WHY CORPORTE TAXATION MEANS SOURCE TAXATION A RESPONSE TO THE OECD'S ACTIONS AGAINST BASE EROSION AND PROFIT SHIFTING

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ABSTRACT

It is widespread practice around the world that corporate entities pay taxes to the country where they are formally registered and to the country in whose territory they have a permanent establishment. While the former is generally known as the 'country-of-residence' the latter is usually referred to as the 'country-of-source'.

This article questions separate taxation based on this distinction between the country-of-residence and the country-of-source. It argues for a departure from the traditional international allocation of the right to tax corporate income and suggests that a corporate entity should instead pay income tax exclusively to the countries in which it has relevant business activities. Moreover, in examining the question of where business activities of multinational corporations effectively take place, this article describes criteria for determining source countries. Furthermore, it offers a method for formulary apportionment of corporate income between those countries in which a given multinational corporation generates income. The article argues that source taxation of corporate income would be coherent with the economic nature of corporate income taxation. Source taxation of corporate income would also make the arbitrary concept of corporate residence irrelevant, and it would allow the outdated legal concept of permanent establishment to be abolished.

This article takes an interdisciplinary approach to argue from both legal and economic perspectives. It adds to the body of literature that discusses how countries should tax corporate entities doing business across national borders. It also contributes to the ongoing debate about the OECD's recent controversial efforts to prevent corporations shifting profits between countries to minimize their exposure to national tax systems (base erosion and profit sharing, or BEPS).

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1. Introduction

The sovereignty principle includes the power to tax. It gives every country the authority to impose taxes on individuals and corporations that reside within their territory. Moreover, it entitles every country to tax foreign resident individuals and corporations as long as they have income generated within the country's territory. Thus, the sovereignty principle gives every country the right to tax both resident taxpayers and non-resident taxpayers generating income within on its territory. In the first case literature generally refers to the 'country-of-residence' or 'residence taxation' and in the second case to the 'country-of-source' and 'source taxation'.

Taxation in the country-of-residence and taxation in the country-of-source are guided by diverging principles: while the country-of-residence typically levies taxes on worldwide incomes, the country-of-source generally imposes taxes on a territorial tax base.² Of course, all countries are both residence countries and source countries at the same time. Nonetheless, every income that crosses borders necessarily involves a country-of-residence and a country-of-source. Country-of-residence and country-of-source, therefore, represent the two different ends of any cross-border income.³

However, simultaneous exercising of sovereignty by the country-of-residence and the country-of-source creates a dilemma: if the country-of-source imposes a tax on the same income that is subsequently also taxed by the country-of-residence, the taxpayer pays twice on the same income. This dilemma has dominated international tax policy since the birth of the current system of international tax law at the beginning of the 20^{th} century. The task of international tax law has been to seek a solution to this dilemma of international double taxation and to find a method to decide whether the country-of-residence or the country-of-source can tax cross-border income.

Since its beginning, international tax law has followed the same legal doctrine as other areas of law and has treated corporations as entities with independent legal personality. Consequently, corporations not only pay income taxes like individuals, they are also deemed to have a residence where they pay taxes on their worldwide income. Thus, individuals and corporations both pay separate income taxes to the

'Country-of-residence' and 'residence country' have the same meaning throughout this article as well 'country-of-source' and 'source country'.

For further elaborations about the definitions of the country-of-residence and the country-of-source, *see* Luzius U. Cavelti, International Tax Cooperation, The Sovereignty Conflict between the Residence and the Source Country paras. 351-560 (forthcoming 2016).

While traditional capital exporting countries in general prefer residence taxation, typical capital import countries have astrong interest in source taxation. For further elaborations about the history of the sovereignty conflict between the country-of-residence and the country-of-source, see Luzius U. Cavelti, International Tax Cooperation, The Sovereignty Conflict Between the Residence and the Source Country paras. 25-234 (forthcoming 2016).

The theoretical underpinnings for taxation in the country-of-residence and for taxation in the country-of-source differ from each other: while taxation in the country-of-residence is driven by the ability-to-pay principle and the notion of capital export neutrality, taxation in the country-of-source is grounded in the benefit principle and follows the notion capital import neutrality. For further discussion, *see* LUZIUS U. CAVELTI, INTERNATIONAL TAX COOPERATION, THE SOVEREIGNTY CONFLICT BETWEEN THE RESIDENCE AND THE SOURCE COUNTRY paras. 21-23 (forthcoming 2016).

country-of-residence and to the country-of-source. This separate taxation by the residence and the source country has hardly been questioned by academics, neither for individuals nor for corporations.

