Article

The Luxembourg Effect: Patent Boxes and the Limits of International Cooperation

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INTRODUCTION

For decades, countries have turned to their tax systems to encourage innovation and entrepreneurship. They have provided tax credits and tax deductions for research and development (R&D) expenses, accelerated depreciation for assets used in the R&D process, and reduced wage taxes for the employees engaged in this process. The goal of these tax incentives is to create an incentive for R&D that will eventually create valuable intellectual property (IP) in the form of patents, copyrights, and other assets that will ultimately produce income. In the

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2. Id. at 351–52.
3. Different countries define IP differently, and different tax incentives apply to different categories of IP. When referring to IP generally, this Article
last several years, more and more countries have also started to provide reduced tax rates on the income arising from IP assets as another way to create incentives for R&D. These reduced rates on IP income take the form of tax incentives referred to as “patent boxes,” where income from patents and other IP assets is separated from a taxpayer’s overall income and subjected to lower rates.

In the last decade, well over a dozen countries have implemented patent boxes and similar tax incentives. Countries that do not have patent boxes, however, see them as examples of harmful tax competition since at least some patent boxes can be used to encourage income shifting by attracting income away from the country where the underlying R&D took place. Countries without patent boxes thus fear that taxpayers who engaged in R&D in their countries (and benefited from their R&D incentives) could move the income from that R&D to another country, where it would be taxed at a lower rate.

In 2013, this criticism of patent boxes overlapped with international criticism of tax avoidance more generally. As newspapers printed stories about large multinationals avoiding taxation, and domestic legislatures hosted hearings about the

uses a broad definition that can encompass the assets protected by any country’s tax incentives for IP. See, e.g., TRIPS: Agreement on Trade-Related Aspects of Intellectual Property Rights, art. 1, para. 2, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299 (“For the purposes of this Agreement, the term ‘intellectual property’ refers to all categories of intellectual property that are the subject of Sections 1 through 7 of Part II [i.e., copyright and related rights, trademarks, geographical indications, industrial designs, patents, layout designs of integrated circuits, and protection of undisclosed information].”). When referring to IP in the context of the nexus approach, this Article uses the narrower definition to which the OECD and G-20 countries agreed. See infra notes 138–40 and accompanying text.

4. See Graetz & Doud, supra note 1, at 362–63.

5. Id.


7. See Graetz & Doud, supra note 1, at 372–75.

8. Id.

same topic, the Organisation for Economic Co-operation and Development (OECD) and the G-20 initiated the Base Erosion and Profit Shifting (BEPS) Project, which was a two-year project to produce a range of required minimum standards and recommended best practices designed to target international tax avoidance. As part of this project, the OECD was charged with developing an approach to limit the elements of patent boxes that encouraged and allowed income shifting between jurisdictions. The OECD’s mandate was to develop an approach that would only permit countries to provide benefits to income that was linked to “substantial activities” that took place in the country providing benefits. The approach that the OECD developed came to be known as the “nexus approach.” Under the nexus approach, countries are only permitted to provide benefits under patent boxes to the extent that there is a nexus between the income receiving benefits and certain qualifying R&D expenditures. Under this approach, benefits must be proportionate to the amount of R&D undertaken by the taxpayer receiving benefits or in the country providing benefits.

The nexus approach limits revenue loss from patent boxes by establishing a link between R&D and the income that may benefit, thereby constraining the ability of taxpayers to shift income between countries. It does not, however, eliminate all opportunities for income shifting, and it achieves its goal by creating pressures in favor of restructuring and against outsourcing and acquisitions, even when outsourcing and acquisitions would not create any income shifting opportunities. These weaknesses can be explained with reference to one phenomenon: European Union law.

11. See infra Part I.B.
12. See infra Part I.B.
13. See infra Part I.B.
14. See infra Part I.C.
15. See infra Part I.C.
16. See infra Part I.C.
17. See infra Part I.C.
18. See infra Part II.
Of the countries that took part in the BEPS Project, half were Member States of the European Union. The EU Member States that took part in the BEPS Project were unwilling to permit the OECD to issue any requirements or recommendations that would be inconsistent with European Union law. Since the European Court of Justice has previously held that domestic R&D credits cannot discriminate based on the location of the R&D, the nexus approach could not take the most logical approach, which would have been to establish a nexus between the location of the R&D and the country providing tax benefits to the income. Instead, it had to create a less intuitive nexus, between the entity incurring R&D expenditures and the entity receiving benefits. This version of the nexus approach will still reduce income shifting, but, because of the constraints imposed by European Union law, it will create more distortions and more possibilities for income shifting than a version that focused directly on the location of the income.

These distortions and income shifting opportunities matter for the effectiveness of patent boxes and for international tax competition more generally. But they also illustrate an important phenomenon. Previously, discussions of EU law and the ECJ’s jurisprudence have focused primarily on the internal inconsistency of the cases or the impact of these cases on Member

19. Note that, at the time of the BEPS Project, Latvia, a Member State of the European Union, was not yet a member of the OECD. It was, however, one of the forty-four countries participating in the BEPS Project as an OECD accession country, and it became a member of the OECD on July 1, 2016. See List of OECD Member Countries – Ratification of the Convention on the OECD, OECD, http://www.oecd.org/about/membersandpartners/list-oecd-member-countries.htm (last visited Mar 20, 2017).

20. In this Article, the terms “European Union law” and “EU law” are shorthand for the acquis of the European Union institutions, as well as the Treaty freedoms, cases by the ECJ and the other courts of the Court of Justice of the European Union interpreting and applying these freedoms, and relevant directives and regulations.

21. This Article refers to the Court of Justice as the European Court of Justice, or ECJ. The name of the court system of the European Union has been changed to the Court of Justice of the European Union, or CJEU, but many of the decisions mentioned in this Article were decided before this name change. Furthermore, the highest court is still referred to as the Court of Justice. Therefore, using one name for the same court is intended to provide consistency throughout the Article.

22. See infra Part II.A.

23. See infra Part II.A.

24. See infra Part II.A.
This Article argues that these discussions need to focus on the impact of EU law on countries outside the European Union as well. Although some academics have acknowledged that EU law can have implications for treaties or relations with countries outside the European Union (known as “third countries” in the context of EU law), this Article uses the nexus approach and other recommendations issued as part of the BEPS Project to illustrate that EU law has an even larger effect on third countries than previously acknowledged. It is no longer just a constraint on Member States. It is now a constraint on other countries as well, since non-EU countries are now competing in an international tax environment where the Member States cannot police tax avoidance in the most effective manner. Instead, the ECJ’s jurisprudence, which has limited the ability of Member States to police tax avoidance, has also put downward pressure on international anti-avoidance standards, thereby making it harder for non-EU countries to have robust anti-avoidance rules.

In a nod to Anu Bradford’s “Brussels Effect,” which describes how the EU has heightened regulatory standards in certain areas due to the combination of EU regulatory authority and market competition, I refer to this downward pressure on worldwide anti-avoidance standards as the Luxembourg Effect (because the primary seat of the European Court of Justice is in Luxembourg). In areas such as direct taxation, where the EU has no independent regulatory authority but the ECJ can strike down Member State provisions for violating the freedoms enshrined in the Treaty on the Functioning of the European Union (TFEU), the ECJ’s jurisprudence has created a vacuum. Member States cannot pass laws or regulations that violate the Treaty freedoms, but EU institutions also cannot fill

28. Pistone, supra note 26, at 239–43.
29. Id. at 235–39.
31. See infra Part II.A.
this void by passing EU-wide laws or regulations.\textsuperscript{32} What the BEPS Project and its outputs reveal is that this vacuum has effects outside of the European Union.\textsuperscript{33} Even though half of the countries involved in the BEPS Project (including the United States) were not Member States of the EU, their efforts to combat tax avoidance through the BEPS Project were constrained by EU law, and they now face an international tax environment where it will be difficult to pass anti-avoidance legislation that is more robust than the low standard permitted by the ECJ.\textsuperscript{34} This in turn raises significant concerns about the future of international cooperation. If EU law places limits on what non-EU countries can agree to in international negotiations, that is important for those countries to know as they enter into future negotiations or large-scale projects such as the BEPS Project.

In order to illustrate the Luxembourg Effect, this Article proceeds in three parts. Part I introduces patent boxes and the nexus approach. This is the first in-depth description of the nexus approach in the literature, and it highlights the fact that the nexus approach in fact has two versions: the main “entity version,” which is subject to the constraints imposed by EU law, and the “location version,” which is hidden in the footnotes of the report describing the approach and which is not subject to those same constraints. Part II introduces the Luxembourg Effect and argues that EU law explains why the entity version of the nexus approach was adopted, even though it creates distortions and income shifting opportunities relative to the location version. This Part sets out the three requirements for the Luxembourg Effect and explains why the Luxembourg Effect illustrates a significant cost of the recent “Brexit” vote for the United Kingdom that has not previously been acknowledged.\textsuperscript{35} This Part also argues that EU law imposed limits on some of the other outputs of the BEPS Project, as well as other areas of direct tax law. Part III considers several possible responses to the Luxembourg Effect. Since none of these responses appears likely in the short term, Part III concludes that the first step

\textsuperscript{32} See infra Part II.A.
\textsuperscript{33} See infra Part II.A.
\textsuperscript{34} See infra Part II.A.
\textsuperscript{35} “Brexit” is the term for the outcome of the UK referendum on June 23, 2016, where the majority of voters elected to leave the European Union. See generally Alex Hunt & Brian Wheeler, Brexit: All You Need To Know About the UK Leaving the EU, BBC NEWS (Jan. 24, 2017), http://www.bbc.com/news/uk-politics-32810887 (discussing the circumstances and consequences of Brexit).
toward addressing the Luxembourg Effect is to acknowledge it. Discussions of EU law must focus on its effect outside the EU as well as inside the EU, and negotiators, lawyers, and academics outside the EU must realize that the ECJ is changing the legal environment for everyone, not just the Member States of the European Union.

I. PATENT BOXES AND THE NEXUS APPROACH

In order to illustrate the long reach of EU law, Part I first introduces readers to patent boxes and the OECD/G-20 BEPS Project, and then outlines the two versions of the nexus approach.

A. AN INTRODUCTION TO PATENT BOXES

Studies have shown that R&D leads to greater economic growth, but private parties underfund R&D because they do not necessarily benefit from all the positive spillovers associated with innovation. In response to this market failure, countries have stepped in to use their tax systems to create incentives for R&D. Countries and states have encouraged R&D by granting credits, deductions, and super-deductions for R&D expenditures, accelerated depreciation for machinery and other assets used as part of R&D projects, and reduced wage taxes for employees engaged in R&D, among other incentives. These tax incentives all apply to the inputs to innovation, since they provide benefits at the time R&D is undertaken by providing credits or deductions based on the amount of R&D expenditures. In recent years, over a dozen jurisdictions have also im-

36. See, e.g., Graetz & Doud, supra note 1, at 348 ("[T]he importance of technological development to economic growth has been accepted ever since [Robert Solow’s 1957 paper].").
37. Id. at 349–50; see also Bas Straathof et al., A Study on R&D Tax Incentives 18 (CPB Neth. Bureau for Econ. Policy Analysis, Working Paper No. 52-2014, 2014) ("[M]arkets left on their own will probably generate less innovation than would be desirable from society’s point of view. The reason is that knowledge is not completely excludable . . . [and] investments in research are more risky.").
38. Graetz & Doud, supra note 1, at 349–52.
39. For a sense of the scale of tax incentives for R&D, see Straathof et al., supra note 37, at 6 (finding that the thirty-three countries studied in that article had a total of over eighty R&D incentives). For an analysis of many such incentives, see Stephen E. Shay et al., R&D Tax Incentives: Growth Panacea or Budget Trojan Horse?, 69 TAX L. REV. 419 (2016).
40. For a more detailed description of the variety of R&D incentives that are available, see Straathof et al., supra note 37.
implemented tax incentives that provide benefits to the outputs from innovation. In other words, rather than providing benefits at the time that a taxpayer engages in R&D, these tax incentives provide reduced rates to income arising from the IP assets that resulted from that R&D.

The primary example of an output-based incentive is a patent box, which taxes income from patents (and sometimes other IP assets) at a reduced rate. These tax incentives are sometimes also called innovation boxes, knowledge development boxes, IP regimes, or the like, but this Article uses the term “patent box” to refer to all regimes that provide a reduced rate to income from IP assets. Patent boxes first originated in Europe, and their name is generally thought to refer to the box that taxpayers need to check off on a tax return in order to benefit from the reduced rate. Variations of these tax incentives are now in many non-European countries, including Colombia, China, Israel, and Turkey. The design of these incentives varies, with some only applying to income from patents.

42. See Graetz & Doud, supra note 1, at 363.
43. Id. at 362–63.
44. Id.
45. France and Ireland first introduced incentives for patent income in the 1970s and 1980s, but the trend of providing benefits for patent income did not take off for several more decades. In the interim, Ireland eliminated this incentive. See Graetz & Doud, supra note 1.
46. See Andrea Prieto, Colombia Decree 121/2014: National Council of Tax Benefits in Science, Technology and Innovation – Regulations Issued, IBFD Tax News Serv. (IBFD Tax News Serv., Amsterdam, Neth.), Sept. 11, 2014, at 1 (describing benefits provided to “new medical products and the software made in Colombia”). The Colombian regime described by Prieto is noticeably different from most other patent boxes in that it focuses entirely on income from software, but it is an output incentive that applies to income from IP assets (i.e., software), and the OECD listed it in its lists of potentially harmful IP regimes subject to the nexus approach. See Action 5: 2015 Final Report, supra note 6.
47. See Shi Qi Ma, China (People’s Rep.) – Corporate Taxation 31 (2015) (describing the benefits provided for “high-new technology enterprises”).
50. The United Kingdom and Belgium are countries that have limited
and others extending benefits to income from copyrights, trademarks, brands, know-how, and other forms of intellectual property. They also vary in terms of what type of income can qualify. Some only permit royalties from the sale or licensing of IP assets to qualify, while others allow so-called “embedded royalties” to qualify for benefits, which means that the reduced rate will apply to a portion of all the sales income from a good or service that was developed using the IP asset. Depending on the scope of the IP assets and the income that can qualify, therefore, patent boxes can provide benefits to taxpayers in a wide variety of industries ranging from pharmaceuticals and software to fashion design and car manufacturing.

By 2013, patent boxes were in the news as more and more countries adopted them. Although these regimes had briefly

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51. See, e.g., Netherlands Corporation Tax Act 2015, c. 2, pt. 2.3, § 12b (providing benefits to patented assets as well as intangible assets arising from R&D that received an R&D certificate under the Dutch Income Tax and Social Insurance Premium Relief Act); Spain Corporate Income Tax Act 2014, c. 4, § 35 (providing benefits to patents, designs or models, plans, formulas or secret procedures, and rights on information concerning industrial, commercial, or scientific know-how). Only a few, however, go so far as to extend to trademarks and marketing-related IP assets. Jurisdictions with innovation boxes that have extended to marketing-related intangibles include Hungary and Luxembourg. Borbála Kolozs & Annamária Koszegi, International Fiscal Association Branch Report: Hungary, in STUDIES ON INTERNATIONAL FISCAL LAW, supra note 50, at 375; Frank van Kuijk, The Luxembourg IP Tax Regime, 39 INTERTAX 140, 141 (2011).

