer, 2015) suggests, the nexus standard has been equally enforced through the BEPS inclusive framework under the leadership of the FHTP, thereby overcoming the enforcement problems that characterized the 1990s OECD HTC Project. Research suggests that double standards in enforcing the counter measures of the 1990s was one of the reasons for the OECD HTC Project's failure (Pinto, 2003, pp. 279-80). OECD member countries, including Switzerland and Luxembourg, which were known international tax havens, were perceived as receiving unequal treatment, when they and the United States abstained or withdrew from the OECD project without penalty while the OECD blacklisted non-OECD tax havens.

Building on the compliance-based theory of soft law (Brummer, 2015), this enforcement mechanism is necessary in regulating international tax competition. Similar to international financial areas that have complex regulatory features (e.g., distributional consequences and asymmetrical regulatory relationships, costs and benefits), international tax competition is ripe for global coordination through coercive or disciplinary soft law, especially in BEPS Action 5. (Christians, 2017, p.1603; Avi-Yonah and Xu, 2016, p. 219 ).<sup>86</sup> Unlike in other areas of international law, such as international environmental law and international human rights law, ppersuasion and soft power suggested by traditional soft law theories (“contractarian analysis” theory, “soft power” theory, discussed in Chapter 2) may be insufficient in ensuring that countries agree to and fully implement soft law. Instead, strategic actions like bargaining and coercion, or a combination of the two are needed to create the net payoffs of adopting a new soft law. As such, international financial laws or international financial standards rely heavily on reputational discipline, market discipline and institutional discipline which can include financial assistance, naming and shaming violators of the standard, capital market sanctions and membership sanctions (Brummer 2015, pp. 145-161). Tax competition is such an area that also requires more regulatory disciplinary measures.

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<sup>86</sup> Christians (2017) argues the lack of sanctions for defaulting countries, especially the major powers, in the 1990s OECD HTC Project, can threaten the compliance of BEPS actions, including Action 5. Peer review can increase cost to defection to some countries without impacting other countries. Avi-Yonah and Xu (2016) suggest FHTP should perform a mandatory monitoring function based on a sanctions mechanism of transparent investigation, peer review, reasonable reward, and adequate sanction in order to ensure the effectiveness of soft BEPS Action 5.

Regulating international tax competition is not a coordination problem, but rather has the structure of an asymmetric prisoner's dilemma in which countries have conflicting interests and some countries can individually benefit from undercutting one another's taxes to attract mobile capital (Rixen, 2010, p. 5). For instance, small countries have less of a tax base to lose and therefore, can overcompensate for their tax base loss with the inflow of tax bases from other countries. In this way, small countries have more of an incentive to defect from international cooperation in combating harmful tax competition (Bucovetsky, 1991; Wilson, 1999).<sup>87</sup> These small countries, especially tax havens, can threaten the effective implementation of a new global tax competition standard as they will have more motivation to deviate when the adoption of the global standard increases the demand for tax haven services and the benefits of tax haven business (Dagan, 2018, p. 233). The fact that the 1990s OECD HTC Project failed at reaching a consensus because small countries that offered international tax havens, such as Luxembourg and Switzerland opposed them, underscores this point. The implementation of BEPS Action 5 (including the nexus standard) can be particularly difficult due to its distributional consequences and to the fact that different countries have different preferences, priorities or interests (Grinberg, 2016, p. 1137). Therefore, disciplinary measures that increase countries' defection costs are necessary in ensuring the effectiveness of the nexus standard.

The types of disciplinary measures around the nexus standard are extralegal and include reputational, market, and institutional disciplines, the most important of which is reputational discipline. Reputation loss is an important source of discipline in international taxation and can be much more effective than judicial or quasi-judicial enforcement (Chaye and Handler, 1995). The experience with the nexus standard suggests that peer reviews and public reporting of review results act as disciplinary measures as they can inflict reputational damage on a non-compliant country. Because the nexus standard is very specific, and non-compliance is not hard to identify and address, this mechanism can make a non-complaint country look terrible if it does not take