However, corporations are not like individuals. Unlike individuals, corporations do not actually 'pay' taxes. For economists it is clear that all corporate taxes are ultimately borne by individuals: the cost of corporate taxation actually falls on stakeholders such as shareholders, employees, and customers. Ultimately, a corporation is nothing more than a legal mechanism for a group of people to join together to form a business.⁵

If we claim that all corporate taxes are eventually borne by individuals, the question arises as to why countries impose corporate income taxes at all? We take the stance that corporate taxation is a form of source taxation. Without corporate taxation, business activities would only be taxed by the country in which the shareholders and the other stakeholders such as customers and employees reside. In the context of cross-border income, the main justification for taxing corporate entities is that corporate taxation allows the country-of-source to tax the business activities of foreign corporations that take place within its borders. Consequently, we argue that corporations should no longer be taxed by the country-of-residence. Instead, we postulate a new international allocation of the right to tax is allocated among the different source countries according to the method of formulary apportionment.

This article addresses four key themes. In section it describes how the contemporary system of international tax law allocates the right to tax corporate income between the country-of-residence and the country-of-source and globalization, digitalization and the growing importance of multinational corporations have brought this system to a fundamental crisis. Section three discusses the efforts of the Organization for Economic Co-operation and Development (OECD) to realign corporate taxation with the geographical location of actual business activities. Section four looks at corporate taxation from an economic perspective to explore the nature of a corporation and the rational underpinnings for corporate taxation in the context of international taxation. Section five explains how this economic perspective justifies formulary apportionment among source countries and show through realistic examples how the international corporate tax system and the allocation of the right to tax corporate income can be altered. Finally, section six summarizes the major considerations and concludes with some final remarks.

2. The Current International Corporate Tax System and its Deficiencies

Since both the country-of-residence and the country-of-source tax the same income, corporations are subject to international double taxation. It is the duty of international tax law to decide whether the country-of-residence or the country-of-source has the primary right to tax cross-border income. The roots of the international corporate tax system were established at the beginning of the 20th century. Under the auspices of the League of Nations, four economists, professors

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JOSEPH E. STIGLITZ, ECONOMICS OF THE PUBLIC SECTOR (3rd ed 2000), 645; *See also* Alan J. Auerbach, *Who Bears the Corporate Tax? A Review of What We Know* (National Bureau of Economic Research, Working Paper 11686, 2005); Richard M. Bird, *Why Tax Corporations?* 56 BULLETIN FOR INTERNATIONAL TAXATION 194, 195 (2002).

Bruins, Einaudi, Seligman and Sir Josiah Stamp, laid the groundwork for the first model tax conventions. In their report of 1923, which became known as the 'Report by the Four Economists', they suggested that income from business activities should be taxed by the country-of-source while in return the country-of-residence should have the primary right to tax income from investments such as dividends, royalties or interests. Since the 'Report by the Four Economists', the 'fundamental compromise' between country-of-source and country-of-residence has been the globally accepted standard for the allocation of the right to tax income. This groundbreaking compromise still applies today: in the current OECD Model Tax Convention, the country-of-source has the right to tax active income while the right to tax passive investment income primarily lies with the country-of-residence. This fundamental compromise seems to be accepted as a fair allocation of the right to tax income.

However, this system of international corporate taxation has two major flaws. The first weakness is the necessity to assign putative residences to corporations. The two dominant model tax conventions, which have been developed by the OECD ('OECD Model Tax Convention') and the United Nations ('U.N. Model Tax Convention'), codifies that corporations are deemed resident in the country in which they are liable to taxation because of formal registration, place of management or any similar criterion. Thus, both model tax conventions grant countries some discretion in defining the residence of corporations: while some countries define corporate residence as the place where a corporation has been legally created, ¹⁰ other countries assign the residence of corporations to the location where they are 'effectively managed'. ¹¹

No matter how countries define the residence of corporations, the determination remains arbitrary. This is specially the case for multinational corporations which, unlike individuals do not generally reside in the country where

See generally League of Nations, Economic and Financial Commission, Report on Double Taxation Submitted to the Financial Committee by Professors Bruins, Einaudi, Seligman and Sir Josiah Stamp (April 5, 1923)

Reuven S. Avi-Yonah, All of a Piece Throughout: The Four Ages of U.S. International Taxation, 25 VIRGINIA TAX REVIEW 313, 322 (2005).