52. Countries that have applied this limit include Hungary. See Kolozs & Koszegi, supra note 51, at 376. Likewise, France has not permitted certain types of embedded IP income to qualify for benefits. Georges Cavalier & Jean-Luc Pierre, International Fiscal Association Branch Report: France, in STUDIES ON INTERNATIONAL FISCAL LAW, supra note 50, at 312 (noting that embedded royalties earned by companies that exploit their own IP may not qualify for benefits).


54. See Annika Breidhardt, Germany Calls on EU To Ban “Patent Box” Tax Breaks, REUTERS UK (July 9, 2013), http://uk.reuters.com/article/uk
been introduced in the 1970s,55 it was not until the Netherlands adopted its innovation box in 2007 and the United Kingdom implemented its patent box in 2013 that commentators focused in on the costs and benefits of these tax regimes. Critics of these tax incentives argued that they were poorly targeted,56 that they did not increase R&D sufficiently to offset their significant cost,57 and that they encouraged income shifting and base stripping.58 Advocates argued that they were necessary to maintain a jurisdiction’s competitiveness and keep R&D in the

55. See supra text accompanying note 45.

56. This argument focuses on the fact that the benefits of patent boxes apply to income from patents, which in turn means that the benefits are only granted to taxpayers that already have income-generating patents. They therefore apply after the decision to research was made, and their application only to successful innovation means that they likely do not provide benefits to many of the innovators producing positive societal spillovers, particularly since the type of R&D that is most likely to be underfunded and that is also most likely to create positive spillovers appears to be basic R&D, much of which may not lead directly to income production. See, e.g., Martin A. Sullivan, A History Lesson for a Future Patent Box, 147 TAX NOTES 1036, 1038 (2015) (“There is no readily apparent economic justification for granting patented technologies more favorable tax treatment than other IP (and in fact, some would argue that there is less of a reason since this property already enjoys government-favored status).”); Martin A. Sullivan, Economic Analysis: Patent Boxes, Research Credits, or Lower Rates?, 147 TAX NOTES 975, 975 (2015) (stating that a patent box “wastes tax benefits on income from prior research that is now manifesting itself in current income—a windfall for prior work that provides no incentive for new effort”); Straathof et al., supra note 37, at 6 (stating that IP rights “enable firms to capture a large part of the societal benefits, such that the need for a tax incentive for protected innovations becomes unclear”); id. at 45 (“By subsidizing inventions that do not need a subsidy, patent boxes would induce inventions that are difficult to patent (and therefore might have high spillovers) relatively less attractive.”).

57. The empirical literature on patent boxes does not conclusively show whether patent boxes increase R&D. Although one 2015 paper found that, “for each percentage point reduction in the [corporate income tax] rate thanks to the patent box, the likelihood of registering a patent in the country concerned will rise” significantly across industries, a further finding of that same study was that, unless they require that development take place in the jurisdiction, patent boxes decrease the probability of inventors moving to the jurisdiction offering the patent box. Annette Alstadsæter et al., Patent Boxes Design, Patents Location and Local R&D 12 (European Comm. Joint Research Ctr., Working Paper No. 6/2015, 2015). Other studies, however, have suggested that patent boxes, even if they do not increase overall revenue, do attract IP income to the jurisdiction. Rachel Griffith et al., Ownership of Intellectual Property and Corporate Taxation, 112 J. PUB. ECON. 12, 22 (2014).

58. See Breidthardt, supra note 54; Houlder & Peel, supra note 54.
jurisdiction in the face of the growing number of patent boxes.\textsuperscript{59} Despite these arguments, empirical literature on the effectiveness and cost efficiency of patent boxes is quite limited.\textsuperscript{60} To the extent that there are empirical findings in this area, studies suggest that patent boxes that reduce the corporate income tax rate lead to an increased likelihood that patents (particularly high-quality patents)\textsuperscript{61} will be registered in the country providing the patent box,\textsuperscript{62} increase the amount of IP income in that jurisdiction,\textsuperscript{63} and correspond with a reduction in that jurisdiction’s tax revenue.\textsuperscript{64} Studies have not yet been able to determine conclusively whether patent boxes lead to an increase in overall R&D, although at least one recent study suggests that in-country R&D increases if a patent box requires that R&D be undertaken in the jurisdiction.\textsuperscript{65}

\begin{footnotesize}
\textsuperscript{59} See, e.g., Charles Boustany, Jr., \textit{Boustany & Neal Release Patent Box Discussion Draft}, ISPY (July 29, 2015), https://votesmart.org/public-statement/1018460/boustany-neal-release-innovation-box-discussion-draft#WHxNXvkrLIU (quoting the legislators that proposed the U.S. patent box as wanting “to begin the conversation on how the United States can attract and retain the brightest minds and best ideas on Earth” and “attract innovation and the high-paying, high-quality jobs that come with it”); HM Treasury, \textit{Corporate Tax Reform: Delivering a More Competitive System}, 2010, at 51 (UK) (explaining the proposed patent box by stating that “[t]he Patent box will aim to reward successful technical innovation. The Government believes that it is right to introduce this reform now in order to prevent movement of IP offshore and encourage the development of new patents by UK businesses, protecting and enhancing the status of the UK as a world leader in this field”). Another argument that was not made by patent box advocates but that could have supported their arguments is based on a 2001 paper by Michael Keen, which suggested that preferential regimes could in fact reduce overall competition by focusing this competition on specific tax bases (i.e., geographically mobile income) rather than allowing jurisdictions to compete across multiple tax bases. Michael Keen, \textit{Preferential Regimes Can Make Tax Competition Less Harmful}, 54 Nat’l Tax J. 757 (2001). According to this view of preferential regimes, tax competition that focuses only on a specific tax base (say, IP income) will not reduce revenue as much as tax competition that cuts across all income sources. According to this argument, then, another reason to support patent boxes is that they could theoretically be beneficial by focusing tax competition on income from IP assets, although Keen emphasized that his results were limited to the narrow two-country situation on which his model was based.

\textsuperscript{60} Graetz & Doud, \textit{supra} note 1, at 375 (concluding in 2013 that “the extant data is too limited to adequately assess the effectiveness of patent boxes”).

\textsuperscript{61} Alstadsæter et al., \textit{supra} note 57, at 15.

\textsuperscript{62} \textit{Id.} at 12.

\textsuperscript{63} Griffith et al., \textit{supra} note 57, at 21–22.

\textsuperscript{64} \textit{Id.}

\textsuperscript{65} Alstadsæter et al., \textit{supra} note 57, at 19.
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Even without empirical data showing the actual effect of patent boxes on the overall amount of R&D, countries continue to implement them, and taxpayers have increased their demands for these regimes. By 2013, over a dozen patent boxes and similar tax incentives had been implemented in OECD and G-20 members.\(^6\) Several more existed in the European Union and European Economic Area, with Cyprus, Liechtenstein, and Malta all implementing patent boxes with tax rates ranging from 0% to 2.5%.\(^6\) Although the provisions that existed in 2013 all provided reduced rates to income from IP, they varied significantly in the benefits that they provided.\(^6\) The tax rates applied to IP income by existing patent boxes ranged from zero percent to nineteen percent.\(^6\) As mentioned above, the IP as-


\(^{67}\). See European Parliament, Directorate-General for Internal Policies of the Union, Intellectual Property Box Regimes: In-Depth Analysis for the Taxe Special Committee, 2015, at 7 (UK).

\(^{68}\). See id. The rate that applied under the Belgian patent income deduction was 6.8%. Peter R. Merrill et al., Is It Time for the United States To Consider the Patent Box?, 134 Tax Notes 1665, 1666 (2012); Warson & Claes, supra note 53, at 319. The rate under China’s reduced rate for new and high-tech enterprises ranged from 0% to 12.5%. Bernard Knight & Goud Maragani, It Is Time for the United States To Implement a Patent Box Tax Regime To Encourage Domestic Manufacturing, 19 Stan. J. L. Bus. & Fin. 39, 50 (2013). The rate under Colombia’s software regime was zero percent. Catalina Hoyos Jimenez, Colombia—Corporate Taxation 19–20 (2015). The rate under France’s regime was fifteen percent. Cavalier & Pierre, supra note 52, at 313; Knight & Maragani, supra. The rate of the Hungarian regime was 9.5%. Gabor Koka, Changes to Intellectual Property Box Regime Take Effect, 65 Tax Notes Int’l 345, 345 (2012). The rate under Israel’s regime varied from nine percent to sixteen percent. Henriette Fuchs, Israel—Corporate Taxation 10 (2015). The rate under the Luxembourg regime was 5.76%. Van Kuijk, supra note 51, at 140. The rate under the Dutch regime was five percent. Nijhof & Kloes, supra note 53. The rate under the Portuguese regime was scheduled to decrease from nineteen percent to seventeen percent by 2018. Tiago Cassiano Neves, Opening Pandora’s Box: 10 International Effects of Portugal’s Corporate Tax Reform, 71 Tax Notes Int’l 1223, 1224 (2013). The rate under the Spanish regime was fifteen percent. Jason M. Brown, Patent Box Taxation: A Comparison of Four Recent European Patent Box Tax Regimes and an Analytical Consideration of If and How the United States Should Implement Its Own Patent Box, 46 Int’l L. 913, 927 (2012). The rate under the Turkish regime, which provides a fifty percent exemption, was ten percent. See Yalti, supra note 53, at 16–17 (stating that the Turkish corporate rate is twenty percent). The effective rate under the United Kingdom regime was ten percent.
sets that could benefit ranged from only patents and extensions of patents to everything from copyrighted software to know-how and trademarks, and the income that could benefit also ranged from only royalties and licensing income to embedded royalties from the sale of goods and services. These regimes also varied in terms of whether they limited benefits based on who developed the IP or where the R&D took place. At least one country historically granted benefits only to income from IP that had been entirely developed by the taxpayer, but the majority of patent boxes that existed in 2013 also granted benefits to IP that was not self-developed but was instead acquired or developed through outsourcing. Some patent boxes outside the EU also imposed limitations based on jurisdiction, only providing benefits when the R&D that contributed to the income was done in the jurisdiction providing benefits. Patent boxes that had no limits on acquisition, outsourcing, or the location of the R&D provided the greatest benefit to taxpayers, while those that restricted benefits to self-developed IP or IP developed in the jurisdiction provided the least generous benefits.


70. See supra notes 50–51.
71. See supra notes 52–53.
73. See id. (describing the previous version of the Spanish innovation box).
74. Id. Many patent boxes did, however, place limits on either how much R&D can be outsourced or from whom IP can be acquired. Id. For example, both the Netherlands and the United Kingdom allowed outsourcing and acquisition, but they required that the resident owner of the IP have taken on the risk associated with that IP. HM Revenue & Customs, Patent Box: Qualifying Companies: Groups: Active Ownership Condition, GOV.UK (Aug. 2, 2016), https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird210210; Nijhof & Kloes, supra note 53, at 70. Belgium applied a similar requirement that the “overall responsibility and management of the R&D activities” must rest with the Belgian company. De Mil & Wallyn, supra note 50, at 160. Luxembourg limits acquisitions between related parties. Van Kuijk, supra note 51, at 143.
76. See Alstadsæter et al., supra note 57, at 3, 12 (finding that allowing acquired patents to benefit increases the tax advantage). This is because such restrictions by definition meant that such patent boxes did not allow as many
As more European countries adopted patent boxes that did not require that the R&D be done in the jurisdiction, countries that were known for having significant amounts of domestic R&D but that did not have patent boxes, such as Germany and the United States, feared that these tax incentives would lead to lower revenues as IP was shifted outside of their jurisdictions and into jurisdictions with patent boxes. \(^{77}\) Several tax reform proposals, ranging from Chairman Camp’s “Option C” from 2011 to proposals from Senator Feinstein in 2012 and Representatives Boustany and Schwartz in 2013, included designs for a U.S. patent box, \(^{78}\) and multiple commentators wrote advocacy pieces calling for such an incentive in the U.S. \(^{79}\) At the same time, the countries that did have patent boxes feared that they were losing the ability to tax IP income to other jurisdictions with even more favorable patent boxes. For example, as countries such as Malta and Cyprus implemented patent boxes with rates that were well below ten percent and that did not require that the R&D take place in the jurisdiction, Spain modified its patent box to both reduce the rate that applied to IP income and eliminate the requirement that qualifying IP be self-developed, thereby making it easier for more taxpayers to benefit from the lowered rate. \(^{80}\)

B. AN INTRODUCTION TO THE BEPS PROJECT

It was against the backdrop of these debates that the OECD started work on its two-year project to combat corporate tax avoidance. This project, which was known as the Base Erosion and Profit Shifting (BEPS) Project, was a fifteen-point international tax reform project supported and authorized by the G-20. \(^{81}\) The BEPS Project garnered significant political support and attention, partly because international tax avoidance itself

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\(^{77}\) See Breidthardt, supra note 54 (highlighting Germany’s fear); Houlder & Peel, supra note 54 (same).


\(^{79}\) See, e.g., Merrill et al., supra note 69 (advocating for a U.S. patent box).

\(^{80}\) Compare Evers et al., supra note 72, at 10 (describing the 2008 version of the Spanish IP box and stating that “only self-developed IP qualifies without exceptions”), with Corporate Income Tax Act art. 35 (B.O.E. 2014, 27) (Spain) (allowing for some IP that was not self-developed to qualify).

\(^{81}\) For a description of the top-down nature of the BEPS Project, see Itai Grinberg, The New International Tax Diplomacy, 104 GEO. L.J. 1137 (2016).
was receiving so much attention at the time the project was announced.\textsuperscript{82} The project was first proposed in the form of the BEPS Report, which laid out the general challenges facing the international tax system,\textsuperscript{83} and the fifteen specific Action Items were then set out in more detail in the BEPS Action Plan in July 2013.\textsuperscript{84}

Prior to this project, the OECD had already been active in international tax policy.\textsuperscript{85} The OECD has a Model Tax Convention, the changes to which are the subject of many OECD working party meetings, and the OECD encourages information sharing through the Global Forum on Transparency and Tax Administration.\textsuperscript{86} The OECD also sets out transfer pricing guidelines that are often discussed in working party meetings,\textsuperscript{87} and it has published numerous reports on topics ranging from aggressive tax planning\textsuperscript{88} to bribery and corruption\textsuperscript{89} to the taxation of high net worth individuals.\textsuperscript{90} Institutionally, the OECD’s work on international tax issues is carried out by the Committee on Fiscal Affairs, which is made up of high-level tax officials in each member country; the Centre for Tax Policy and Administration, which is made up of OECD staff; and a variety of working groups and expert groups that meet several times

\textsuperscript{82.} See Org. for Econ. Co-operation & Dev., Action Plan on Base Erosion and Profit Shifting 13 (2013) [hereinafter BEPS Action Plan] (acknowledging increased attention on international tax issues); Grinberg, supra note 81, at 1 (providing examples of how international tax avoidance has become “front-page news”).

\textsuperscript{83.} See Org. for Econ. Co-operation & Dev., Addressing Base Erosion and Profit Shifting (2013) [hereinafter BEPS Report]

\textsuperscript{84.} BEPS Action Plan, supra note 82, at 14–24.