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<sup>87</sup> According to Wilson (1999), when competing countries differ in size (in terms of initial capital and labor endowments), they no longer face similar competitive constraints. Instead, small countries have stronger incentives to cut tax rates than large countries as they have little domestic tax base to lose but a lot of foreign tax base to win. Indeed, when difference in country size is large enough, small countries may generate more revenue under tax competition than in its absence. The reason is that the revenue effect of lower tax rates will be overcompensated for by an enlargement of the tax base through inflows from abroad is rather high.

immediate measures to remedy its non-compliance. The publication of review reports of non-compliant countries (as institutional disciplinary measures) can amount to public shaming, leading to reputational loss for countries.<sup>88</sup> It is possible that big, defaulting countries will suffer diminished group influence as opinion leaders, while small tax haven countries will suffer economic loss as their economies mainly rely on tax haven services (Sullivan, 2007, p. 334). Most importantly, the reputational loss for non-compliant countries can result in a bad market reputation in attracting FDI. A MNE that runs a business in the market of a country that does not follow an international tax competition standard can face uncertainty, even tax risks, such as if or when the subsidiaries of this MNE in other standard-compliant countries are punished by countermeasures from standard-compliant countries, as occurred with Germany's anti-patent box rule, as discussed below.<sup>89</sup> It is thus possible that reputational discipline is an important regulatory tool in international tax competition and the leverage of transparency by the FHTP can make reputational discipline as stiff as other countermeasures like Germany's anti-patent box rule that directly denies the deduction of income from non-nexus compliant patent box regimes. Ultimately, public shaming among peer countries turns into a source of persuasive authority based on peer pressure and may compel compliance better than hard law enforcement mechanisms (Chaye and Handler, 1995; Carroll and Kellow, 2011; Verdier, 2009).

In addition, there are coordinated and individual sanctions that increase the enforceability of the nexus standard. The nexus standard enjoys some coercive power owing to the BEPS Inclusive Framework mechanism. Implementation of the standard is a precondition for joining the Inclusive Framework, and non-compliance can be sanctioned not only by public shaming, but also through loss of participation in the Inclusive Framework. One can see this from an earlier precedent. According to Cui (2015, p. 1279), at the April 2, 2009 London summit, the G20 asserted that it would impose sanctions on non-cooperating countries in the form of denying financial assistance or loans from the IMF and the WB. Costa Rica, Malaysia, the Philippines and Uruguay were blacklisted by the OECD because they did not incorporate OECD anti-harmful tax competition

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<sup>88</sup> The FHTP regularly issues public reports that can contain a list of non-compliant countries in respect of countries' commitments on information exchange on tax rulings as well as the preferential tax regimes. See Chapter 3 under heading 3.7.2 *Consequences of Non-compliance* in Chapter 3.

<sup>89</sup> For more analysis on the market reputation loss and its negative consequences, Brummer (2015) discusses the negative financial market sanction cost in terms of capital cost, shareholder value and legal risk faced by foreign market participants. See Brummer (2015), pp. 156-158.

measures. Facing potential sanctions from the G20, the IMF and the WB, these countries took actions to comply.

Another type of nexus sanction is imposed by a specific country against MNEs that benefit from non-compliant regimes. As discussed in Chapter 3, Germany adopted a “patent box blocker rule” that restricts the deduction of payments to entities from non-nexus standard compliant patent box countries.<sup>90</sup> Spain and Italy both deny the eligibility of non-resident claimants from tax havens or low-tax jurisdictions that do not have a signed double taxation treaty with a provision on information exchange (IFA, 2015, p. 695; Cipollini, 2016). Such sanction measures are so-called ‘market participant sanctions’ and are among the stiffest disciplinary measures of the nexus standard as they impose monetary costs on the permitting countries in addition to the non-compliant countries (Brummer, 2015, pp. 157). They impose defection costs on taxpayers from non-compliant countries, resulting in a higher cost of doing business for those taxpayers, and thereby compel countries to comply with the nexus standard.

To sum up, these powerful extralegal disciplinary and sanction measures offer the nexus standard a high degree of enforceability, which makes it different from pre-BEPS soft law. By contrast, the the 1990s OECD HTC Project had limited sanction measures that were not implemented and the public monitoring of the implementation was also absent. The OECD Model Convention and OECD Transfer Pricing Guidelines do not have disciplinary measures and enforcement mechanisms at all. The enforcement mechanisms and sanctions make the soft nexus standard to be seen as closer to hard law in the hard-soft law spectrum (Schoueri, 2017, p. 829). This near-hard law effect is a major reason that the nexus standard is more effective in ensuring compliance. For the legal status of the nexus standard, see attached Table 5.