See OECD Model Tax Convention, arts. 7, 10, 11, 12, 13; U.N. Model Tax Convention, arts. 7, 10, 11, 12, 13; However, there are a few exceptions to this general rule: For example, investment income from immovable property is taxed in the country-of-source, see OECD Model Tax Convention, arts. 6, 13 (1); U.N. Model Tax Convention, arts. 6, 13 (1).

The United States, for example, imposes corporate income taxes on corporate entities and partnership that "are created or organized in the United States or under the law of the United States or of any state." See U.S. Internal Revenue Code, § 7701 (a)(4) (citation omitted).

The OECD and U.N. Model Tax Convention both state: "For the purposes of this Convention, the term "resident of a Contracting State" means any person who, under the laws of that State, is liable to tax therein by reason of his domicile, residence, place of incorporation, place of management or any other criterion of a similar nature ... This term, however, does not include any person who is liable to tax in that State in respect only of income from sources in that State or capital situated therein." OECD Model Tax Convention, art. 4 (1) (citation omitted).

Model Tax Convention, art. 4 (1) (citation omitted).

For example, Switzerland and Germany tax corporations on their worldwide income provided they are formally registered in the country or if they are effectively managed in Switzerland and Germany respectively. *See* Swiss Federal Tax Code, Art. 50; German Corporate Tax Code, §§ 1 (1), (2). The OECD defines the 'place of effective management' as the "place where management and commercial decisions that are necessary for the conduct of the entity's business as a whole are in substance made." OECD, Model Tax Convention on Income and on Capital, Full Version 2014, at C(4) 24.

they have their "center of vital interests" or their "habitual abode". ¹² As a result, multinational corporations can move their residence to countries with preferential tax regimes without having significant business activities in those countries. As a result, the taxable income of multinational corporations accrues in countries offering the lowest tax burden. ¹³ The ability to shift profits within multinational corporations to reduce tax liability (known as Base Erosion and Profit Shifting or BEPS) is an inevitable consequence of that the way that tax laws treat corporations like individuals and grant them a fictitious residence. "[I]n the case of corporations, the idea of residence is largely an effort to put flesh into fiction, to find economic and political substance in a world occupied by legal niceties. It is no accident that we call corporations doing business around the world 'multinationals'." ¹⁴ Indeed, there is no convincing rationale to assign residence to corporations.

The second weakness of the international corporate tax system is the lack of a coherent concept for the source of income. While some countries, such as the United States, have enacted comprehensive rules to determine the source of income, ¹⁵ in most other countries the source of income is defined simply by "from whose pocket the payment was made." Thus, most countries allocate the source of income to the place of residence of the payer. International tax law also includes legal concepts to determine the source of income: according to the model tax conventions of the OECD and the UN, corporations not only pay taxes to the country in which they have legal residence but also to the countries in which they have a permanent establishment. Therefore, without a permanent establishment, the country-of-source is not entitled to tax income from foreign corporations even if they earn this income from business activities in its territory. Instead, in the absence of a permanent establishment, the entire income from those business activities is taxed by the country-of-residence. ¹⁸

The permanent establishment concept is a key legal concept to determine the country-of-source according to geographic location. The OECD Model Tax Convention and the U.N. Model Tax Convention provide complex and congruent descriptions of permanent establishment.¹⁹ Both conventions start by defining that a

OECD Model Tax Convention, arts. 4 (2)(a),(b); U.N. Model Tax Convention, arts. 4 (2)(a),(b).

See Kleinbard describing the movement of income within multinational corporations as 'stateless income'. Edward D. Kleinbard, Stateless Income, 11 FLORIDA TAX REVIEW, 701, 701-02 (2011); Edward D. Kleinbard, The Lessons of Stateless Income, 65 TAX LAW REVIEW, 99, 99 (2011).

Micheal J. Graetz, *Taxing International Income: Inadequate Principles, Outdated Concepts, and Unsatisfactory Policies*, 54 TAX LAW REVIEW 261 320 (2001).

See U.S. Internal Revenue Code, §§ 861-865.

JOSEPH ISENBERGH, INTERNATIONAL TAXATION (3rd eds. 2010), 31; See also Klaus Vogel, Worldwide vs. Source Taxation of Income, A Review and Re-Evaluation of Arguments, Part I, 8/9 INTERTAX 216, 223 (1998/89) (observing that most authors take the source of income for granted).