\textsuperscript{85.} For further discussions of the role of the OECD in tax matters, see Hugh Ault, Reflections on the Role of the OECD in Developing International Tax Norms, 34 Brook. J. Int’l. L. 757 (2009); Allison Christians, Networks, Norms, and National Tax Policy, 9 Wash. U. Global Stud. L. Rev. 1 (2010); Grinberg, supra note 81.

\textsuperscript{86.} See Grinberg, supra note 81, at 10 (discussing the Global Forum on Transparency and Tax Administration).


\textsuperscript{90.} Org. for Econ. Co-operation & Dev., Engaging with High Net Worth Individuals on Tax Compliance (2009).
per year to discuss various international tax topics. The BEPS Project fit into the existing international tax work that had previously been undertaken by the OECD, but it added all G-20 countries that were not also OECD members to the discussions and it brought with it an accelerated time scale and significantly more publicity and media attention than had attached to previous OECD tax projects.

As part of this project, Action 5 of the BEPS Action Plan required the OECD to “[r]evamp the work on harmful tax practices with a priority on . . . requiring substantial activity for any preferential regime.” Although this mandate did not mention patent boxes, observers, delegates, and OECD staff read Action 5 to mean that the BEPS Project had to determine how to align the benefits granted by patent boxes with the substantial activities that led to the income receiving benefits. This work was placed within the context of the OECD’s ongoing work on “harmful tax practices,” which had begun in 1998, when the OECD published *Harmful Tax Competition: An Emerging Global Issue* (known as “the 1998 Report”) and created the Forum on Harmful Tax Practices (the “FHTP”).

The 1998 Report marked a new phase in international tax cooperation for several reasons. First, the 1998 Report did not just focus on general themes of cooperation and consensus. Instead, it focused on individual regimes implemented by individual countries, and its mere existence suggested that countries were complicit in the race to the bottom. Second, creating the FHTP at the same time as the 1998 Report was published ensured that this focus would continue for many years. Third, other portions of the 1998 Report suggested that it was not merely individual regimes that could be harmful but that entire countries could be named as tax havens. Although this part of the

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91. See Ault, supra note 85, at 761–62 (discussing the makeup and function of the CFA).

92. BEPS ACTION PLAN, supra note 82, at 18.

93. ORG. FOR ECON. CO-OPERATION & DEV., HARMFUL TAX COMPETITION: AN EMERGING GLOBAL ISSUE (1998) [hereinafter 1998 REPORT]; see also Ault, supra note 85, at 767 (“The Report established a new subsidiary body within the OECD, the Forum on Harmful Tax Practices, which, since 1998, has administered a set of guidelines on tax practices setting out certain obligations on countries that adopted the Report.”).

94. See 1998 REPORT, supra note 93, at 19–20 (describing the “race to the bottom”).

95. See id. at 21–25 (“Many fiscally sovereign territories and countries . . . offer the foreign investor an environment with a no or only nominal taxation which is usually coupled with a reduction in regulatory or administrative con-
OECD’s work fell by the wayside over several years,\(^96\) it does highlight the country-specific focus of the FHTP’s continued work. Fourth, the framework that was established in the 1998 Report still informs the work of the FHTP, and that framework has a very specific view of what it means for a regime to represent harmful tax competition. Under that framework, if a regime applies a preferential low tax rate to geographically mobile income and is ring-fenced (i.e., the low rate is not available to domestic taxpayers) or lacks transparency or effective information sharing, then that regime will be listed in later reports by the FHTP as “potentially harmful.”\(^97\) Once a regime is found

\(^{96}\) Compare \textit{id.} at 21–22 (setting out the factors for identifying tax havens), \textit{with ACTION 5: 2015 FINAL REPORT, supra note 6, at 15–16} (listing the work of the FHTP since the 1998 Report).

\(^{97}\) 1998 \textit{REPORT, supra note 93, at 25–26}. The 1998 Report describes this requirement by setting out twelve factors for the FHTP to consider when determining whether a jurisdiction has implemented a harmful regime. \textit{Id.} at 26–34. Four of these factors are labeled as “key factors,” which means that they are sufficient for a finding of harmfulness, while the other eight factors can indicate harmfulness. \textit{Id.} The interpretation and interaction of these twelve factors was further elaborated on in several later OECD publications. See, e.g., \textit{ORG. FOR ECON. CO-OPERATION & DEV., CONSOLIDATED APPLICATION NOTE: GUIDANCE IN APPLYING THE 1998 REPORT TO PREFERENTIAL TAX REGIMES} 49 (2004); \textit{ORG. FOR ECON. CO-OPERATION & DEV., HARMFUL TAX PRACTICES: THE 2004 PROGRESS REPORT} 7 (2004) [hereinafter 2004 \textit{PROGRESS REPORT}]; \textit{ORG. FOR ECON. CO-OPERATION & DEV., THE OECD’S PROJECT ON HARMFUL TAX PRACTICES: THE 2001 PROGRESS REPORT} 4–5 (2002); \textit{ORG. FOR ECON. CO-OPERATION & DEV., THE OECD’S PROJECT ON HARMFUL TAX PRACTICES: 2006 UPDATE ON PROGRESS IN MEMBER COUNTRIES} 3 (2006); \textit{ORG. FOR ECON. CO-OPERATION & DEV., TOWARDS GLOBAL TAX CO-OPERATION: PROGRESS IN IDENTIFYING AND ELIMINATING HARMFUL TAX PRACTICES} (2001).

The key factors from the 1998 Report are (i) that the regime applies no tax rate or a low effective tax rate; (ii) that the regime is ring-fenced (i.e., the benefits are not fully available to domestic taxpayers); (iii) that the regime lacks transparency; and (iv) that the regime lacks effective exchange of information. 1998 \textit{REPORT, supra note 93, at 26–30}. In practice, the first factor is necessary but not sufficient for a finding of harmfulness, so one of the following three factors must also be evident for such a finding. \textit{See id.} at 22–23 (“No or only nominal taxation is a necessary condition for the identification of a tax haven.”). Along with these four key factors, a regime must also be within the scope of the 1998 Report, which means that it must apply to geographically mobile income and be preferential (i.e., it must apply a more favorable rate than the general rate that would apply to corporate income). \textit{Id.} at 25–26. Therefore, as envisioned in the 1998 Report, a harmful regime must apply a preferential low rate to geographically mobile income and either be ring-fenced or lack transparency or effective exchange of information. \textit{See id.} The further eight factors were listed as possible further indicators of harmfulness that must be considered, but they were not necessary for any such finding. \textit{Id.} at 30–34.
to be potentially harmful, then it must go through an assessment to determine if it is “actually harmful,” where the FHTP will consider economic data to determine whether the regime is in fact promoting harmful tax competition. If the regime is actually harmful, other jurisdictions may impose defensive measures. Since 1998, many jurisdictions have opted to amend or abolish their regimes rather than risk a label of either potential harmfulness or actual harmfulness.

This earlier work on harmful tax practices provided the context for the OECD’s work on patent boxes. Despite the lack of any language in the BEPS Action Plan that focused on patent boxes, the OECD and G-20 member countries involved in this work interpreted the Action 5 mandate to mean that the FHTP should first focus on requiring substantial activities in what they referred to as “preferential IP regimes” (i.e., patent boxes), after which the work would then focus on other preferential regimes. In short, Action Item 5 provided an opportunity for the FHTP to focus on patent boxes, but it did so within the context of a broader project and with the involvement of

98. BEPS ACTION PLAN, supra note 82, at 29 (“The process for determining whether a regime is harmful contains three broad stages: (i) consideration of whether a regime is preferential and of preliminary factors, to determine whether the regime needs to be assessed; (ii) consideration of key factors and other factors to determine whether a preferential regime is potentially harmful; and (iii) consideration of the economic effects of a regime to determine whether a potentially harmful regime is actually harmful.”).

99. See Roman Grynberg & Bridget Chilala, WTO Compatibility of the OECD Defensive Measures Against Harmful Tax Competition, 2 J. WORLD INVEST. 507, 507 (2001) (“Those jurisdictions that failed to sign memoranda by that date became subject to possible defensive measures which are, in effect, economic sanctions that can be instituted collectively or bilaterally by OECD Members.”).

100. See Ault, supra note 85, at 767–68 (stating that the 1998 Report and the subsequent FHTP process have “been extremely effective in bringing countries to eliminate regimes found to be harmful under the criteria of the Report. Of the forty-seven preferential tax regimes that had been identified as potentially harmful in 2000, none of the regimes are deemed harmful at the present time. A number of regimes have been abolished, others have been amended to remove their potentially harmful features, and still others were found not to be harmful on further analysis of their actual impact”).

101. Cf. House of Commons, Written Statement made by the Financial Secretary to the Treasury (Mr. David Gauke), Dec. 2, 2014, HCWS55, (UK), http://www.parliament.uk/documents/commons-vote-office/December%202014/2%20December/3-Treasury-PatentBoxes.pdf (“Work by the OECD has focused on agreeing new rules on the level of substantial activities required for a preferential regime to be considered a tax relief that supports real economic activity and not to be considered ‘harmful.’”).
non-OECD G-20 members that had not been involved in any of the FHTP’s previous work.

As mentioned above, the literature on the effectiveness of patent boxes is still quite limited, and it was even more so at the time of the BEPS Project. The OECD therefore had to decide how to address the challenges created by patent boxes, and it effectively split the difference between eliminating patent boxes entirely and allowing them to remain as they were in 2013. Action 5 of the BEPS Action Plan said nothing about eliminating patent boxes entirely, but it also did not permit the OECD and G-20 to leave existing patent boxes standing. Instead, it mandated that the FHTP require substantial activities in these regimes—without providing any clear guidance on what was meant by “substantial activities.” While countries with patent boxes might have preferred that patent boxes be left entirely unlimited and countries without patent boxes might have preferred that patent boxes be eliminated entirely, the OECD chose at the start of the BEPS Project to take neither of those routes and instead to require that patent boxes only provide tax benefits to income that arose from substantial R&D activities within the jurisdiction providing the patent box. The idea underlying this decision was that such a requirement would prevent the income from IP from being shifted away from the jurisdiction where the underlying R&D had been performed and into a jurisdiction with a lower-rate patent box.

This decision was not without empirical support. As mentioned earlier, although the literature on the effectiveness of patent boxes remains fairly inconclusive, at least one empirical study does suggest that requiring that underlying R&D be done in the jurisdiction has the effect of increasing R&D, while patent boxes that do not have this jurisdictional requirement may

102. See BEPS ACTION PLAN, supra note 82, at 18.
103. See id. (“Requiring substantial activities for any preferential regime.”).
104. Note that this Article assesses the two versions of the nexus approach against the BEPS Project’s goal of preventing income from being shifted outside the jurisdiction. This Article does not consider whether or not the BEPS Project should have selected another goal (such as increasing global R&D or enhancing welfare), nor does it consider whether the two versions of the nexus approach would be consistent with different goals. Although such considerations could be valuable in another Article, the purpose of this Article is to assess what the OECD and G-20 countries produced against what they intended to achieve in order to determine both how the outcome differed from the intent and what observers can learn from any such differences.
in fact decrease R&D in the jurisdiction. Furthermore, there were clear political reasons for making the decision not to eliminate patent boxes but also not to allow them to stand unchallenged. Within the OECD, a significant minority of jurisdictions had patent boxes. These included Belgium, France, Luxembourg, Spain, and the United Kingdom. These countries were unwilling to eliminate their boxes entirely, particularly since many, such as the United Kingdom, had staked significant political capital on the creation of these regimes. Jurisdictions without patent boxes, such as Germany, Japan, and the United States, however, were themselves unwilling to allow these regimes to exist without any restrictions, given that these regimes could lead to IP assets that had been created in a jurisdiction without a patent box to be acquired by a taxpayer in a jurisdiction with a patent box just as the IP assets began to produce income. One justification for front-end R&D incentives is that the revenue foregone in subsidizing R&D will be recaptured in the form of tax revenue if and when that R&D is successful and produces income. If, however, other jurisdictions have patent boxes that create incentives to shift that income away from the jurisdiction that funded the underlying R&D, then jurisdictions without patent boxes feared that they would just be funding R&D without ever being able to tax the income that arose out of it. Jurisdictions without patent box-
es, particularly those with larger economies and more significant R&D infrastructure, therefore had an interest in requiring that those regimes only be permitted to the extent that R&D was also undertaken in the jurisdiction providing the box. Although this could be seen as encouraging jurisdictions with patent boxes to compete over not just the rate of the box but also the environment for R&D, it also suggests that the countries supporting a substance requirement were confident that they could prevail in the latter type of competition, while the same might not have been true in the context of a competition over rates.

C. A N INTRODUCTION TO THE NEXUS APPROACH

The FHTP therefore had to create a new approach to defining substantial activities. This new approach, referred to as the “nexus approach,”111 was unveiled in the 2014 Progress Report, although not all jurisdictions had yet reached consensus on it.112 On November 11, 2014, after the 2014 Progress Report was published, the United Kingdom and Germany announced that they had reached a compromise that would lead to acceptance of the nexus approach by all forty-four countries participating in the BEPS Project.113 The EU Code of Conduct Group then adopted the nexus approach that the FHTP had designed at the end of 2014.114 On February 6, 2015, the OECD itself issued a study found that the tax attractiveness of patent boxes is larger the broader their scope.

111. Note that some commentators have referred to this as the “modified nexus approach” due to its many iterations in 2014 and 2015. The nexus approach and the modified nexus approach are one and the same, and this Article uses the former term to avoid confusion.


114. See Bob van der Made, EU Update on Patent Boxes and the EU Code of Conduct Group, INT. TAX REV. (Dec. 9, 2014), http://www.internationaltaxreview.com/Article/3430573/EU-Update-on-patent-boxes-and-the-EU-Code-of-Conduct-Group-Business-Taxation.html (“On patent boxes, following all discussions in the OECD Forum on Harmful Tax Practices (FHTP) around BEPS Action 5, a compromise regarding the modified nexus approach and how to assess whether there is substantial activity in an IP regime, was endorsed by the
press release announcing that the nexus approach had been accepted and pledging to finish work on the approach by the end of June 2015.\textsuperscript{115} In October 2015, the OECD issued the final report on Action 5, which was then accepted by the G-20,\textsuperscript{116} and this 2015 Report set out the final description of the nexus approach.\textsuperscript{117} The nexus approach is one of the four minimum standards produced as part of the BEPS Project, which means that it must be followed by any OECD or G-20 jurisdiction with a patent box or similar IP regime.\textsuperscript{118}

Under this approach, patent boxes and other IP regimes will not be found to be harmful if they require a nexus between the expenditures that contributed to the value of the IP income and the IP income that receives benefits. The amount of income that may benefit from a patent box under this approach is represented by the following equation:\textsuperscript{119}

\[
\frac{\text{Qualifying expenditures incurred to develop IP asset}}{\text{Overall expenditures incurred to develop IP asset}} \times \frac{\text{Overall income}}{\text{Income receiving from IP asset}} = \frac{\text{Income receiving from IP asset}}{\text{tax benefits}}
\]

Due to a political compromise between the UK and Germany, jurisdictions can permit taxpayers to increase the amount of qualifying expenditures by thirty percent so long as the resulting ratio does not exceed one hundred percent.\textsuperscript{120} The nexus


\textsuperscript{116} ACTION 5: 2015 FINAL REPORT, supra note 6, at 3 (“The BEPS package is designed to be implemented via changes in domestic law and practices, and via treaty provisions, with negotiations for a multilateral instrument under way and expected to be finalised in 2016. OECD and G20 countries have also agreed to continue to work together to ensure a consistent and co-ordinated implementation of the BEPS recommendations.”).