### **5.3.2 Enhanced Legitimacy**

Even the nexus standard is coercive because of its coercive mechanism, it can be ineffective or not even accepted or applied if it is not legitimate. The nexus standard enjoys a higher level of

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<sup>90</sup> KPMG, *Germany: Anti-patent box legislation, other developments* (1 June 2017)(<https://home.kpmg/xx/en/home/insights/2017/06/tmf-germany-anti-patent-box-legislation-other-developments.html>).

legitimacy than previous anti-harmful tax competition measures for the simple fact that it has been accepted as a minimum standard by the BEPS Inclusive Framework, which has over 100 participating countries and jurisdictions. Such enhanced legitimacy is critical to the hard law effect of the nexus standard and its adoption by a large number of countries. Several factors help contribute to the enhanced legitimacy, including the inclusive nature of the process of developing and implementing the nexus standard, broad political support, and OECD soft power. As discussed in Chapter 2, scholars assess the legitimacy of soft law (Brummer, 2015; Senden, 2005; Gribnau, 2007) in terms of accountability, output legitimacy and input legitimacy. Below is a discussion of these factors, using the 1990s OECD HTC Project as a backdrop to measure the extent of enhanced legitimacy under the nexus standard.

### **5.3.2.1 Enhanced Accountability**

Accountability gauges the extent to which soft law makers are responsive to stakeholders and the public when wielding their power. In the case of the nexus standard and international efforts on combating harmful tax competition, it is the OECD that is the de facto soft law maker. As such, it is the OECD's accountability that is considered here.

In terms of political accountability, the OECD was accountable not only to members of the OECD in the 1990s OECD HTC Project, but also to G20 members that might not be OECD members G20 in the BEPS Project that generated the nexus approach in Action 5. As discussed in Chapter 2 because the G20 represents about two-thirds of the world's population and half of the world's land area, such a level of accountability by the OECD is unprecedented.

In term of accountability to stakeholders, the OECD adopted processes to enable multiple stakeholders, such as taxpayers, non-governmental organizations, tax administrations and members of the public, to be involved in various ways, including through submitting comments on draft discussion papers or by participating in discussions, workshops and meetings. It is noteworthy here that more developing countries had an opportunity to participate in the BEPS process than in the 1990s OECD HTC project. Inputs from stakeholders and the public were taken into account by the OECD. By contrast, the 1990s OECD HTC project denied active participation of the public and non-OECD tax haven countries that were targeted by the project.

The OECD's accountability in implementing the nexus standard was also enhanced. The FHTP, which implements the nexus standard, follows more transparent procedures and publishes peer reviews and progress reports than its predecessor. In other words, while the FHTP's work enables stakeholders, including civil societies and the public, to monitor the implementation of the nexus standard, such monitoring also makes the FHTP more accountable. Such a level of transparency did not exist in the case of the 1990s OECD HTC Project.

### **5.3.2.2 Enhanced Input Legitimacy**

Input legitimacy involves both a more explicit conception of consent by the governed and the opportunity to influence the outcome by the governed (Brummer, 2015, p185; Gribnau, 2007, p. 310). It is derived from the determination of who can participate and from how relevant their participation is to the development and implementation of the soft law.

As mentioned in the context of enhanced accountability above, the scope of participation in the BEPS Project is significantly broader than was that of the 1990s OECD HTC Project. In addition to the stakeholders and the members of the public mentioned above, international institutions such as the UN, the IMF and the WB participated in the BEPS Project. These institutions allow more opportunities for their member countries to participate. These legitimate institutions also bolster one another's claim to legitimacy when combining their different technocratic expertise with the democratic authority of the G20 as a political actor. This was not the case in the 1990s OECD HTC Project because as the listed tax haven countries under that project pointed out, the OECD's harmful tax competition initiatives contradicted the advice at the time from the World Bank and the IMF, which encouraged them to develop financial services industries through low tax rates (Sharman and Mistry, 2008, p. 67). By contrast, non-OECD G20 members, such as China and India, actively participated in the BEPS Project and gave consent to the BEPS outcomes, including the nexus approach in Action 5. Such broad-based participation in the BEPs project enabled an inclusive consensus-building process, which, in turn, enhanced the legitimacy of the nexus standard.