OECD Model Tax Convention, art. 7 (1); U.N. Model Tax Convention, art. 7 (1).

ARVID A. SKAAR, PERMANENT ESTABLISHMENT: EROSION OF A TAX TREATY PRINCIPLE 84-85 (1995).

Although the permanent establishment concepts in the model tax conventions are congruent, the U.N. model tax convention favors the country-of-source. The reason for this is that the OECD consists of traditional capital exporting countries, which typically prefer taxation in the country-of-residence while the countries that follow the U.N. model tax convention are traditional capital importing countries for which taxation in the country-of-source is more important.

permanent establishment is a "fixed place of business through which the business of an enterprise is wholly or partially carried on". ²⁰ Both model tax conventions list of the types of establishment that are explicitly encompassed by the concept of permanent establishment: "A place of management, a branch, an office, a factory, a workshop, and a mine, an oil or gas wells, a quarry or any other place of extraction of natural resources,". ²¹ Moreover, both conventions also list a number of activities that are deemed to be of an auxiliary and preparatory character and which are, therefore, exempt from the permanent establishment definition. These exceptions include, for instance, storage facilities, the maintenance of a stock of goods and the maintenance of a fixed place of business as long as these activities solely serve the purpose of storage, display or delivery. ²² Finally, in both model tax conventions a dependent agent may also create a permanent establishment if a corporation acts in a foreign country through a dependent agent and if this agent has not only the authority to act on behalf of the corporation but also habitually exercises this authority, the corporation is "deemed to have a permanent establishment" in this country. ²³

Hence the concept of permanent establishment is characterized by physical nexus to the country-of-source. In fact, a corporation cannot have a permanent establishment for tax purposes in the country-of-source without having an actual physical presence in its territory. Without this physical nexus, the country-of-source is not entitled to tax income earned by foreign corporations.

The permanent establishment concept serves two main purposes. First and foremost, permanent establishment determines the source of corporate income and enables the country-of-source to tax income from business activities within its borders. Secondly, the permanent establishment concept is included in double taxation treaties to provide a minimum threshold for taxation in the country-of-source²⁴ such that countries tax foreign corporations only if their business activities reach a certain level and thereby avoids inefficient fragmentation of the jurisdiction to tax.

The necessity to assign a residence to corporations and the lack of coherent source rules have created opportunities for profit shifting that have been exacerbated by a combination of globalization and the rapid increase of digitalization and

OECD Model Tax Convention, art. 5 (1); U.N. Model Tax Convention, art. 5 (1).

OECD Model Tax Convention, art. 5 (2); U.N. Model Tax Convention, art. 5 (2); However, the two concepts conventions also slightly differ slightly from each other: While the OECD Model Tax Convention considers a construction site or an installation as a permanent establishment if it lasts more than twelve months, under the U.N. model tax convention a construction site must only last six months in order to create a permanent establishment; see OECD Model Tax Convention, art. 5 (3); U.N. Model Tax Convention, art. 5 (3)(a). Additionally, unlike the OECD Model Tax Convention, the concept of the U.N. Model Tax Convention also includes a so-called "service permanent establishment", which: The service permanent establishment allows taxation in the country-of-source if a foreign corporation is providing services, including consultancy services, and if these activities continue for a period aggregating more than 183 days in any twelve months period; see U.N. Model Tax Convention, art. 5 (3)(b); However, it is important to note that also the commentary to the OECD Model Convention discusses the service permanent establishment, see OECD, Model Tax Convention on Income and on Capital, at art. 5 paras. 42.11-42.48.

See OECD Model Tax Convention, art. 5 (4); U.N. Model Tax Convention, art. 5 (4).

OECD Model Tax Convention, art. 5 (5); U.N. Model Tax Convention, art. 5 (5).

EKKEHART REIMER, STEFAN SCHMID, MARIANNE ORELL, PERMANENT ESTABLISHMENTS, A DOMESTIC TAXATION, BILATERAL TAX TREATY AND OECD PERSPECTIVE §1.01 n. 40-42 (4th eds., 2015).

virtualization. As a result countries' income tax bases have been undermined. The OECD, supported by the G20, has launched an initiative to realign corporate taxation with the location of actual business activities. Given what has been described with regard to determining the country-of-residence and the country-of-source, it is no surprise that the main focus of this new project against BEPS is finding appropriate criteria to define residence and source countries. The OECD's efforts to modify the determination of residence and source countries is examined critically in the following section.