\textsuperscript{117} For the full description of the nexus approach, see id. at 24–36.


\textsuperscript{119} ACTION 5: 2015 FINAL REPORT, supra note 6, at 25.

\textsuperscript{120} FEB. 2015 AGREEMENT, supra note 115, at 3–4; see also German Press Release, supra note 113; UK Press Release, supra note 113.
approach sets the outer limits within which patent boxes will be found not to be harmful. The nexus approach does not require that countries implement patent boxes, nor does it require that countries implement patent boxes that apply the exact equation above, but it does require that, in order to escape a finding of potential harmfulness, patent boxes cannot provide benefits to any income that would not qualify under the equation above.\textsuperscript{121} The OECD has thus described it as a “box around the box” because all patent boxes that jurisdictions choose to implement must fall within the confines of the nexus approach.\textsuperscript{122}

One key element of the nexus approach that is not made explicit in the 2015 Report is that there are essentially two versions of the nexus approach: the entity version, which must be implemented by any Member State of the European Union that has a patent box, and the location version, which could be implemented by non-EU countries. The 2015 Report presents the entity version as the only version, since it can be adopted by all jurisdictions, but several footnotes of the 2015 Report highlight that jurisdictions outside the EU can choose to design their patent boxes quite differently. In the entity version, qualifying and overall expenditures are defined by focusing on which entity undertook them.\textsuperscript{123} Qualifying expenditures are those incurred by the individual entity benefiting from the patent box and any expenses for outsourcing to unrelated parties,\textsuperscript{124} while overall expenditures include these expenditures plus all acquisition costs and any expenses for outsourcing to related parties.\textsuperscript{125} In other words, the nexus ratio can be written as

\textsuperscript{121} Patent boxes may allow income that would not qualify under the nexus approach to qualify for benefits in limited circumstances if they treat the nexus ratio as a rebuttable presumption, but the presumption must be designed such that it can only be rebutted in a narrow set of circumstances. See ACTION 5: 2015 FINAL REPORT, supra note 6, at 35–36 (“Taxpayers would, however, have the ability to prove that more income should be permitted to benefit from the IP regime in exceptional circumstances where taxpayers that have undertaken substantial qualifying R&D activity in developing a qualifying IP asset or product can establish that the application of the nexus fraction leads to an outcome where the level of income eligible for a preferential IP regime is not commensurate with the level of their R&D activity.”).


\textsuperscript{123} ACTION 5: 2015 FINAL REPORT, supra note 6, at 27–29.

\textsuperscript{124} Id. at 27–28.

\textsuperscript{125} Id. at 28–30.
where $OWN$ includes R&D expenditures incurred by the taxpayer, $UNRP$ includes expenditures for outsourcing R&D to unrelated parties, $RP$ includes expenditures for outsourcing R&D to related parties, and $ACQ$ includes expenditures for acquiring IP from related or unrelated parties. Qualifying entities include resident taxpayers as well as both outbound and inbound PEs to the extent that those PEs are subject to taxation in the jurisdiction providing the patent box.

In the location version, qualifying and overall expenditures are instead defined by where the expenditures were incurred. Qualifying expenditures are all R&D expenditures incurred in the jurisdiction providing benefits, while overall expenditures are all R&D expenditures incurred by the taxpayer, whether domestically or internationally. Therefore, in the location version, the nexus ratio can be written as

$$ \frac{OWN + UNRP}{OWN + UNRP + RP + ACQ} $$

where $Domestic R&D$ includes all R&D expenditures incurred in the jurisdiction providing benefits (whether undertaken by the taxpayer itself or outsourced to or acquired from other parties) and $Foreign R&D$ includes all R&D expenditures incurred outside the jurisdiction (whether undertaken by the taxpayer itself or outsourced to or acquired from other parties).

To illustrate the difference between the two versions of the nexus approach, take A Co., which is resident in Country A, a jurisdiction that has a patent box. A Co. has three subsidiar-
ies: Sub A, which is also resident in Country A; Sub B, which is resident in Country B; and Sub C, which is resident in Country C. This is shown below in Figure 1:

**Figure 1:**

```
Country A
   A Co.
      Sub A

Country B
   Sub B

Country C
   Sub C
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A Co. earns royalty income from licensing out Patent A, which it owns. The initial R&D for Patent A was done by Sub C, which paid 500 to an unrelated company in Country A to undertake all its R&D. After the rights to the initial R&D were acquired by A Co. for 500, Patent A was further developed partly by Sub A and partly by Sub B, each of which was paid 750 for its R&D by A Co. and each of which undertook R&D in its country of residence. These expenditures are listed below in Table 1:

If C had their own patent boxes, a separate calculation would need to be undertaken to determine if any income allocated to Sub B or Sub C would be able to qualify from those countries’ patent boxes.
Table 1:

<table>
<thead>
<tr>
<th>A Co. Expenditures:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of Sub C R&amp;D (undertaken in Country A)</td>
<td>500</td>
</tr>
<tr>
<td>Outsourcing to Sub A (undertaken in Country A)</td>
<td>750</td>
</tr>
<tr>
<td>Outsourcing to Sub B (undertaken in Country B)</td>
<td>750</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2000</td>
</tr>
</tbody>
</table>

Under both versions, overall expenditures would equal 2000. Under the entity version, there would be zero in qualifying expenditures because all expenditures for acquisition of the R&D rights from Sub C would be excluded from qualifying expenditures, as would all expenditures for outsourcing to both Sub A and Sub B because they are both separate entities from A Co. that are also related parties. Note that this creates an incentive to restructure Sub A so that it either earns the income of its own R&D or so that it merges with A Co.

Under the location version, there would be 1250 in qualifying expenditures, which would include both the 500 in Country A R&D expenditures incurred by Sub C and the 750 in Country A R&D expenditures incurred by Sub A. In both versions, the expenditures incurred for R&D undertaken by Sub B would be included in overall expenditures and excluded from qualifying expenditures. In the entity version, this is because Sub B is a related entity. In the location version, this is because Sub B’s R&D was undertaken outside of Country A.

131. This is because 500 + 750 + 750 = 2000. Note that this example is simplified because A Co. paid the same amount to Company C that Company C paid for R&D expenditures. If Company C had paid 400 in R&D expenditures, all of which were for R&D in Country A, then overall expenditures in the location version would be only 1900. Both examples assume that Company C was able to show that it had engaged in complete tracking and tracing to ensure that it did not incur any other expenditures. See ACTION 5: 2015 FINAL REPORT, supra note 6, at 42 n.19 (discussing how complete tracking and tracing ensure that all overall expenditures are include). If Company C was not able to show this, then overall expenditures would include A Co.’s acquisition costs rather than Company C’s R&D costs in the location version as well as the entity version. Id.

132. This is again only true if Company C engaged in tracking and tracing that could show that all of its R&D expenditures were for R&D in A Co. Id.

133. This is a further difference between the two versions, and it means that greater base erosion could be permitted under the entity approach. See id. at 34–35.
These two versions represent two very different visions of substantial activities. Under the entity version, substantial activities do not include any R&D outsourced to a related party or any R&D done by another party that was then acquired. Under the location version, these activities may constitute substantial activities if they were undertaken within the jurisdiction providing benefits, regardless of which entity undertook them, while any outsourcing outside the jurisdiction (whether to a related or unrelated party) does not constitute substantial activities. In other words, substance as defined in the entity version depends on who engages in R&D, while substance as defined in the location version depends on where the R&D takes place. These two visions of substance may often overlap, but they differ in terms of fundamental principles.

Although the two versions differ in terms of their overall focus, they do share the same general requirements. Both versions of the nexus approach share the same definition of IP assets and overall income from IP, and they also share the same requirements for tracking and tracing of income, as well as grandfathering. In terms of IP assets, the 2015 Report explicitly states that only “patents and other IP assets that are functionally equivalent to patents” can qualify under a nexus-compliant patent box, and any patent box that provides benefits to other IP assets will therefore be considered potentially harmful. The 2015 Report defines functionally equivalent IP assets to include copyrighted software, and it also permits jurisdictions to extend benefits to a third category of IP assets that are “non-obvious, useful, and novel.” The taxpayers receiving benefits for this third category of assets fall into a narrowly defined category of small enterprises. Both the 2014

134. *Id.* at 26 (“Under the nexus approach as contemplated, the only IP assets that could qualify for tax benefits under an IP regime are patents and other IP assets that are functionally equivalent to patents if those IP assets are both legally protected and subject to similar approval and registration processes, where such processes are relevant.”).

135. *Id.* at 29 (suggesting that “jurisdictions will define ‘overall income’ consistent with their domestic laws on income definition after the application of transfer pricing rules” but requiring the definition itself to uniformly comply with the principles that “[i]ncome benefiting from the regime should be proportionate” and “[o]verall income should be limited to IP income”).

136. *Id.* at 30–34.

137. *Id.* at 34–35 (describing the grandfathering rules).

138. *Id.* at 41 n.9.

139. *Id.* at 26.

140. Such enterprises can have “no more than EUR 50 million (or a near
Progress Report and the 2015 Report make clear that trademarks and marketing-related IP assets do not fall within the definition of qualifying IP assets. Although this distinction is not explained in greater detail, this is likely due to the stated principle of the nexus approach, which is to grant benefits only to taxpayers that engaged in value-creating R&D activities. If patent boxes were permitted to grant benefits to all income arising from trademarks or other marketing related intangibles, these could arguably grant benefits to all income earned by a company, given that the value of trademarks, brands, know-how, and other non-qualifying IP assets arises from all the activities of a company. This in turn would mean that a patent box was essentially just providing a lower rate for all the income earned by any company with a marketing intangible.

In terms of overall income from IP, the 2015 Report leaves a significant amount of flexibility to jurisdictions as to how they can define and calculate qualifying income. Jurisdictions are not required to provide benefits to embedded IP income (i.e., the portion of sales income that represents an embedded royalty), nor are they prohibited from doing so. The 2015 Report instead states that jurisdictions should ensure that they do not provide benefits to gross income, although it leaves flexibility to
them as to how they define net income, and that they should also ensure that, if they do provide benefits to embedded IP income, they do so in a way that ensures that routine marketing and manufacturing returns do not receive benefits.146

Because the nexus approach requires a link between expenditures and income, both versions also require that taxpayers that benefit from a patent box must engage in sufficient “tracking and tracing” to ensure that the income receiving benefits did in fact arise from qualifying expenditures.147 In the 2014 Progress Report, the general description of the nexus approach required that taxpayers track and trace expenditures and income either to individual IP assets or to individual products.148 The 2015 Report acknowledges that such narrow tracking and tracing may be impossible for large taxpayers with multiple R&D projects and streams of income, so it also permits tracking and tracing to product families if taxpayers can show that they could not feasibly track and trace to a narrower category and they can show that each product family includes overlapping streams of expenditures and revenues.149

Both versions of the nexus approach also permit the grandfathering of patent boxes that existed prior to a certain date.150 This is consistent with previous work of the FHTP, which allowed regimes that would otherwise be potentially harmful to be grandfathered if “(1) no new entrants are permitted into the regime, (2) a definite date for complete abolition of the regime has been announced, and (3) the regime is transparent and has effective exchange of information.” Patent boxes and other IP regimes may therefore continue to grant benefits to pre-existing beneficiaries after June 30, 2016, as long as the jurisdiction with the patent box had begun a legislative process to

146. See id.
147. See id. at 30–34.
148. ACTION 5: 2014 PROGRESS REPORT, supra note 66, at 34, 50 n.3.
149. ACTION 5: 2015 FINAL REPORT, supra note 6, at 31–32. Both versions of the nexus approach also permit jurisdictions to establish a transitional measure, although the outlines of such a transitional measure are again left to jurisdictions to decide. Id. at 33. The 2015 Report does provide an example of such a transitional measure, but it makes clear that this is only provided as an illustration of a possible transitional measure that a jurisdiction could adopt. Id. at 72 (“This Annex provides only one example of how a transitional measure could be designed to ensure that taxpayers had sufficient time to adapt to tracking and tracing requirements while still complying with the general principles of the nexus approach.”).
150. Id. at 34–35.
151. 2004 PROGRESS REPORT, supra note 97, at 9–10.
modify the box in 2015. Patent boxes may not, however, provide benefits to the extent that the IP assets benefiting from a grandfathered patent box were acquired from a related party after January 1, 2016, if they could not have qualified from a patent box at the time of acquisition. In other words, if a taxpayer that benefited from an existing patent box on or before June 30, 2016, acquired an IP asset from an unrelated party in any jurisdiction or from a related party in a jurisdiction with a patent box (including in the same jurisdiction as the taxpayer), it can qualify for grandfathering, including on income from that IP asset. If not, it can qualify for grandfathering on income from IP assets not including the acquired IP asset. As stated in the February 6, 2015, press release, this grandfathering safeguard was designed to prevent taxpayers from circumventing grandfathering by transferring IP assets into a qualifying patent box at the last minute.

As of June 30, 2016, therefore, all new patent boxes must comply with the nexus approach, and no taxpayers can benefit from patent boxes that do not comply with this approach after June 30, 2021, at the very latest. Patent boxes that do not comply with the nexus approach by these dates will be found to be potentially harmful and will then be subject to the FHTP’s analysis of actual harmfulness. If a patent box is found to be actually harmful, other countries may implement defensive measures to offset the effects of the regime.

The overall effect of the nexus approach remains to be seen, but the fact that there are two different versions of the approach means that this approach may be less likely to achieve the OECD’s goal of only allowing reduced rates for income arising from R&D undertaken in the country with the patent box. Instead, as will be outlined in the next Part, the en-

152. ACTION 5: 2015 FINAL REPORT, supra note 6, at 34.
153. Id. at 35.
154. FEB. 2015 AGREEMENT, supra note 115, at 4 (stating that the agreement is designed to resolve concerns about, inter alia, grandfathering).
155. Id.
156. See ACTION 5: 2015 FINAL REPORT, supra note 6, at 20 (setting out the criteria for a finding of potential harmfulness).
157. See id. at 21.
158. Note that this Article does not consider whether the OECD could or should have had a different goal in Action 5, such as reducing deadweight loss or maximizing welfare. It is instead intended to highlight that Action 5 was designed to require that any income that received benefits from a preferential regime also arose from substantial activities in the jurisdiction with the pre-
tity version of the nexus approach may allow taxpayers and countries to continue to do at least some R&D in one country and still benefit from a low-rate patent box in another country.

II. THE LUXEMBOURG EFFECT AND THE LIMITS OF INTERNATIONAL COOPERATION

As suggested by its name, the entity version of the nexus approach that appears in the 2015 Report requires patent boxes to divide expenditures by entity.\(^1\)\(^5\) If the expenditures were incurred by the entity or for outsourcing to an unrelated party, then they will be qualifying expenditures that increase the amount of income that qualifies for benefits.\(^1\)\(^6\) If they were expenditures for acquiring IP from another entity or for outsourcing to a related party, then they will reduce the amount of income that qualifies for benefits.\(^1\)\(^6\)\(^1\) Taken together, these requirements mean that the entity version of the nexus approach is designed to discourage both the shifting of income from entity to entity and the shifting of innovation from entity to entity. Whereas existing patent boxes focused more on the shifting of income, the nexus approach now requires that they also focus on the shifting of innovation and only grant benefits to income when the innovation itself was undertaken by the entity receiving benefits.\(^1\)\(^6\)\(^2\)

This in turn suggests one vision of substance that underlies the entity version of the nexus approach. Because this version maintains a strict focus on entities rather than on jurisdiction.

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\(^1\)\(^5\) ACTION 5: 2015 FINAL REPORT, supra note 6, at 28 (“Overall expenditures should be defined in such a way that, if the qualifying taxpayer incurred all relevant expenditures itself, the ratio would allow 100% of the income from the IP asset to benefit from the preferential regime.”).

\(^1\)\(^6\) Id. at 30 (“Allowing only expenditures incurred by unrelated parties to be treated as qualifying expenditures thus achieves the goal of the nexus approach to only grant tax benefits to income arising from the substantive R&D activities in which the taxpayer itself engaged that contributed to the income.”).

\(^1\)\(^6\)\(^1\) Id. at 28 (“The nexus approach therefore does not include all expenditures ever incurred in the development of an IP asset in overall expenditures. Instead, it only adds two things to qualifying expenditures: expenditures for related-party outsourcing and acquisition costs.”).

\(^1\)\(^6\)\(^2\) See id. at 37 (“When applied to IP regimes, the substantial activity requirement establishes a link between expenditures, IP assets, and IP income.”).
tions, it suggests that the fundamental issue underlying patent boxes was not that income was being taxed in one jurisdiction while the activities were taking place in another jurisdiction. Instead, the concern about substantial activities was that they were taking place in one entity (regardless of its location) while the income was being allocated to another entity (regardless of its location). According to the logic of the entity version of the nexus approach, this means that a taxpayer that structures itself such that one domestic subsidiary engages in certain R&D activities while another domestic subsidiary earns the income from those activities is engaged in impermissible tax planning.

The location version of the nexus approach, in contrast, focuses on jurisdictions rather than entities. This version grants benefits only to the extent that the R&D expenditures were incurred for R&D undertaken in the jurisdiction granting benefits. If a taxpayer pays for R&D undertaken in another jurisdiction, those expenditures will reduce the amount of income that can benefit. This version again discourages both the shifting of income and the shifting of innovation, but the focus is not on shifting from entity to entity but rather from jurisdiction to jurisdiction. Under the vision of substance supported by this version, base erosion and profit shifting takes place not through shifting between entities but rather through shifting between jurisdictions. This version is not concerned with whether the R&D was undertaken by one entity or another, but it is instead concerned with where the R&D took place, and subjecting the income to tax in one jurisdiction when the R&D activities took place in another jurisdiction is seen as impermissible tax planning under this view of substance.

Under the entity version of the nexus approach, the focus on shifting between entities means that domestic subsidiaries are treated as separate entities. Therefore, taxpayers with multiple subsidiaries within a jurisdiction that want to benefit fully from a patent box must restructure to ensure that the entity that earns income from an IP asset is the same entity that incurs the R&D expenditures for that IP asset, which may require a different corporate structure than would otherwise be selected for business reasons. Moreover, since the entity version does not distinguish between outsourcing to domestic or

163. See id. at 42 nn.16, 19 (laying out the salient modifications that distinguish the location approach from the entity version).
164. See id. at 42 n.19.
foreign entities or between acquiring IP developed through domestic or foreign R&D, this version of the nexus approach creates a disincentive against both outsourcing to all related parties and all forms of acquisition. This could therefore lead companies to view outsourcing and acquisition as more costly than before, even if these would otherwise be the most efficient ways to develop an IP asset or increase the amount or quality of innovation.

A second effect of the entity focus could be to allow some shifting of income across jurisdictions since branches are not separate taxable entities. Consider the earlier example illustrated in Figure 1, and imagine that Sub B is instead Branch B, a branch of A Co. The 750 paid to Branch B and then used for the R&D done in Country B could now be treated as 750 paid by A Co. for R&D rather than for related-party outsourcing. It would therefore become a qualifying expenditure, even though the R&D was undertaken in Country B, and the nexus ratio as calculated under the entity version of the approach would now be 37.5 percent—or 48.75 percent if Country A applied the thirty percent uplift. Therefore, in this example, no income would qualify for the box if Sub B remained a separate entity, but almost half of IP income could qualify if Sub B were instead treated as a branch. The entity focus could thus encourage companies to establish branches instead of subsidiaries, and it could also permit income to qualify even when the underlying R&D took place elsewhere.

It is unlikely that this would lead to significant income shifting because work in other areas of the BEPS Project should limit the ability of taxpayers to have such an arrangement respected for tax purposes. Under the Action 7 output, if Branch B had the significant R&D facilities necessary to develop Patent A, Branch B would likely be treated as a taxable PE in Country B. This would therefore mean that Country B would have taxing jurisdiction over the 750 paid to Sub B, whereas previously this payment from head office A Co. to Branch B would have been a wash for Country A tax purposes. This in turn means that it is unlikely that taxpayers will shift a

165. See supra Part I.C.

significant amount of R&D to foreign branches, but the entity version of the nexus approach does allow for some slippage at the margins, since taxpayers now have an incentive to shift just enough R&D to a branch so that it will increase the nexus ratio while not shifting so much R&D that it will lead the branch to be treated as a taxable permanent establishment in the foreign jurisdiction.

Even if neither of these effects ends up being very large, they reveal that the entity version of the nexus approach will allow some out-of-country R&D to qualify the resulting IP income for reduced rates under a patent box. Even if only a small amount of foreign R&D is permitted under the entity version, this slippage is notable because the OECD’s stated goal under Action 5 was to prevent any income from qualifying for reduced rates, and yet the entity version undermines this goal and allows the very jurisdictional income shifting that the BEPS Project was designed to prevent.

If the nexus approach had only included the location version, several of the weaknesses identified above would not exist. First, there would be fewer opportunities for taxpayers to receive benefits for income even when R&D had not taken place in the jurisdiction providing benefits. Second, taxpayers would be free to outsource to any parties they saw fit or acquire IP assets at any stage of their development with no effect on the amount of income that could benefit, so long as the underlying R&D had itself been undertaken in the jurisdiction. A third benefit of using only the location version is that, to the extent that existing research can provide guidance on the design of patent boxes, the literature suggests that having a jurisdictional requirement is necessary to increase R&D within the jurisdiction, so the location version is more consistent with countries’ stated goal of increasing R&D.167 Finally, the location version is more consistent with the goals of the BEPS Project, given that the description of substantial activities in the BEPS Report focused on shifting income between jurisdictions, not entities.168

The nexus approach, however, does not only include the location version, and this version is in fact hidden away in the footnotes of the 2015 Report. Why, then, did the OECD agree

167. See, e.g., Boustany, supra note 59.
168. See BEPS REPORT, supra note 83, at 13 (“There is a growing perception that governments lose substantial corporate tax revenue because of planning aimed at shifting profits in ways that erode the taxable base to locations where they are subject to a more favourable tax treatment.”).