The participation of stakeholders in the BEPS project in creating the nexus standard was also enhanced in terms of diversity compared to stakeholder participation in the 1990s OECD HTC project. Participants of the BEPS Inclusive Framework represented both developed OECD countries and powerful emerging countries like Russia, China, India, South Africa, Argentina and Brazil. The role of developing countries is particularly noteworthy in enhancing the legitimacy of the nexus standard. Harmful tax competition causes more harm to developing countries than to developed countries as their tax revenues rely more on corporation income tax (IMF, 2014, p. 7; Durst, 2018, p.1190; Keen and Simone, 2004). Also, developing countries use tax incentives to promote economic development and would want to have a clear standing according to an international tax standard so that can continue to use tax incentives while protecting their tax base (Zolt, 2013). Other than tax haven jurisdictions that target mobile income, most developing countries use tax incentives to target substantive activities. As such, they support the nexus standard. By contrast, the 1990s OECD HTC Project did not appropriately involve developing countries. In developing the nexus standard, tax haven countries like Luxembourg were consulted through different ways. Through the nexus standard, traditional and emerging R&D countries that do not have patent box regimes, as well as countries that have patent box regimes reached a consensus.

Indeed, the 1990s OECD HTC project did not properly consult many non-OECD members which would be directly affected by the project such as non-OECD tax havens, and no consensus was reached between the jurisdictions that engaged in harmful tax competition and those that wished to fight against it. Because of this, the 1990s OECD HTC project was seen to have no moral authority to interfere with the national tax law (Mitchell, 2000). Law-making without the participation of the stakeholders who will be affected by the laws can lead to skepticism and suspicion of the substantive quality of the decisions (Brummer 2015, p.198).

Compared to the 1990s OECD HTC project, the extent of participation of stakeholders in the BEPS process was enhanced considerably. As with the general law-making processes of democratic countries, fair and open debates about the pros and cons of different or conflicting concerns, approaches and objectives is critical to generating an outcome that is widely considered just. Justice needs conflict (Hampshire 2000). In developing the nexus approach, the BEPS process is closer to an ideal legitimate process than the processes mobilized in 1990s OECD HTC Project.

During the BEPS process, countries debated about three possible approaches that could satisfy the substantial activity requirement (*Action 5 Report*, pp.9, 24). While no country supported the value creation approach, Luxembourg, the Netherlands, Spain and the UK supported the transfer pricing approach, and a larger number of countries support the nexus approach. Such a “democratic” process prevented the determination of an approach from being manipulated by a handful self-interested countries. The public consultation process also allowed the formulation of the nexus approach to benefit from the expertise of participants, as well as from input from the private sector. Input legitimacy is presumably enhanced by taking into consideration the experience of those affected by the soft law (Gribnau, 2008, p. 114). Further, in the developing the nexus approach, the patent box countries, especially EU member countries, expressed some concerns about the nexus approach, such as the compatibility of the nexus approach with EU law, the definition of qualifying R&D expenditures, transitional measures, and the methods of tracking and tracing R&D expenditures. These concerns were able to be addressed by adopting a modified nexus approach (OECD, 2015a), following some negotiations and renegotiations.

Both in terms of the scope of representation, representation from stakeholders most affected by the soft law, and the degree of stakeholder participation and representation, and the open and inclusive process used in developing consensus among the various stakeholders, the BEPS process enjoys more legitimacy than the 1990s OECD HTC Project. Increasing the diversity and extent of representation, such as the expansion of membership and the degree of representation within an organization, can be more critical to determining popular conceptions of legitimacy than whether or not formal treaties or hard law processes have been applied to them (Brummer 2015, pp. 201; Christians and Shay, 2017). This seems to be the case with the nexus standard.