3. Proposals to Realign Taxation with the Location of Business Activities

3.1. Preliminary Remarks – The OECD's BEPS Initiative

Following the financial crisis in 2008, most countries faced soaring government debt. News reports about multinational corporations shifting taxable profits to countries offering favorable tax treatments drew attention to uncoordinated tax policies that provide incentives to shift capital to low tax countries.²⁵ As a result, in June 2012 the meeting of the G20 leaders in Mexico demanded new measures against base erosion and profit shifting. ²⁶ In response, the OECD published a report called 'Addressing Base Erosion and Profit Shifting' ('BEPS Report') in 2013, which described studies and reports showing the impact of profit shifting of multinational corporations.²⁷ The report mentioned several empirical studies, which analyzed how multinationals had shifted profits to low-tax countries. For example, the report referred to a study by Reuven S. Avi-Yonah and Yaron Lahave in 2011 whose findings showed that the effective tax rates of multinationals in the EU tend to be higher than the effective tax rates of multinationals in the United States despite the corporate tax rate in the United States being about 10 % higher than the average statutory corporate tax rate in the EU.²⁸ Several other studies came to a similar conclusion about profit shifting in Europe. Matthias Dischinger, for instance, looked at subsidiaries of multinational corporations and showed a decrease in the pre-tax profits of a subsidiary of around 7% if the difference in the statutory corporate tax rate of this subsidiary to its parent increased by 10 percentage points.²⁹ Dischinger concluded that there is evidence that multinational corporations shift profits by using their subsidiaries in the EU.³⁰ Finally, the report also mentioned that aspects of

For an excellent illustration of Google's tax planning scheme, *see* Reimar Pinkernell, *Ein Musterfall zur internationalen Steuerminimierung durch U.S. Konzerne*, STEUER UND WIRTSCHAFT 364 (2012).

OECD, Addressing Base Erosion and Profit Shifting, 2013, at 14.

OECD, Addressing Base Erosion and Profit Shifting, 2013, at 14

Avi-Yonah and Lahav compared the effective tax rate of the largest 100 multinationals in the United States with the effective tax rates of the 100 largest multinationals in the EU over the years 2001 until 2010. For further discussion, see Avi-Yonah, R. and Y. Lahav, The Effective Tax Rate of the Largest US and EU Multinationals (University of Michigan Law School, Program in Law & Economics, Working Paper No. 41 2011); OECD, Addressing Base Erosion and Profit Shifting, 2013, at 25-31.

Matthias Dischinger, *Profit Shifting by Multinationals: Indirect Evidence from European Micro Data* 4-17 (Department of Economics, University of Munich, Discussion Paper No. 2007-30 2007); OECD, Addressing Base Erosion and Profit Shifting, 2013, at 66.

Matthias Dischinger, *Profit Shifting by Multinationals: Indirect Evidence from European Micro Data* 19 (Department of Economics, University of Munich, Discussion Paper No. 2007-30 2007);

globalization, such as the liberalization of trade, have dramatically increased the flow of capital between countries.³¹ Combined with the growth of the service industry, the increasing importance of telecommunications and the evolution of the digitalization in general, the structures and operational procedures of multinational corporations have fundamentally changed since the development of the first model tax convention by the League of Nations at the beginning of the 20th century.

The BEPS Report concludes that "a number of indicators show that the tax practices of some multinational companies have become more aggressive over time, raising serious compliance and fairness issues." Furthermore, the OECD states that "current international tax standards may not have kept pace with changes in global business practices". According to the OECD, base erosion and profit shifting have put the integrity of corporate income tax at stake: "A lack of response would further undermine competition, as some businesses, such as those which operate cross-border and have access to sophisticated tax expertise, may profit from BEPS opportunities and therefore have unintended competitive advantages compared with enterprises that operate mostly at the domestic level."

The OECD fears that profit shifting will lead to an inefficient allocation of resources and distort investment decisions if the international community cannot find a solution to the problem.³⁵ Thus, to address the problem of profit shifting and base erosion, the OECD suggests in its BEPS Report a comprehensive action plan with the focus on various "pressure areas" and the purpose to "provide concrete solutions to realign international standards with the current global business environment".³⁷

Based on the findings in the BEPS Report, in 2013 the OECD launched an 'Action Plan on BEPS' in which the OECD identified 15 actions³⁸ to address the problem of base erosion and profit shifting. This action plan makes suggestions to

OECD, Addressing Base Erosion and Profit Shifting, 2013, p. 25-28

OECD, Addressing Base Erosion and Profit Shifting, 2013, at 6.