on a version of the nexus approach that discourages outsourcing and acquisition, regardless of where the underlying R&D takes place? Instead of choosing a version that focuses on jurisdiction, why did the OECD settle on a more complicated and less intuitive version that focuses on the entity that undertook the R&D rather than the jurisdiction where the R&D took place?

A. THE IMPACT OF EUROPEAN UNION LAW ON PATENT BOXES AND THE NEXUS APPROACH

The reason that the entity version of the nexus approach exists is EU law. Countries participating in the BEPS Project believed that the treaty freedoms of the European Union would not permit the Member States of the EU to adopt a patent box that focused on jurisdiction. Although direct taxation is one of the few remaining areas where EU institutions are not able to act without the unanimous consent of the twenty-eight Member States of the European Union, Member States are still limited in their ability to design direct tax provisions by the fundamental freedoms protected by the EU treaties. These freedoms are intended to prevent Member States from undermining the single market by establishing barriers to movement or investment, and EU law has evolved to consider many location-based restrictions on tax incentives to violate these freedoms. Therefore, although the European Union institutions may not have the ability to pass direct tax legislation without the unanimous support of all of the EU Member States, the effect of the EU treaties and the ECJ's interpretation of the freedoms protected by those treaties has been to limit the types of direct tax laws that Member States can themselves implement, and Member States participating in the BEPS Project understood this limitation to extend to patent boxes.

Article 49 of the Treaty on the Functioning of the European Union (TFEU) prohibits Member States from restricting the

169. Cf. id. at 9 (“The OECD is committed to delivering a global and comprehensive action plan based on in-depth analysis of the identified pressure areas with a view to provide concrete solutions to realign international standards with the current global business environment.” (emphasis added)).

170. See, e.g., Case C-264/96, Imperial Chem. Indus. plc v. Colmer, 1998 E.C.R. I-4695, I-4721 (“Although direct taxation is a matter for the Member States, they must nevertheless exercise their direct taxation powers consistently with Community law.”).

171. Cf. BEPS ACTION PLAN, supra note 82, at 9 (indicating that the BEPS Project required international cooperation to deal with patent boxes).
freedom of establishment, while Article 56 of the TFEU prohibits Member States from restricting the freedom to provide services. In other words, Articles 49 and 56 are anti-discrimination provisions that prohibit Member States from discriminating in favor of residents in terms of who can, respectively, establish a business in the Member State or provide services in the Member State. After the ECJ determines in a case before it that a Member State provision such as an R&D incentive violates the freedoms enshrined in the TFEU, the Court applies a proportionality analysis under which a provision that violates one of the fundamental freedoms could still be found to be consistent with the TFEU if it were both justified by one of the justifications that the ECJ has previously accepted and proportionate to that justification (i.e., tailored sufficiently narrowly to restrict the freedom only to the extent necessary to achieve the justification). In direct tax cases, however, the ECJ has only accepted a few justifications for an otherwise restrictive direct tax provision. These permitted justifications include ensuring fiscal cohesion, ensuring the balanced allocation of taxing power, and the prevention of abuse. The ECJ has rejected both the prevention of revenue loss and the promotion of research as justifications for a restriction on the fundamental freedoms. In previous cases, the ECJ has held that

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173. Id. at art. 56. Other articles of the TFEU protect the free movement of goods, workers, and capital, but the freedom of establishment and freedom to provide services are the two freedoms that have been implicated in cases considering R&D incentives.
174. See, e.g., Case C-446/03, Marks & Spencer plc v. Halsey, 2005 E.C.R. I-10837, I-10879 (“Such a restriction is permissible only if it pursues a legitimate objective compatible with the Treaty and is justified by imperative reasons in the public interest. It is further necessary, in such a case, that its application be appropriate to ensuring the attainment of the objective thus pursued and not go beyond what is necessary to attain it.”). For a longer explanation of the three-part analysis that the ECJ applies to cases considering the fundamental freedoms, see Lilian V. Faulhaber, Sovereignty, Integration and Tax Avoidance in the European Union: Striking the Proper Balance, 48 COLUM. J. TRANSNAT’L L. 177, 190–93 (2010).
175. See Case C-204/90, Bachmann v. Belg. State, 1992 E.C.R. I-249, I-283–84 (discussing justification by “the need to ensure the cohesion of the tax system”).
178. See Case C-307/97, Compagnie de Saint Gobain v. Finanzamt Aachen-
R&D incentives that only apply to R&D undertaken in the Member State providing the incentive are unjustified violations of the freedom of establishment and the freedom to provide services. The reason that such incentives have been found to violate these fundamental freedoms is that, by only providing benefits to R&D undertaken in the jurisdiction, they favor domestic R&D, which the ECJ has concluded is a form of discrimination based on residence.

Although some commentators have suggested that the ECJ has been more accepting of certain discriminatory Member State direct tax provisions in recent years, the ECJ has not reversed its existing case law regarding R&D incentives, and the precedents that relate directly to R&D incentives make clear that an R&D incentive that limits its benefits based on the location of the R&D would be inconsistent with the freedoms provided in the TFEU.

The EU Member States participating in the BEPS Project thus had legal support to contend that they could not legally implement patent boxes within the European Union if those patent boxes only provided benefits based on the location of the R&D. Given that EU Member States made up half of the countries involved in the BEPS Project, the parties designing the nexus approach believed that they could not require any differential treatment based on the

Innenstadt, 1999 E.C.R. I-6161, ¶ 51 (rejecting the prevention of revenue loss as justification); Case C-39/04, Laboratoires Fournier SA v. Direction des Vérifications Nationales et Internationales, 2005 E.C.R. I-2057, ¶ 23 (rejecting the promotion of research as justification).


183. The countries that were both Member States of the European Union and OECD members at the time of the BEPS Project include Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, and the United Kingdom. Although Latvia was not yet a member of the OECD, it was an EU Member State, and, as an accession country to the OECD, it was also involved in the BEPS Project. Norway and Iceland, members of the European Economic Area, and Switzerland, a member of the European Free Trade Association, are also OECD members and therefore participated in the BEPS Project.
location of R&D. Instead, the OECD had to find a different lens through which to view substantial activities, and the FHTP chose entities. Rather than treating R&D differently depending on where it took place, the entity version of the nexus approach therefore treats R&D different depending on who undertook it. This in turn led to the entity version distinguishing between related and unrelated parties rather than between domestic and foreign R&D. Outsourcing to all related parties is excluded from qualifying expenditures, while outsourcing to all unrelated parties is included in qualifying expenditures. As stated in both the 2014 Progress Report and the 2015 Report, the reason for this was that it was assumed that taxpayers would not choose to outsource the actual value-generating portion of R&D to an unrelated party. 184 In terms of acquisitions, since there is no way for the EU nexus approach to distinguish between acquisitions where the underlying R&D took place in the jurisdiction and those that are just shifting IP out of another jurisdiction, the cost for all acquisitions must be excluded from qualifying expenditures. The focus on entities is thus intended to achieve a similar outcome to a focus on the location of the R&D, but it must allow for some slippage, where some external R&D will be permitted to increase the nexus ratio and some internal R&D will end up decreasing the nexus ratio, because EU law currently prohibits any Member State tax incentive from focusing directly on the location of the R&D. 185

The entity version therefore creates more distortions and more opportunities for income shifting. Any other version of the

184. ACTION 5: 2015 FINAL REPORT, supra note 6, at 29–30; see also ACTION 5: 2014 PROGRESS REPORT, supra note 66, at 32–33.

185. Since the entity version of the nexus approach was designed to comply with EU law and adopted by the Code of Conduct Group, this Article assumes that, if a nexus-compliant patent box is challenged in front of the ECJ, the Court will find it not to violate the EU Treaty freedoms or the prohibition on state aid. Given the ECJ’s constantly changing view of the scope of Treaty protections, however, it is not impossible that, despite the OECD’s efforts to design an approach that is consistent with EU law, a Member State taxpayer could challenge it as a violation of Treaty freedoms or the state aid prohibition. If this were to happen, and if the ECJ were to find that a nexus-compliant patent box was inconsistent with the TFEU’s protections, this would strengthen the arguments in this Article about the detrimental effect of EU law on international cooperation. It would also raise fundamental questions about the interactions between the institutions of the EU, given the Commission’s participation in the working party meetings that led to the creation of the nexus approach, the Code of Conduct Group’s adoption of the approach, and the Commission’s decision not to initiate state aid investigations of patent boxes due to the ongoing debates over the nexus approach.
nexus approach that would comply with the EU treaty freedoms as they are currently understood would, however, not prevent base erosion and profit shifting. Since the prohibition on discriminating based on the location of R&D means that a patent box or other back-end tax regime would be consistent with EU treaty freedoms if it were to provide benefits to all R&D undertaken throughout the EU, one option for the OECD would have been to design the nexus approach so that R&D undertaken anywhere in the EU would qualify the resulting income for benefits. This option, however, would itself create an incentive for base erosion and profit shifting within the EU, since taxpayers could benefit from a patent box in a low-tax Member State with limited support for innovation even if they had undertaken all the R&D in a different EU Member State that had the infrastructure, educational system, trained employees, and technical support necessary for that R&D. In other words, this would permit taxpayers to shift income anywhere within the EU, even if the underlying activities had taken place in another EU Member State.

The OECD therefore produced the most robust version of the approach that was possible given Member State understandings of the EU law constraints. The fact remains, however, that it was because of EU law that the nexus approach does not take the logical approach of focusing on jurisdiction. The logic underlying this outcome is the logic of the single market: in order to be one supranational market with no internal barriers, Member States cannot prevent the shifting of R&D or income within the EU. Yet, given that the EU institutions still have no affirmative authority over direct taxation, this logic means that the effect of EU law is in fact to allow and encourage base erosion and profit shifting.

In many ways, EU law underlies the entire BEPS Project. In the years leading up to this project, the ECJ struck down or limited a wide range of Member State anti-avoidance rules. In general, many anti-avoidance rules treat a payment, transaction, or person differently when there is a cross-border element. Therefore, a domestic taxpayer who engages in purely domestic transactions will be treated differently for tax purposes than a non-resident taxpayer or a domestic taxpayer who engages in cross-border transactions. The reason for this is

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186. For a discussion of many of the anti-avoidance rules struck down by the ECJ prior to the BEPS Project, see Faulhaber, supra note 174.
that, when a transaction or event is purely domestic, the country imposing taxes knows what happens on both ends of the transaction: if a payment is deducted in the hands of the payor, then it will be included in the hands of the payee, and the taxing jurisdiction will be assured that it will be taxed at least once. When a transaction or event is not purely domestic, however, the opportunities for non-payment of taxes increase because one jurisdiction cannot be sure of what is happening in the other jurisdiction. For example, if the deduction on the payor side was premised on the assumption that the payment would be taxed on the payee side, that assumption can no longer be supported if the payee is in another jurisdiction. It is therefore common to distinguish between domestic and cross-border transactions in tax legislation.\textsuperscript{187}

In the European Union, however, the ECJ struck down rules that treated domestic and cross-border transactions differently.\textsuperscript{188} With these decisions, Member States lost many tools in the fight against tax avoidance. They could not impose withholding taxes on dividends or similar payments to other Member States, even if those payments were excluded from income or otherwise subject to benefits in the recipient Member State.\textsuperscript{189} They could not impose robust controlled foreign company (CFC) rules on subsidiaries in low-tax Member States to prevent income from being shifted into those subsidiaries.\textsuperscript{190} They could not limit the deductibility of interest payments to other Member States, even if those interest payments were excluded from income or otherwise subject to benefits in the recipient Member State.\textsuperscript{191} They also could not have any anti-


\textsuperscript{188} See Case C-170/05, Denkavit Internationaal BV and Denkavit France SARL v. Ministre de l'Économie, des Finances et de l'Industrie, 2006 E.C.R. I-11949, ¶¶ 39–41 (holding that a tax that is imposed on dividends paid to non-resident parents and that is not imposed on dividends paid to resident parents is a violation of the Treaty freedoms).

\textsuperscript{189} See id.

\textsuperscript{190} See Case C-196/04, Cadbury Schweppes PLC, Cadbury Schweppes Overseas Ltd. v. Comm'rs of Inland Revenue, 2006 E.C.R. I-7995, ¶ 75 (holding that controlled foreign company rules that apply to non-resident subsidiaries and not to resident subsidiaries are a violation of the Treaty freedoms to the extent that the subsidiaries to which they apply are not wholly artificial arrangements).

\textsuperscript{191} Case C-324/00, Lankhorst-Hohorst GmbH v. Finanzamt Steinfurt, 2002 E.C.R. I-11779 (holding that thin capitalization rules that apply differ-
avoidance rules that applied to residents of other Member States unless those rules were sharply curtailed and applied only to wholly artificial entities or transactions.\footnote{See Faulhaber, supra note 174, at 192–94 (defining the “wholly artificial arrangements doctrine,” according to which the ECJ only permits Member States to justify a discriminatory measure as a means to prevent tax avoidance if that measure targets only wholly artificial arrangements).} Essentially, the ECJ barred Member States from policing tax avoidance within the European Union because it disallowed rules that discriminated against non-resident taxpayers and recognized only a very limited exception for the prevention of tax avoidance. This in turn meant that EU law could at least in part explain many of the patent boxes that most concerned the jurisdictions that wanted the BEPS Project to target these provisions. Countries that opposed patent boxes were most concerned by those that had no limitation on the location of the R&D or the identity of the party who undertook the R&D, but EU law was what prohibited Member States from limiting their patent boxes to income from domestic R&D.

This meant that, by the time of the BEPS Project, the European Union had in many ways become a safe space for tax avoidance. Taxpayers could structure their transactions such that they took advantage of the lack of withholding taxes between jurisdictions and the lack of anti-avoidance rules within EU Member States. While the jurisprudence of the ECJ was not the only cause of the base erosion and profit shifting issues facing countries at the time of the BEPS Project, it was a key factor in creating these issues. This can be seen in the fact that several of the BEPS Action Items focused on the very areas where the ECJ had struck down or not permitted Member State rules as violations of the treaty freedoms. For example, Action 2 focused on hybrid arrangements, where the same transaction or entity is treated differently in two different jurisdictions.\footnote{BEPS ACTION PLAN, supra note 82, at 15–16.} One way to address these arrangements is for a jurisdiction to change its treatment based on the other jurisdiction’s treatment, but this is the type of differential treatment that the ECJ has previously not permitted. Action 3 focused on CFC rules, which the ECJ had severely limited.\footnote{Id. at 16–17.} Action 4 focused on interest deductibility rules, which the ECJ had also
limited. In effect, these Action Items highlight that one goal of the BEPS Project was to overcome the limits that had been placed on anti-avoidance efforts by the ECJ.

And yet, as shown by the nexus approach, efforts to overcome the ECJ's jurisprudence were themselves thwarted by Member State understandings of the Court's interpretation of the freedoms protected in the Treaty on the Functioning of the European Union. The nexus approach is therefore striking in that it did work within the confines of EU law to address a problem to which EU law contributed, but it also highlights that the BEPS Project was hampered from the start, given that many Action Items were limited in what they could achieve based on the legal constraints that applied to EU Member States. This was true for several other Action Items as well. The Reports on Action 3 and Action 4, for example, included several pages that explained the restrictions imposed by the EU treaty freedoms and made clear that no recommendations in those Reports should be interpreted as requiring Member States to violate those freedoms. Given that those freedoms were the very ones that led to weak CFC and interest deductibility rules in the first place, the fact that the OECD had to work within those constraints limited the degree to which the OECD could advocate rules that would eliminate tax avoidance opportunities.

EU law therefore limited the ability of Member States to police tax avoidance both before and after the BEPS Project. The OECD did propose recommendations and requirements that went as far as possible toward combating tax avoidance within the constraints of existing EU law, but these constraints prevented it from adopting the most robust possible anti-avoidance rules. This effect of EU law is particularly clear within the context of the work on patent boxes, because this is the one area where the OECD's outputs include both the desired outcome and the more limited outcome that is necessary to comply with EU constraints. By including the location version but explicitly limiting this version to non-EU countries, the OECD made clear that the entity version was a deviation from

195. *Id.* at 17–18.

the version that could have been proposed in the absence of EU law.

Although the ECJ’s interpretations of the treaty freedoms limited the outcomes under the BEPS Project, this was not the only interaction between EU institutions and the BEPS Project. Other EU institutions and groupings, including the Council, the Commission, and the Code of Conduct Group, in fact contributed to strengthening the outputs under the BEPS Project. For example, in the context of Action 2, which dealt with hybrid mismatch arrangements, some Member States had interpreted a piece of EU legislation as preventing the types of rules that were proposed in the Action 2 report. 197 This legislation, known as the Parent-Subsidiary Directive, prevents Member States from imposing taxes on certain intragroup payments. 198 The Action 2 report, however, included several recommendations, one of which was the imposition of a tax on intragroup payments. This recommendation said that, if a subsidiary had been permitted to deduct a payment to a parent, the parent country could then impose taxes on that payment rather than allowing it to escape taxation. 199 Some observers saw this and other Action 2 recommendations as violating the Directive. In response to this concern, the Council of the European Union approved two amendments to the Directive in 2014 and 2015. The first of these amendments directly supported Action 2 by requiring that a parent impose a tax on a payment to the extent that it had been deducted in a subsidiary resident in another Member State. 200 The second amendment then made it easier for Member States to adopt other Action 2 recommendations that may also have run afoul of the Parent-Subsidiary Directive, thereby eliminating an EU legal constraint that would have significantly weakened the effectiveness of the BEPS Project’s recommendations. 201

199. Id. at 15–20.