### **5.3.2.3 Enhanced Output Legitimacy**

Output legitimacy involves implied consent based on the optimality of the soft law that soft law makers generate (Brummer, 2015; Gribnau, 2008; Gribnau, 2007; Senden 2004). Generally speaking, a soft law will be legitimate if it can provide a solution to citizens' problems and can “respond efficiently and effectively to their expectations, interests, and needs of the citizens (government for the people)” (Gribnau, 2008, p. 299). Output legitimacy is assessed by reference to the soft-law maker’s accomplishments or outcomes and is determined by the ability of the soft

law maker to respond to demands efficiently and effectively, as opposed to the representation, processes and formal organizational qualities that contribute to input legitimacy (Brummer, 2015, p. 186; (Gribnau, 2008, p. 299).

Again, compared to the outcome of the 1990s OECD HTC Project, the nexus standard has demonstrated a better outcome. The nexus standard has been widely accepted as a minimum, global standard for assessing harmful tax practices. It addressed countries concerns about harmful tax competition effects of some pre-BEPS patent boxes in terms of tax base erosion and race to bottom. It represents the outcome of a transparent, inclusive process led by the G20/OECD and reflects the common interests of multiple countries in mitigating the negative spillover effects of harmful tax competition. The fact that the nexus standard was adopted by a large number of countries within the span of a few years is also a positive outcome that enhances the legitimacy of the nexus standard. This is in contrast with the outcome of the 1990s OECD HTC Project – the substantive activity test in OECD (1998) was not adopted by Luxembourg and Switzerland. As suggested by the definition of output legitimacy, the output legitimacy of the nexus standard depends on the capability of the OECD to design an effective and efficient soft law which will be discussed in the next section.

### **5.3.3 Soft Power Combined with Hard Technical Expertise**

The hard law effects and the enhanced legitimacy of the nexus standard can also be attributed to the OECD's capability of exercising soft power through its advanced technical design skills. Soft power theory (Slaughter and Zaring, 2006; Gribnau, 2008; Pollitt, 2001) posits that the compliance force of soft law derives from its own power of persuasion and attraction. In the area of international taxation, the OECD exercises soft power (Ring, 2010a; Christians, 2017; Avi-Yonah, 2004; Christians, 2007; McLaren, 2009; Vega, 2012), and is the de facto international tax organization (Cockfield, 2006). This soft power was much on display in developing the nexus standard. The OECD had experience with transparency that it gained from the 1990s OECD HTC Project and enjoyed widespread recognition of its leadership and technical capacity.<sup>91</sup> The design

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<sup>91</sup> OECD soft law-making process is also criticized because of its exclusivity and opacity in Pre-BEPS era since it mainly represents developed countries due to limited membership and avoid the direct scrutiny based on close-door

of the nexus standard shows a delicate balance of competing concerns and a pathway for practical and gradual development of intergroup communication and consensus.

The OECD's wisdom in leading the development of the nexus standard can also be seen by the "organic" or innovative character of the standard. The nexus standard is an organic part of the overall BEPS Project. It is consistent with the overarching value creation principle (Devereux and Vella, 2018; Hey, 2018; Morse, 2018; Vanistendael, 2018) in that a country can only "give away" the tax base (that is, income from patent and patent-like intellectual property) that is within its tax base in the first place, assessed by reference to the nexus or having substantive activity in the country. It works together with the transfer pricing rules in determining qualifying IP income, building on national tax rules in determining qualifying R&D expenditures for purpose of the patent box regimes. It highlights the transparency requirement by mandating exchange of information regarding administrative rulings. Using the FHTP to monitor and enforce the nexus standard integrates the pre-BEPS and post-BEPS measures on tax competition.

## **5.4 Implications for General Harmful Tax Competition and Digital Economy Taxation**

Leading by example is important in a world of soft law (Brummer, 2015, p. 340). Soft law facilitates experimentation. My research suggests that the nexus standard is a successful experiment. It is possible that this experiment can lead to soft law solutions in other areas of international taxation, such as harmful tax competition in general and the taxation of digital economy.