OECD, Addressing Base Erosion and Profit Shifting, 2013, at 7 (citation omitted).

OECD, Addressing Base Erosion and Profit Shifting, 2013, at 8.

OECD, Addressing Base Erosion and Profit Shifting, 2013, at 8.

The OECD describes the following six "pressure areas": (i) International mismatches in entity and instrument characterization including hybrid mismatch arrangements and arbitrage, (ii) application of treaty concepts to profits derived from the delivery of digital goods and services, (iii) the tax treatment of related party debt-financing, captive insurance and other inter-group financial transactions, (iv) transfer pricing, (v) the effectiveness of anti-avoidance measures, such as CFC regimes, thin capitalization rules and rules to prevent tax treaty abuse and (vi) the availability of harmful preferential tax regimes. See OECD, Addressing Base Erosion and Profit Shifting (2013), at 47-48.

OECD, Addressing Base Erosion and Profit Shifting (2013), at 51 (citation omitted).

Action 1 addresses the tax challenges of the digital economy, action 2 intends to neutralize the effects of hybrid mismatch arrangements, action 3 shall strengthen the controlled foreign corporation rules, action 4 wants to limit base erosion via interest deductions and other financial payments, action 5 counters harmful tax practices by taking into account transparency and substance, action 6 shall prevent treaty abuse and action 7 the artificial avoidance of permanent establishment status, actions 8 to 10 focus on transfer pricing, action 11 shall establish methodologies to collect and analyze data on BEPS, action 12 requires taxpayers to disclose their aggressive tax planning arrangements, action 13 re-examines transfer pricing documentation, action 14 shall make dispute resolution mechanisms more effective and with action 15 the OECD finally seeks to develop a multilateral instrument to implement the different measures against BEPS. See OECD, Action Plan on Base Erosion and Profit Shifting, 2013, at 14-24.

prevent tax strategies "that artificially segregate taxable income from the activities that generate it." The OECD's ultimate goal is to realign taxation with relevant business activities, and to reestablish a coherent international corporate tax system.

An analysis of the OECD's proposals shows that the criteria to determine the country-of-residence and the country-of-source play an important part in this Action Plan on BEPS. In fact, some of these proposals counter base erosion and profit shifting by modifying the definition of the country-of-residence to prevent the abuse of treaty benefits. Other suggestions intend to alter the permanent establishment concept and therefore focus on the country-of-source. Beginning with proposals for the country-of-residence and followed by the proposals for the country-of-source, the next section elaborates how the OECD and other commentators plan to realign corporate income taxation with the actual business activities of corporations.

3.2. Proposals Relating to the Country-of-Residence

The main purpose of international double taxation treaties is to promote international commerce and the exchange of goods and services by eliminating international double taxation. 41 However, by exploiting the differences between domestic tax systems, taxpavers can abuse international double taxation treaties as the following simplified example demonstrates: 42 X-Corporation is resident in Country A and earns income in Country B. Assuming that Country A has no double taxation treaty with Country B, X-Corporation pays income taxes twice on the same income from Country B. To eliminate double taxation, X-Corporation decides to act through a newly established entity in Country C. The income from Country B is redirected to Country C from where it is remitted to Country A. Assuming that Country C has a territorial tax system and does not tax foreign income from Country B and assuming that Country C entered into a double taxation treaty with Country A, dividends from Country B to Country C are not taxed by Country C and benefit from a significantly reduced tax level in Country B. The subsequent remittance of dividends from Country C back to Country A enjoys the benefits of a double taxation treaty and may additionally benefit from a participation exemption in Country A. As a result, the entity in Country C functions as a conduit corporation allowing X-Corporation to enjoy the benefits of two double taxation treaties and to eliminate double taxation of its income from Country B. If X-Corporation established the entity in Country C only to benefit from the double taxation treaties of Country C, this is called 'treaty-shopping'. In that case the question arises of whether the taxpayer should be allowed to benefit from these treaty benefits or not. 43

The commentary to the OECD Model Tax Convention already addresses treaty abuse and treaty-shopping. ⁴⁴ In 1986 the OECD published an extensive report on the use of conduit corporations and treaty-shopping. ⁴⁵ For example, the OECD recommends low tax countries to include a "look-through provision" in their double

OECD, Action Plan on Base Erosion and Profit Shifting, 2013, at 13 (citation omitted).