Another example of cooperation between the European Union and the OECD can be seen in the Code of Conduct Group’s adoption of the nexus approach. In 1997, the EU established the Code of Conduct for Business Taxation, which targeted harmful tax practices within the EU.\footnote{Conclusions of the ECOFIN Council Meeting on 1 Dec. 1997, 1997 O.J. 98/C.} Since then, the Code of Conduct Group has been charged with eliminating these practices, and it does so by applying five criteria when assessing regimes in Member States: (i) “whether advantages are accorded only to non-residents or in respect of transactions carried out with non-residents”; (ii) “whether advantages are ring-fenced from the domestic market”; (iii) “whether advantages are granted even without any real economic activity and substantial economic presence within the Member State offering such tax advantages”; (iv) “whether the rules for profit determination . . . depart[] from internationally accepted principles”; and (v) “whether the tax measures lack transparency.”\footnote{Id. §§ B(1)–(5).}

More recently, the Code of Conduct Group opened discussions on Member State patent boxes, many of which were later assessed by the FHTP. These discussions took place in the context of the Group’s discussions of the third criterion, which requires that advantages only be granted where there is real economic activity and a substantial economic presence within the Member States offering the tax advantage.\footnote{Id. § B(3).} On November 20, 2014, just after Germany and the UK released their compromise proposal on the nexus approach, the Code of Conduct Group announced that it was adopting the entity version of the nexus approach as developed by the FHTP in the context of the BEPS Project.\footnote{Van der Made, supra note 114. In the media, there was some confusion about what organization had developed the nexus approach. See, e.g., Liz Loxton, Closing the Loophole: Tax Breaks on IP and Patents, ECONOMIA (Feb. 5, 2015), http://economia.icaew.com/finance/february-2015/closing-the-double-irish-loophole (quoting a lawyer as referring to “the EU’s Forum on Harmful Tax Practices,” which does not exist). This was developed by the FHTP and adopted by both the FHTP and the Code of Conduct Group.}

This adoption increased pressure on Member States who were participating in the BEPS Project to adopt the nexus approach themselves, since they would now be subject to it at the
EU level regardless of whether or not the OECD adopted it. Therefore, opposing the nexus approach no longer provided any benefit to these Member States. This effect can be seen by the fact that, before the FHTP assessed any patent boxes, the Code of Conduct Group assessed all Member State patent boxes and concluded that none of them were compatible with the nexus approach.206 Furthermore, this expanded the scope of the nexus approach by subjecting all twenty-eight EU Member States, including those that were not members of the OECD or G-20, to assessment under the nexus approach. In practical terms, this meant that the Cyprus and Malta patent boxes, both of which applied rates of 2.5% or less and neither of which would have been considered under the OECD’s nexus approach since neither Cyprus nor Malta is an OECD or G-20 member, were now subject to the nexus approach.

The institutions of the European Union therefore have contributed to the success of the BEPS Project by reforming EU-level legislation and adopting the nexus approach in the Code of Conduct Group. The Commission took part as an observer in many of the working party and FHTP meetings that led to the OECD’s recommendations, and it also stepped back from its 2013 review of patent boxes as state aid.207 What the two versions of the nexus approach highlight, however, is that, despite these positive contributions on the part of other EU institutions, EU law remains a significant constraint on the ability of Member States to police tax avoidance. The ECJ’s jurisprudence created opportunities for the base erosion and profit shifting that led to the BEPS Project, and it also limited the efforts by Member States and other OECD and G-20 countries to curtail these opportunities during the BEPS Project. While this is not necessarily the intention of the Court, which achieves this result merely by interpreting the Treaty freedoms to prevent discrimination against non-residents, the result of this interpretation is to create a welcoming environment for tax avoidance within the European Union.

That effect is worrisome enough when it just constrains the ability of Member States to police tax avoidance. As will be discussed next in this Part, however, the BEPS Project expanded the impact of the ECJ’s pro-avoidance jurisprudence so that it

206. Van der Made, supra note 114.
is now not only Member States who are constrained in what they are able to do to prevent tax avoidance. Instead, the ECJ’s jurisprudence has now made it harder for even non-EU countries to police tax avoidance and curtail tax competition.

EU Member States were not the only countries that were party to the BEPS Project. Although they made up half of the forty-four participants, the other half of the countries taking part in the BEPS Project were not EU Member States. But, as shown above, the results of the BEPS Project were constrained by legal requirements that applied only to those twenty-two Member States. This in turn illustrates an important new development in international relations: it is no longer just the Member States of the European Union who are subject to EU law constraints. These constraints now affect countries outside the European Union as well.

B. THE LUXEMBOURG EFFECT

Although the two different versions of the nexus approach mean that EU Member States are the only countries that must implement the entity version, they do not mean that other countries cannot implement the entity version. Instead, non-EU countries are free to adopt either the entity version or the location version (or a mix of the two). And even though the location version is more consistent with the goals of Action 5, it is likely that many jurisdictions even outside the European Union will end up implementing the entity version of the nexus approach. One of the main reasons for implementing a patent box is to compete with other countries for both revenue and R&D activity. Therefore, when countries have a choice between a tax incentive that will be more attractive to taxpayers or one that will be less attractive because it provides fewer benefits, many countries will choose the former. The entity version of the nexus approach allows for patent boxes that are generally more attractive to taxpayers because they are likely to allow some extraterritorial R&D to qualify for benefits, while the location version does not. That said, the entity version also creates

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208. This is partly because of the treatment of branches under the entity approach and partly because of the treatment of unrelated party outsourcing, which is included in qualifying expenditures under the entity approach even if the unrelated party is outside the jurisdiction providing benefits. The treatment of acquisitions is less generous under the entity version, so this may overall end up being less generous. Jurisdictions could, however, choose to
more complexity by requiring greater tracking and tracing and creating pressures against outsourcing and acquisition, so some non-EU countries may adopt the entity version, while others may incorporate some combination of the entity version and the location version, such as a patent box that focuses on which entity undertook the R&D but then adopts jurisdiction-focused rules on acquisitions.

Even if some non-EU countries adopt a purely jurisdiction-focused patent box, however, the mere existence of the entity version of the nexus approach changes the competitive environment in which countries are deciding to adopt patent boxes. The fact that the EU Member States were able to shape the nexus approach so that it focused on entities rather than location means that taxpayers now know that, at least in the European Union, patent boxes will allow for some degree of income shifting, where non-local R&D can qualify income for benefits. This in turn means that non-EU jurisdictions that see themselves competing with EU jurisdictions for taxpayers and income will feel pressure to allow similar slippage in their own patent boxes.

EU law, therefore, no longer has an effect just on the Member States of the European Union. Instead, when combined with the competitive pressures facing countries as they design tax incentives, it changes the legal landscape for other countries. In other words, when EU Member States are part of an international or transnational negotiation, EU law shapes those negotiations and can have an effect on the law that applies in non-EU countries as well as in Member States. This lesson can be seen in some of the other outputs from the BEPS Project as well. In the context of CFC rules, for example, the apparent goal of including Action 3 was to push for more robust CFC rules worldwide. 209 The outcome from Action 3, however, only set out non-binding recommendations for countries that wished to adopt CFC rules, and it expressly acknowledged that these rules could not be designed in a way that was inconsistent with the EU treaty freedoms. 210 Given that EU treaty

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209. BEPS ACTION PLAN, supra note 82, at 16 (outlining the positive effects of CFC rules).

210. ACTION 3: 2015 FINAL REPORT, supra note 196, at 17 (stating that “EU Member States will need to ensure that they make choices that are consistent with EU law”).
freedoms were what had weakened Member State CFC rules to begin with, this acknowledgment did not offer much comfort to observers who had hoped that the BEPS Project would lead to stronger rules than those permitted under the ECJ’s jurisprudence.211

Examples of this larger effect of EU law can also be found outside of the BEPS Project. In cases such as Gottardo212 and Open Skies,213 the ECJ had previously found that treaties with third countries that provided more favorable benefits to residents of one Member State compared to residents of another Member State were inconsistent with the Treaty freedoms.214 The Commission interpreted these findings to mean that limitation on benefits clauses in tax treaties with third countries were also inconsistent with the Treaty freedoms.215 If the Commission’s current infringement decision against the Netherlands for its treaty with Japan (which contains a limitation on benefits provision that the Commission believes to violate the Treaty freedoms) is not challenged or overturned, this provides yet another example of the Luxembourg Effect, pursuant to which third countries have less freedom in how they design tax treaties to ensure that their benefits are limited to residents of EU treaty partners.216

211. The Action 3 Final Report did suggest that Member States could design their CFC rules to be more robust than what they currently had. This recommendation suggested that, while most Member State CFC rules were designed to target only wholly artificial arrangements, they could also be designed to target a wider variety of subsidiaries as long as that included both resident and non-resident subsidiaries, or they could be designed to target “partly wholly artificial” arrangements, or they could be designed to apply more broadly so long as they could be justified by a need to maintain the balanced allocation of taxing power. See id. at 17–18. All these suggestions were placed within the constraint of EU law, however, and the fact that the Action 3 Final Report did not require any Member States to implement CFC rules means that these design options will not change the environment for CFC rules unless Member States affirmatively want to test the limits of EU law.


215. See Mindy Herzfeld, The EU’s Other Smoking Gun, 84 TAX NOTES INT’L, 12, 12–13 (2016).

216. This also at least partly explains why the minimum standard designed under Action 6 of the BEPS Project did not specify one required treaty provision but instead required countries to implement either a limitation on benefits clause or a principal purpose test. As was true in the context of patent boxes, the OECD did not feel that it could issue a report that recommended
EU law therefore has a much broader reach than has previously been acknowledged. Although many academics have discussed the internal inconsistencies of the ECJ’s direct tax jurisprudence and the effect of this case law on Member State tax provisions, the nexus approach shows that the ECJ’s direct tax jurisprudence has an effect on tax provisions outside of the European Union. This means that the European Union and its court system are not only important for EU legal experts, but instead for all countries that are negotiating with the EU or competing with the EU for taxpayers, income, or anything else.

In an earlier article, Anu Bradford identified what she referred to as the “Brussels Effect,” whereby the European Union has raised the floor for regulatory standards through market harmonization. In the process identified by Bradford, standards in areas where the EU has regulatory authority (such as antitrust law, privacy, human health, and the environment) have been heightened even outside the EU because the EU’s higher regulatory standards have pushed up all regulatory standards due to market pressures.

This Article introduces the Luxembourg Effect (so named because the primary seat of the European Court of Justice is Luxembourg). In an area such as direct taxation, where the only a limitation on benefits clause if some Member States understood such a clause to be inconsistent with the Treaty freedoms. See ORG. FOR ECON. CO-OPERATION & DEV., PREVENTING THE GRANTING OF TREATY BENEFITS IN INAPPROPRIATE CIRCUMSTANCES, ACTION 6: 2015 FINAL REPORT 14 (2015) (acknowledging that “some countries may have constitutional restrictions or concerns based on EU law that prevent them from adopting the exact wording of the model provisions that are recommended in this report”).

217. See, e.g., Graetz & Warren, supra note 25; Mason & Knoll, supra note 25.
218. See, e.g., Faulhaber, supra note 174.
220. Id. at 3. Bradford’s article builds on the concepts of the California Effect and the Delaware Effect. Under the California Effect, California is able to heighten regulatory standards and norms in certain contexts. Under the Delaware Effect, Delaware has the ability to lower such standards and norms in other contexts. See id. at 5. The Brussels Effect is the international version of the California Effect. The Luxembourg Effect, which I introduce here, is in some ways the international version of the Delaware Effect.
221. Id. at 19.
222. Id. at 3.
223. While the Commission and other EU institutions are located in Brussels, the primary seat of the European Court of Justice is Luxembourg. See BOLESŁAW A. BOCZEK, INTERNATIONAL LAW: A DICTIONARY 359 (2005).
EU institutions do not have any regulatory authority but the ECJ does have jurisdiction, the EU cannot raise international standards through market convergence, so the Brussels Effect does not apply. What the nexus approach shows us, however, is that the opposite outcome arises. Instead of just leaving individual country standards as is, the ECJ reduces these standards when it finds that individual Member State provisions are inconsistent with the Treaty freedoms. These reduced standards are then exported through international competition. The reduced ability of Member States to police tax avoidance therefore does not just affect Member States, but it changes the entire competitive landscape and creates pressures for other countries to also reduce their anti-avoidance standards. Therefore, while the Brussels Effect leads to upward pressure on regulatory standards, the Luxembourg Effect leads to downward pressure on international standards.

This effect was made particularly clear in the context of the BEPS Project, since the goal of that project was to raise international standards limiting tax avoidance. In many of the Action Items, the OECD and G-20 achieved this goal: they introduced rules to combat hybrid mismatch arrangements, which very few countries had even attempted to prevent; they made it harder to avoid PE status; they established new requirements for exchanging and collecting taxpayer information; and they modified transfer pricing guidance to allocate more income to jurisdictions where value creation took place.

224. Bradford, supra note 30, at 59 (acknowledging that the Brussels Effect does not apply in areas where the “missing regulatory propensity . . . reflects a preference for heterogeneity within the EU” and identifying direct taxation as one such area).

225. This Article views greater opportunities for tax avoidance as examples of reduced standards and downward pressure. Although advocates for patent boxes may disagree with this characterization, the fact that the Luxembourg Effect meant that the OECD and the FHTP agreed to an approach that allowed more jurisdictional income shifting than otherwise would have been consistent with the stated goals of Action 5 supports the view of this effect as leading to reduced standards and downward pressure.

226. See BEPS ACTION PLAN, supra note 82.

227. ACTION 2: 2015 FINAL REPORT, supra note 197.

228. ACTION 7 FINAL REPORT, supra note 166.

These outcomes could be achieved either because the ECJ had not yet decided cases in that specific area or because the area appeared to fall outside the ECJ’s existing jurisprudence. In the context of hybrid mismatch arrangements, for example, the Council’s amendment to the Parent-Subsidiary Directive was sufficient to remove at least some limits on Member State action.  PE status was a change made to bilateral treaties, and, although the ECJ has previously considered cases challenging treaty provisions, the establishment of PE status is further from the ECJ’s jurisprudence than an individual domestic law affecting cross-border taxation. Exchange of information was outside the scope of the ECJ’s jurisprudence because this information was required of all taxpayers, and the transfer pricing changes were just made in the OECD Transfer Pricing Guidelines, which the ECJ sees as generally consistent with EU law.

But in areas where the ECJ had already ruled on the inconsistency of Member State rules with EU law, the OECD members were not able to agree to raise international standards as high as they could have in the absence of EU law. EU law therefore has an effect that goes beyond the borders of the EU—and Bradford’s arguments about regulatory convergence go beyond the borders of the EU’s regulatory authority. Regulatory convergence, in fact, happens in reverse in direct taxation because this is an area where the EU has no regulatory authority, the ECJ has struck down the ability of Member States to pass legislation, and countries gain a competitive advantage by lowering their own standards. Member States therefore face a legislative and regulatory vacuum, where they cannot implement their chosen provisions but no EU institution has the authority to replace those provisions with EU-wide harmonization. This vacuum in turn affects countries outside the EU because the reduced standards in the European Union create a lower bar against which to compete and thus reduce international standards.

231. See ACTION 2: 2015 FINAL REPORT, supra note 197.
232. See ACTION 7 FINAL REPORT, supra note 166.
In order for the Luxembourg Effect to apply, the nexus approach suggests that three requirements must be met. First, the EU institutions cannot have separate regulatory competence in the area. In other words, the area must be one where the unanimous consent of the Member States of the European Union is required for any legislation. This requirement is met in the direct tax area, as well as several other areas, including the EU’s common foreign and security policy (CFSP), family law, social security and social protection, and the granting of rights to EU citizens. Second, the European Court of Justice must have jurisdiction over cases in this area. Although this second requirement is also met in the direct tax area, it is not met in all areas that require unanimous consent. The ECJ does not, for example, have jurisdiction over cases involving the CFSP. Finally, the area must be one in which countries gain a competitive advantage by reducing standards. This third requirement is met in the direct tax area, since countries believe that they benefit from making it easier to engage in income shifting transactions. This may not, however, be true in many of the other areas that meet the first two requirements. In the area of family law, for example, the regulatory vacuum also exists because Member States have retained the unanimity requirement over legislation in this area and the ECJ has struck down Member State laws in this area. The effect of the


236. Treaty on European Union art. 24(1), Oct. 26, 2012, 2012 O.J. (C 326) 13 (noting that, although the ECJ does not have jurisdiction over cases involving CFSP, it does have jurisdiction “to monitor compliance with Article 40 of this Treaty and to review the legality of certain decisions as provided for by the second paragraph of Article 275 of the Treaty on the Functioning of the European Union”).

237. Note that the Treaty on the Functioning of the European Union does provide for the possibility of Member States agreeing to allow some family law legislation to be approved by qualified majority voting, but any such agreement requires the unanimous consent of all Member States. Treaty on the Functioning of the European Union art. 81(3), Oct. 26, 2012, 2012 O.J. (C326) 47.

238. See, e.g., Case C-200/02, Kunqian Catherine Zhu v. Sec’y of State for the Home Dep’t, 2004 E.C.R. 1-9925 (interpreting the right of residence to mean that petitioners had the right to reside in one Member State that did not recognize birthright citizenship when their only claim to this right was birth-
ECJ’s jurisprudence has again been to lower regulatory standards in this area, but non-EU countries may not have had their own family law legislation affected by reduced standards within the European Union because competition in this area does not focus on reduced standards. This third requirement means that the Luxembourg Effect is limited to the few areas such as direct taxation where lower standards are beneficial to countries from a competitive perspective. Although that means that the Luxembourg Effect may not be as common as the Brussels Effect, the Luxembourg Effect is still significant in that it illustrates the long reach of EU law in the direct tax area and the impact that the ECJ’s decisions can have beyond the borders of the European Union.