Extending the nexus requirement to preferential tax regimes designed to attract non-IP mobile income, such as financial income, technical services or digital economy income seems to make sense. It appears that the BEPS Inclusive Framework can provide the institutional platform for the OECD to lead the development of standards for these tax regimes. With respect to financial income

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law making. The inconsistency of hard legal effect and illegitimate law-making process poses a risk to the rule of law. See Rixen (2009), Carrero (2007), Klabbers (1998), Christians (2010) discussed in Chapter 2.

and tax havens, according to *Action 5 Report* (p. 10), the FHTP has been working on a new standard for these preferential tax regimes.

With respect to the taxation of the digital economy, the OECD has proposed Pillar One and Pillar Two to address the distribution of taxing rights among user/customer jurisdictions and residence jurisdictions and to address the problem of profit-shifting through proposing a minimum global corporate tax.<sup>92</sup> The proposals, if adopted, would be “standards” for countries to implement. In this sense, the nexus standard (as well as the other minimum standards resulting from the BEPS Project) may have paved the way for the eventual adoption of Pillar One and Pillar Two around the world.

More broadly, using the nexus standard to coordinate international tax initiatives seems to be reducing or even crowding out unilateral measures. The experience with the nexus standard suggests that successful, internationally coordinated efforts lead to more stable and transparent soft law that can be widely accepted by OECD and non-OECD countries and provide more certainty for taxpayers, while reducing the room for profit shifting. Such certainty is particularly important for taxpayers in a self-assessment common-law legal system (Bentley, 2008, pp. 33, 39). Uncoordinated measures, as shown by the problems of BEPS, often result in gaps between national tax laws, leaving room for profit shifting or overlaps that may impede cross-border business activities.

The nexus standard can also be seen as an example of an implicit global contract with regard to tax competition. Under this contract, countries have obligations not to conduct harmful tax practices in order to enjoy the benefits of substantial tax competition. As with the case of social contracts in democratic countries, enforcement and legitimacy are important in ensuring compliance with this global contract. Experience with the nexus standard in enhancing legitimacy may be helpful in expanding the global contract into other areas.

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<sup>92</sup> The BEPS Inclusive Framework has agreed to commit to reach an agreement on a consensus-based solution by the end of 2020. So far, they have agreed upon an outline of the architecture of a Unified Approach on Pillar One as the basis for negotiations. OECD, “Statement by the OECD/G20 Inclusive Framework on BEPS on the Two-Pillar Approach to Address the Tax Challenges Arising from the Digitalization of the Economy – January 2020” (Paris: OECD, 2020). (<https://www.oecd.org/tax/beps/statement-by-the-oecd-g20-inclusive-framework-on-beps.htm>).

## Chapter 6 Conclusions

On the basis of applying my doctrinal research to my case study, I reach several conclusions about my research findings. First, international tax challenges, such as harmful tax practices involving intangible property, are better addressed through collaboration. A minimum global standard, if one can be established, is more effective in addressing these challenges. This is due to the current reality that there is no global (supranational) taxing organization and that many countries may not have the necessary political clout or expertise to address these international challenges on a unilateral basis. By coordinating and thereby ceding some tax sovereignty by agreeing to a global standard, countries can effectively preserve their sovereignty. Also, participating in the global standard may help countries avoiding any reputational backlash. In other words, having a “regulated” tax market through soft law is arguably better than the uncoordinated alternatives. This research agrees with Dagan’s theory by showing the effectiveness of the nexus standard in combating harmful tax competition.

Second, the enforcement of soft law is important in enabling hard law effects, especially in contested areas such as tax competition. A range of informal enforcement arrangements by informal institutions (the G20, the OECD), such as transparent peer review and ongoing monitoring through the BEPS Inclusive Framework, together with a series of extralegal disciplinary measures, like reputational discipline, market discipline and institutional disciplines are important. Peer review and monitoring collect and provide the information needed for enforcing disciplinary measures. Among these informal enforcement arrangements, informal institutions like the G20, the OECD (including the FHTP) play significant roles. They leverage transparency in the context of globalization and the important role of market participants like MNEs, and make the implicit disciplinary measures more effective. Such enforcement mechanisms are important in ensuring the nexus standard is implemented and that there is a level playing field for all countries.