The third requirement also highlights the political story underlying the development of the two versions of the nexus approach—and it highlights a cost of the UK’s recent “Brexit” vote that has not previously been discussed. The third requirement of the Luxembourg Effect is that countries must receive a competitive advantage from a reduction in standards. This implies that many of the countries debating the nexus approach were aware that a version of the approach that allowed for some out-of-jurisdiction R&D to qualify for reduced rates would allow countries that adopted a patent box that complied with such a version to continue to attract income from other jurisdictions. The limits imposed by EU law therefore provided a convenient excuse for those countries that already had existing patent boxes and that wanted to ensure that these regimes could continue to allow some degree of jurisdictional income shifting. While the thirty percent uplift that was agreed to by the UK (a country with a patent box that had previously allowed for jurisdictional income shifting) and Germany (a country that publicly stated that it wanted to eliminate all patent boxes) already achieved this goal and allowed countries to receive benefits for at least some of their out-of-jurisdiction R&D, the entity version also contributed to the lowering of anti-avoidance standards. The Luxembourg Effect illustrates that, despite public complaints by EU Member State politicians about the many limitations imposed on them by EU law, these supposed limitations may, in fact, be more of a shield that protects Member States’ more pro-avoidance direct tax rules from challenge and, right citizenship granted in another Member State).

239. See FEB. 2015 AGREEMENT, supra note 115.
240. See Houlder & Peel, supra note 54.
in turn, sets the bar progressively lower for anti-avoidance rules worldwide.

The Member States’ use of EU law as a shield is also illustrated by the fact that the OECD did not propose that all patent boxes be eliminated. Such a proposal would have been consistent with both Action 5, which did not foreclose the possibility of eliminating patent boxes entirely, and EU law, which says nothing that could be interpreted to require Member States to have patent boxes. The OECD did not propose eliminating patent boxes, however, because many Member States came to the BEPS Project with patent boxes that they did not want to eliminate. Their deference to EU law, therefore, only went so far, and they were unwilling to allow EU law to be used to strike down their patent boxes entirely.

Another illustration of how Member States used EU law to shield them from proposals that would make their patent boxes less competitive and more restrictive can be seen in the fact that many commentators had suggested that the ECJ appeared to be moving away from its most pro-avoidance interpretation of the treaties. \(^\text{241}\) Member States therefore could have used the BEPS Project as a moment to challenge the ECJ’s jurisprudence, and they could have limited the Action 5 proposal to the location version of the nexus approach. Any Member States that implemented a patent box consistent with that approach would then have to be willing to defend the box as consistent with EU law, which would require them to argue that the BEPS Project, which included twenty-two of the twenty-eight Member States of the EU, had redefined tax avoidance and that rules that were designed to combat tax avoidance as defined by the project were justified under EU law. While many observers may have hoped that the Member States would do just that, their unwillingness to do so illustrates that at least some Member States were willing to use the ECJ’s pro-avoidance jurisprudence as a shield to protect their less restrictive patent boxes.

This political story adds another dimension to the effects of the recent UK referendum in favor of leaving the European Union. Although politicians throughout the United Kingdom were outspoken about the ways in which the European Union limited their freedom in designing domestic law, \(^\text{242}\) the Luxem-

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\(^{241}\) See, e.g., Hilling, supra note 181.

\(^{242}\) See, e.g., David Cameron, The EU Is Not Working and We Will Change
THE LUXEMBOURG EFFECT highlights that, at least in the direct tax area, the United Kingdom may have benefitted from the political cover provided by the limits imposed by EU law. This is particularly evident in the context of patent boxes. Prior to the BEPS Project, politicians from other countries directly criticized the UK patent box as an example of unfair tax competition. The BEPS Project did not, however, eliminate the UK's patent box. It instead allowed the United Kingdom to keep a patent box so long as it was consistent with the entity version of the nexus approach. The United Kingdom and other EU Member States with patent boxes were therefore able to use EU law as a shield to protect a rule that otherwise may have been eliminated. If the United Kingdom is no longer a Member State of the European Union, however, it will be in the same position as all the other non-EU countries that are subject to the Luxembourgeois Effect. In other words, even though a majority of its electorat voted to no longer be subject to the laws of the European Union, the United Kingdom will still be faced with a competitive landscape shaped by this very law, but it will no longer be able to use this law as a political shield to protect its own domestic interests.

This means that, while the debates over the internal consistency of the ECJ's direct tax jurisprudence are important and relevant, they are not the only debates that should be taking place around this case law. Instead, there needs to also be a focus on how this jurisprudence affects countries beyond the EU as well as Member States and a discussion of what can be done. The following Part considers some possible answers, but, as shown by the nexus approach and other outcomes of the BEPS Project, most of these answers require the ECJ and the other EU institutions to limit these constraints, which they have thus far been unwilling to do.


243. See, e.g., Houlder & Peel, supra note 54.

244. See ACTION 5: 2015 FINAL REPORT, supra note 6.

245. \textit{Id.} at 34–35. The UK and all other jurisdictions with existing patent boxes were also permitted to continue to provide benefits until 2021 to taxpayers that had previously benefited from the existing patent box.
III. POSSIBLE RESPONSES TO THE LUXEMBOURG EFFECT

As outlined above, the long reach of the ECJ’s direct tax jurisprudence exists because of the combination of (i) the EU institutions’ lack of authority to pass direct tax legislation without the unanimous support of Member States; (ii) the ECJ’s jurisdiction over cases arising under the freedoms protected by the TFEU; and (iii) the competitive advantage of having lower standards. This Part briefly considers responses to the Luxembourg Effect that would address each of these requirements, although it acknowledges that many of these responses are unlikely to succeed in the short term, so the first step toward addressing the Luxembourg Effect must be raising awareness of its existence.

A. RESPONSES TO THE EU INSTITUTIONS’ LACK OF REGULATORY AUTHORITY

One way to address the Luxembourg Effect in the field of direct taxation would be to grant the EU institutions the competence to pass EU-level directives or regulations in this area without the unanimous consent of the Member States. In other words, direct tax could become one of the many areas where only qualified majority voting (QMV) is required for EU-level legislation. Moving direct taxation to QMV was considered during the debates over the EU Constitution in 2003 and 2004, but this proposal was not incorporated into the final version, so it is unlikely that such a reform will be achieved in the short term. Moreover, even if the EU institutions had the authority


247. See Opinion of the Commission, Pursuant to Article 48 of the Treaty on European Union, on the Conference of Representatives of the Member States’ Governments Convened to Revise the Treaties, at 7, COM (2003) 548 final (Sept. 17, 2003) (proposing that the Constitution allow for QMV in areas such as “taxation in connection with the operation of the internal market, i.e. modernising and simplifying existing legislation, administrative cooperation, combating fraud or tax evasion, measures relating to tax bases for companies, but not including tax rates; the aspects of free circulation of capital linked to the fight against fraud; taxation in respect of the environment; certain aspects of social security; certain measures concerning passports; and the European public prosecutor’s role in safeguarding the Union’s financial interests”).

to pass direct tax legislation, this legislation would still need to conform to the ECJ’s interpretations of the treaty freedoms, so this would still not remove the downward pressure on direct tax standards. This can be illustrated by the recent work done by the Commission and Council on an Anti-Tax Avoidance (ATA) Directive.\(^{249}\) Although this Directive at first appears to be a move away from the reduced standards that led to the Luxembourg Effect, it in fact illustrates just how difficult it will be for Member States to offset the Luxembourg Effect through political agreement since it is still subject to the Treaty freedoms as interpreted by the ECJ. Therefore, even though it includes proposals for an interest deductibility rule, an exit tax, a general anti-abuse rule, a CFC rule, and a hybrid mismatch rule,\(^{250}\) many of these rules are still constrained by the ECJ’s jurisprudence. Consistent with *Lankhorst-Hohorst*,\(^ {251}\) for example, the interest deductibility rule is not a thin capitalization rule that focuses only on interest paid to foreign parents but is instead a jurisdiction-neutral rule that applies based on a proportionate calculation.\(^ {252}\) Consistent with *National Grid Industries*,\(^ {253}\) the exit tax is not an immediate penalty but instead a tax that may be extended over five years for transfers within the EEA.\(^ {254}\) Moreover, both the general anti-abuse rule and the CFC rule

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250. *Id.* at ch. II, arts. 4–9.


252. ATA Directive, *supra* note 249, at ch. II, art. 4. Interest deductibility rules in general are intended to prevent taxpayers from taking excess interest deductions, and such deductions generally are more valuable when the interest payment being deducted was paid to a foreign entity, since the recipient will not necessarily be taxed on the interest payment at the same rate that the payor can deduct the payment. Therefore, many interest deductibility rules take the form of a thin capitalization rule (i.e., a rule that applies only to highly leveraged taxpayers) that applies only when interest payments are made to foreign or other non-taxable entities. However, such a rule treats interest payments differently depending on whether they were paid to a resident recipient or a foreign recipient, so it raises EU law concerns.


254. ATA Directive, *supra* note 249, at ch. II, art. 5. An exit tax applies when a company leaves one jurisdiction for another. Since it is triggered only when a taxpayer leaves a jurisdiction and establishes in a different jurisdiction, it does not apply equally to resident companies that are remaining resident companies and those that are becoming foreign companies, so it raises EU law concerns.
adopt the terminology of Cadbury Schweppes and apply only to “non-genuine arrangements.” Therefore, although the ATA Directive may lead more Member States to have anti-avoidance rules, many of these rules will not go any further toward preventing tax avoidance than the rules that already exist in Member States since even EU-level legislation is restricted by the pro-avoidance jurisprudence of the ECJ.

B. RESPONSES TO THE ECJ’S JURISDICTION OVER DIRECT TAX CASES

EU-wide legislation thus does not seem to be the answer to the current stalemate since even that would be subject to the treaty freedoms. What, then, could be done at the ECJ level to address this situation? One option would be for Member States to amend the treaties to restrict the ECJ’s jurisdiction over direct tax cases. Member States have, however, previously considered and rejected the idea of rescinding the ECJ’s jurisdiction over direct tax cases, so this is again unlikely to be an option in the short term.

A second option would be for the Court itself to change its approach to deciding direct tax cases. It could, for example, adopt a more deferential approach when deciding cases involving Member State implementation of internationally agreed

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256. ATA Directive, supra note 249, at ch. II, art. 6(1), art. 7(2)(b). This is a blanket limitation for the general anti-avoidance rule. The CFC rule allows Member States either to apply a blanket rule that applies to all non-genuine arrangements or to apply their rules only to CFCs that do not “carry[ing] on a substantive economic activity supported by staff, equipment, assets and premises, as evidenced by relevant facts and circumstances.” For Member States that choose the latter path, they can apply their CFC rules more broadly to subsidiaries in non-EEA countries. Both of these were designed to be consistent with Cadbury Schweppes, which focused on the treatment of subsidiaries within the European Union (and, by extension, the EEA). For more on what the ECJ believes the terms “non-genuine arrangements” and “wholly artificial arrangements” encompass, see Faulhuber, supra note 174. The ECJ’s argument in Cadbury Schweppes was that CFC rules that by definition applied only to foreign subsidiaries were discriminatory, but they could be justified as preventing tax avoidance if they only applied to subsidiaries that were “wholly artificial.” See id. The ATA Directive therefore adopted this logic to limit both CFC rules and general anti-avoidance rules so that they only apply narrowly to arrangements or transactions that the ECJ believes represent tax avoidance that Member States are permitted to prevent.
recommendations. Although the ECJ is not a political body, many commentators have noted throughout the years that its deference to Member State rules and its interpretation of the treaty freedoms fluctuate in line with the political pressures facing the European Union. Given that the Commission participated in OECD meetings about the BEPS outputs and that twenty-two Member States of the EU participated in the BEPS Project, the ECJ could interpret the BEPS outputs as the result of international cooperation to which it should defer, and it could therefore see any restrictions arising from these as outside the scope of the treaty freedoms. This could provide Member States and non-EU countries with more certainty that, if they were to agree to heightened standards in any future international agreements, those standards would be more protected than individual Member State rules. This would, however, contrast with the ECJ’s self-presentation as an apolitical body that is merely interpreting the Treaty freedoms, so it may be unlikely in the short term that the Court would follow this approach.

Alternatively, the Court could also change its approach to deciding direct tax cases by accepting more justifications for provisions that are designed to prevent tax avoidance. As discussed above, the ECJ now accepts only a narrow group of justifications for direct tax provisions that discriminate based on jurisdiction, and it has rejected the need to raise revenue as an acceptable justification. In order to make it easier for Member States to prevent income shifting, it could accept other justifications, such as the need to prevent shifting of income across jurisdictions or the need to prevent double non-taxation. Such a development would, however, break from the Court’s previous case law, and it would also be inconsistent with the overall vision of the European Union as a single market since it would


259. An opportunity to exercise such deference could arise, for example, if a nexus-compliant patent box were to be challenged by a Member State taxpayer. See Case C-254/97 Société Baxter v. Premier Ministre, 1999 E.C.R. I-4809.

260. This version of deference by a supranational court to an international organization has not been discussed in detail in the international law literature on deference, most of which focuses on deference of international courts to domestic courts. See, e.g., DEFERENCE IN INTERNATIONAL COURTS AND TRIBUNALS (Łukasz Gruszczynski & Wouter Werner eds., Oxford Univ. Press 2014).

261. See supra Part II.A.
allow more Member State measures to discriminate based on jurisdiction.

C. RESPONSES TO COMPETITIVE PRESSURES FOR LOWER STANDARDS

In the near term, therefore, the situation is likely to remain as it currently is: Member States cannot pass anti-avoidance legislation that discriminates based on jurisdiction, and the EU institutions cannot pass anti-avoidance legislation at the EU level without unanimous Member State consent. This in turn means that, at least in areas where the ECJ has struck down Member State rules, international tax standards are themselves going to be pushed down by the effect that EU law has on the competitive landscape. The Member States’ unwillingness to address this impasse could therefore continue to have effects on countries outside the European Union.

In the longer term, however, as non-EU countries become more aware of the Luxembourg Effect (or, after the Brexit vote, as countries that were previously Member States become non-EU countries that are now subject to the Luxembourg Effect and no longer have the ability to effectuate any of the above reforms), Member States may come under pressure from non-EU countries to either rescind the ECJ’s jurisdiction over direct tax cases or to eliminate the unanimity requirement for direct tax legislation. Since the effect of the ECJ’s decisions has now been exported outside of the European Union, some of the non-EU countries most affected by the reduced international standards may start to apply pressure to the Member States to fix this situation. Therefore, although Member States previously rejected either of these solutions, the long reach of EU law may mean that the parties demanding change are no longer just the Member States. Instead, as illustrated by the nexus approach, the parties demanding change could end up expanding to include all those countries subject to the downward pressure of the ECJ’s decisions. This result would mean that, by exporting the effect of its decisions, the ECJ could also end up importing the political pressure necessary to solve the current impasse.

262. This pressure could be imposed in a variety of ways. The member countries of the OECD could, for example, implement a working group on the impact of EU law, or, in a more extreme example, non-EU countries could refuse to ratify or modify double tax treaties with EU Member States in the absence of reform.
CONCLUSION

At the start of the BEPS Project, several countries and commentators expressed concern about the effect of patent boxes on the international tax environment. They claimed that patent boxes were leading to reduced tax rates and greater opportunities for base erosion and profit shifting.\(^{263}\) In response, the OECD and G-20 designed the nexus approach to require these tax provisions to require substantial activities.\(^{264}\) While the nexus approach did impose limitations on patent boxes and may even lead to a reduction in the number of patent boxes in the long-term, it also included two separate versions: the main version, which focused on entities, and a version hidden in the footnotes, which focused on the location of the underlying R&D. As suggested by the BEPS Report that the OECD issued in 2013, as well as empirical literature on the effectiveness of patent boxes, a limitation based on the location of the underlying R&D would have been the most logical way to curtail patent boxes and ensure that they achieved their stated goal of increasing the amount of R&D in a jurisdiction. And yet the entity version of the nexus approach focuses on entities, which creates incentives to restructure and disincentives for outsourcing and acquisition, as well as more opportunities for income shifting than a location-based approach.

One reason for this deviation away from the more logical approach was EU law. Even though EU law created many of the base erosion and profit shifting opportunities that led to calls for the BEPS Project, the involvement of Member States of the European Union in the project meant that the outputs of the project were themselves limited by EU law. The pro-avoidance jurisprudence of the European Court of Justice thus did not just have an impact on Member States of the EU. Instead, it had an impact on other countries as well, since these countries were now competing for revenue and taxpayers in an environment where patent boxes could be designed to comply with the more lenient entity version of the nexus approach.

The nexus approach therefore illustrates the long reach of EU law. No longer do decisions of the ECJ just reduce the ability of Member States to pass direct tax legislation. They now also push down international standards on taxation through the Luxembourg Effect: where the lack of EU-wide regulatory

\(^{263}\) See Breidthardt, supra note 54; Houlder & Peel, supra note 54.
\(^{264}\) See BEPS ACTION PLAN, supra note 82.
authority and the ECJ’s jurisprudence combine to create a vacuum, that vacuum will lead to lower standards internationally when other countries are competing with the Member States of the European Union. In the context of tax avoidance, this means that it is now harder for all countries—including those not subject to the EU treaties—to police tax avoidance because the ECJ has interpreted anti-avoidance rules to violate the treaty freedoms.

Although the ECJ and Member States could theoretically address this problem by agreeing to EU-wide tax legislation and reducing the ECJ’s jurisdiction over direct tax cases, these options seem unlikely, at least in the near future. The lesson to be learned from the nexus approach is therefore that academics, practicing lawyers, and negotiators alike must all be aware of the effect that the ECJ’s jurisprudence has on regulatory convergence in the direct tax area. While discussions of the impact of this jurisprudence within the EU are important and relevant, the conversation also needs to focus on the impact of this jurisprudence outside the EU and acknowledge that the European Court of Justice is making decisions that limit the ability of the United States and other non-EU countries to police and prevent international tax avoidance.