Third, legitimacy is critical in ensuring the effectiveness of soft law and its built-in enforcement mechanisms. A standard gains legitimacy if it allows room for preserving tax sovereignty and has some flexibility in technical design. More importantly, legitimacy is closely tied to leadership,

inclusiveness, transparency and expertise. Through a series of informal arrangements, informal institutions can create authority, legitimacy and compliance.

With respect to my research methodology, I have encountered several challenges in conducting my empirical research. One challenge was the lack of availability of reliable information in English. Another challenge was making sense of different tax systems in order to be able to make valid and meaningful comparisons. Because patent box regimes are part of the general corporate tax system, which differ from country to country, it is not easy to isolate the design of a patent box regime without an in-depth knowledge about the corporate tax system. Nevertheless, I found that having a case study, even if not ideal, was helpful to developing my understanding of the nexus standard.

Finally, with respect to potential contributions to the literature on nexus standard research, although there is a vast body of literature on BEPS, international tax competition and soft law, I have not found much in the existing literature on BEPS Action 5 and the interesting role of the nexus standard in curbing harmful tax competition and international tax governance. I hope that my research contributes to the literature in this area in several ways.

First, it is my hope that this dissertation contributes to the existing international tax competition literature by showing that Professor Dagan's theory has some explanatory power and that standardized tax competition has a better chance of combating harmful tax practices than non-standardized or unilateral measures, such as those attempted by the 1990s OECD HTC Project. More importantly, I believe that my dissertation demonstrates the feasibility of designing and implementing a transparent and compatible standard through a soft law strategy, thereby advancing Dagan's work, which had some doubt about the efficacy of such a standard due to: (a) the absence of a supranational institution that can design and enforce the standard, and the participation and accountability issues caused by the absence of such a supranational design and enforcement institution (b) anticipated technical design challenges for creating and implementing such a standard due to the distributional consequence, and (c) anticipated enforcement challenges because of tax havens' possible undercutting of the global standard. The analysis of the development of the nexus standard in Chapter 3 and the case study described in Chapter 4 show that the political feasibility of a transparent and inclusive consensus-building process among various countries

(major countries and tax haven countries, or mixed tax haven countries) led by G20/OECD. In other words, in developing the nexus standard, the G20/OECD functioned like a supranational institution. My research also shows that a standard can be designed by building on existing domestic, EU, or OECD soft laws. The enforcement through peer review, monitoring and implicit sanction measures could prevent the standard from being undercut by tax havens. Through a series of inclusive and transparent consensus-building strategies and institutional innovations, informal G20/OECD organizations create their own authority, legitimacy, and compliance.

Specifically, the case study indicates that an incremental and soft strategy is more feasible than the radical solution of building a supranational institution, such as the anti-trust agency proposed by Professor Dagan. The standardization of patent box regimes helps better identify harmful tax practices and expresses the common interests of different countries. This soft law strategy is suitable for the sovereignty-preserving international tax regime based on its informality and flexibility. The nexus standard allows countries to compete while not over competing or harming other countries. It works for large countries such as the UK and Italy, and mixed tax haven countries such as Luxembourg, the Netherlands and Ireland. In the case study, the OECD and its soft law-making function as supranational institutions with lower costs in terms of time, enforcement and sovereignty than formal legislation. It combats harmful tax competition without causing radical change or a politically risky complete overhaul of existing legislation.

Professor Dagan's theory is concerned that tax haven countries could undercut any proposed international standard. My research indicates that the enforcement of the nexus standard includes a range of built-in compliance-oriented soft enforcement arrangements, such as peer review, enhanced monitoring, positive implementation incentives (e.g., technical support), and negative incentives (e.g., national reputational discipline, market reputation loss and institutional disciplines, which further include public shaming, blacklisting, and the development of anti-patent box rules by individual member countries). These enforcement measures have shown effectiveness. These enforcement strategies and coercive disciplinary measures are built on and justified by the inclusive and transparent consensus-building process at the nexus standard creation and implementation stages led by G20/OECD, overcoming another concern that Professor Dagan raised - the participation and accountability issue.

Second, my findings contribute to the literature on soft law in international taxation and on soft law approaches in general. My contribution to the literature on soft law in international taxation is in my illustration of how soft law can acquire some hard law effects and my exploration of what aspects of soft law give rise to that effect. Enforcement mechanisms based on legitimacy is the most important factor supporting the efficacy of soft law in international taxation especially in contest areas. Among those features, the procedural values of the nexus standard - the transparency and inclusiveness with which its development proceeded - are the seeds of that transformation, which may lead to hard law effects and soft law development.

My findings also contribute to soft law theories in general. The experiences from international tax area tests the soft law theories explaining the hard law effect of soft law. Meanwhile, by finding the nexus standard as a new species of law that has harder edges than traditional wisdom contemplates soft law, and informal institutions can also create authority, legitimacy and compliance through a range of informal enforcement arrangements, this research challenges the legal positivism of soft law that argues that formal legitimacy is the only mechanism that gives rise to the law's coercive force and that soft law is not law. This finding is consistent with legal realism that soft law and hard law exist on a continuum rather than as a dichotomy.

# TABLES

Table 1: Types of Qualifying Intellectual Property in the Ten Countries

IP Types included	LU	BE	NL	CY	HU	ES	PT	UK	IT	IE
<b>Patents</b>	√	√	√	√	√	√	√	√	√	√
<b>Copyrighted software or computer program</b>	√	√	√	√	√	√			√	√
<b>The third category of qualifying IP</b>	Utility Model	√		√	√		√			
	Protected drawing, design or models					√	√	√		√
	Semiconductor topographies					√				
	Protected pharmaceutical production products	√					√		√	
	Exclusive licensing for use		√	√						
	Protected plant products (Plant variety right or plant breeder's rights)	√	√	√	√	√	√		√	
	Protected orphan drug designations	√	√	√	√	√			√	
	Protected products for pediatric use	√								
	Other protected non-obvious, novel and useful IP			√ (R&D certificate by SME)	√ (R&D certificate by SME)	√		√ (protected and related to R&D IP rights)		√ (Protected know-how)

Table 2: Qualifying Intellectual Property Income in the Ten Countries

	LU	BE	NL	CY	HU	ES	PT	UK	IT	IE
Royalties or License fees	√	√	√	√	√	√	√	√	√	√
Embedded royalties (income from sales of IP related product, services or procedures)	√	√	√	√	√	√	√	√	√	√
Proceeds from sale of qualifying IPs	√	√	√	√	√	√	√	√	√	√
Infringement payment or other Compensation	√	√		√			√	√		√

Table 3: Patent Box Effective Tax Rates in the Ten Countries

	LU	BE	NL	CY	HU	ES	PT	UK	IT	IE
Regular tax rate	29.22	29	25	12.5	10 or 19	30	21	21	24	12.5
Patent box tax rate	5.84	4.35	5	2.5	5 or 9.5	12	10.5	10	12	6.25





Table 5: The Status of Nexus Standard in the Hard-soft Law Spectrum

Attributes	Soft Law (informal legislation)	The Nexus Standard	Hard Law (formal legislation)
Maker	Governments, international institutions, stakeholders, and citizens	The G20/OECD, countries, business, NGO(e.g., Tax Justice Network), academics, UN, IMF, World Bank, Tax Organizations, etc.	Governments
Making Process	Reciprocal interaction “discourse,” “talk,” “debates,” “negotiation,” and “renegotiation” (two-way mutual communication)	Public consultation, “negotiation,” and “renegotiation”(e.g., from nexus approach to modified nexus approach)	Hierarchical, command and control, (one-way communication)
Instruments	Guidelines, voluntary standards, codes, recommendations, reports and best practices	Minimum Standards	Legally binding treaties, law, statutes
Enforcement	Lack of Enforcement or Self-enforcement by participants based on ongoing dialogue, such as peer review, ongoing monitoring	Peer Review by the FHTP, Global Forum and Inclusive Framework member countries , Ongoing monitoring, Publishing review report	State coercive enforcement mechanisms, such as, using military force or economic coercion force
Sanction Measures	Lack of sanction or Recommendation on counter (defensive) measures	Reputational discipline, market disciplines, institutional disciplines by G20, OECD and EU (e.g., blacklisting, Germany anti-patent box rule, and G20 coordinated discipline).	Legally binding disciplinary measures, such as, retaliation, reciprocal noncompliance, and damage

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