OECD, Action Plan on Base Erosion and Profit Shifting, 2013, at 13.

OECD, Model Tax Convention on Income and on Capital, Condensed Version 2014, at art 1, para. 7.

For a similar example of a "direct conduit", *see* OECD, Double Taxation Conventions and the Use of Conduit Companies (1986), at para. 4.

See OECD, Model Tax Convention on Income and on Capital, at art. 1 para 9.1.

OECD, Model Tax Convention on Income and on Capital, at art. 1 paras. 7-26.2.

OECD, Double Taxation Conventions and the Use of Conduit Companies (1986).

taxation treaties disallowing treaty benefits to corporations owned by shareholders residing in another country than the corporation's country-of-residence. However, despite the OECD's previous recommendations, it nonetheless dedicates action 6 of the Action Plan on BEPS to the problem of treaty abuse.

The final report to action 6 makes three principal recommendations.⁴⁷ Firstly, the OECD suggests that a preamble to international double taxation treaties shall make clear that both treaty partners intend to avoid creating opportunities for "non-taxation or reduced taxation through tax evasion or avoidance." Secondly, the OECD recommends a new "principle purposes test" (PPT). The PPT will ensure that "tax conventions apply in accordance with the purpose for which they were entered into, i.e. to provide benefits in respect of bona fide exchanges of goods and services, and movements of capital and persons as opposed to arrangements whose principal objective is to secure a more favourable tax treatment." Thirdly, and of more weight, the OECD proposes a new anti-abuse rule, a so-called "limitation on benefits" clause (LOB-Clause). The LOB-Clause will ensure that only eligible taxpayers enjoy the benefits of double taxation treaties. Thus, a LOB-Clause is specifically directed at conduit corporations and treaty-shopping situations and thereby focused on the country-of-residence.

According to the OECD Model Tax Convention and the U.N. Model Tax Convention, treaty benefits apply to persons who are resident in one of the two

The OECD suggests the following wording for such a look-through provision: "A company that is a resident of Contracting State shall not be entitled to relief from taxation under this Convention with respect to any item of income, gains or profits if it is owned or controlled directly or through one or more companies, wherever resident, by persons who are not residents of a Contracting State." OECD, Model Tax Convention on Income and on Capital, Condensed Version 2014, at art. 1 paras. 13.

OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 9-10; "[A]s long as the approach that countries adopt effectively addresses treaty abuse...." the OECD leaves it to the member countries which of those recommendations they want to implement in their double taxation treaties, *see* OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 19 (citation omitted).

The full text of the proposed preamble reads as follows:

"PREAMBLE TO THE CONVENTION

(State A) and (State B),

Desiring to further develop their economic relationship and to enhance their cooperation in tax matters,

Intending to conclude a Convention for the elimination of double taxation with respect to taxes on income and on capital without creating opportunities for non-taxation or reduced taxation through tax evasion or avoidance (including through treaty-shopping arrangements aimed at obtaining reliefs provided in this Convention for the indirect benefit of residents of third States)." OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 92.

OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 56. The exact wording of the PPT says: "Notwithstanding the other provisions of this Convention, a benefit under this Convention shall not be granted in respect of an item of income or capital if it is reasonable to conclude, having regard to all relevant facts and circumstances, that obtaining that benefit was one of the principal purposes of any arrangement or transaction that resulted directly or indirectly in that benefit, unless it is established that granting that benefit in these circumstances would be in accordance with the object and purpose of the relevant provisions of this Convention." OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 55. Thus, the idea of the new PPT is rather vague granting tax administrations an overly broad discretion.

OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 20-54.

parties of the double taxation treaty.⁵¹ Thus, the LOB-Clauses will ensure that taxpayers can only claim treaty benefits if they are truly resident in the country from which they claim treaty benefits. Yet, only taxpayers that pass one of several residence tests will be regarded as "qualified persons" and therefore be entitled to treaty benefits.⁵² With regards to corporations, the OECD suggests two "structural tests" and one "business activity test" to determine whether a corporation is truly resident in the country from which its claims the treaty benefits.⁵³:

The first structural test is passed by corporations whose principal class of shares are "regularly traded on one or more recognized stock exchanges". 54 Hence the OECD assumes that corporations whose shares are publicly traded are less susceptible to treaty-shopping than other corporations. 55 The second structural test includes two conditions that apply cumulatively: a corporation fulfills the first condition if it is at least 50% owned by shareholders that are either individuals or publicly traded corporations residing in the same country as the corporation; and a corporation meets the second condition if less than 50% of the corporation's gross income is paid, directly or indirectly, to third country residents by means of deductible payments. 56 In other words, the two structural tests make sure that the corporation is controlled by residents of the country from which the corporation claims treaty benefits.⁵⁷ Finally, the business activity test ensures that the corporation in the country from which it claims treaty benefits is: (i) "engaged in the active conduct of a business"; (ii) that the payment it receives from the country-of-source is indeed connected with this business activity; and (iii) that the business activity in that country is 'substantial' compared to the activity that generates the income in the country-of-source. 58 Thus, the business activity test assesses whether the corporation has a sufficient economic nexus to the country from which it claims treaty benefits.⁵⁹

OECD Model Tax Convention (2014), art. 1; See also U.N. Model Tax Convention, art. 1

The first paragraph of the detailed version of the OECD's LOB-Clause states: "Except as otherwise provided in this Article, a resident of a Contracting State shall not be entitled to a benefit that would otherwise be accorded by this Convention ... unless such resident is a "qualified person", as defined in paragraph 2, at the time that the benefit would be accorded." OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 23 (citation omitted).

Adrian Wardzynski, *The Limitation on Benefits Article in the OECD Model: Closing Abusive* (*Undesired*) *Conduit Gateways* BULLETIN FOR INTERNATIONAL TAXATION 471, 475 (2014); These tests rely largely on the LOB-Clause of the U.S. model tax convention, *see* U.S. Model Income Tax Convention of November 15, 2006, art. 22.

OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 26. However, for the OECD it is not sufficient if the corporations' shares are listed at a recognized stock exchange. In fact, the OECD requires that either principal class of shares is primarily traded on one or more recognized stock exchanges located in the corporation's country-of-residence; or either the corporation's primary place of management and control is in the corporation's country-of-residence; or at least 50 per cent of the aggregate voting power and value of the shares in the corporation is owned directly or indirectly by five or fewer corporations or entities entitled to benefits from the benefits of double taxation treaty. OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 26.

OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 26.

OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 30.

Adrian Wardzynski, The Limitation on Benefits Article in the OECD Model: Closing Abusive (Undesired) Conduit Gateways, BULLETIN FOR INTERNATIONAL TAXATION 471, 475 (2014).

OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2015), at 36-37.

Adrian Wardzynski, The Limitation on Benefits Article in the OECD Model: Closing Abusive

In summary, the proposed LOB-Clause is highly technical but its underlying purpose is, however, strikingly simple: to ensure that corporations only claim treaty benefits from those countries to which they have a significant personal and economic connection. Formal criteria, like the place where a corporation is officially registered or the place of incorporation, will become less relevant with the new LOB-Clause. Instead, corporate residence will depend more on the residence of the shareholders and investors controlling the corporations. In addition to the residences of the investors, the place of actual business activity plays a more important role than previously: corporations may only claim treaty benefits from countries in which they actually conduct businesses. Thus, the definition of corporate residence increasingly comprises the same elements that are used for the characterization of source countries.⁶⁰

3.3. Proposals Relating to the Country-of-Source

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The current international corporate tax system, as described in section 2, uses the concept of permanent establishment as the key legal concept to define the source of income and, thereby, the country-of-source. Action 1 and Action 7 of the Action Plan on BEPS deal with the permanent establishment concept by addressing the digital economy and the avoidance of permanent establishment respectively.

3.3.1. Action 1: Proposals to Adapt the Permanent Establishment Concept to the Challenges of the Digital Economy

With Action 1 the OECD intends to adapt the permanent establishment concept to the challenges of globalization and digitalization. Whereas traditional commerce involves a physical exchange of goods or a physical interaction with customers, digital commerce does not necessarily include a physical exchange or interaction. Digitalization means the transformation of information into bits, the most basic form of information. Since bits of information can be sent around the world at light speed, digitalization enables corporations in conducting business activities in one country and interacting with their customers in other countries. As a result, corporations can generate significant revenues in a country in which they have no physical presence. For example, a university can offer online courses to students throughout the world without necessarily being present in the country of its students. A corporation can design screws and consumers around the world print these screws on a 3-D printer. Since corporations no longer even need an actual workforce to generate income in the country-of-source, the traditional concept of permanent

⁽Undesired) Conduit Gateways, BULLETIN FOR INTERNATIONAL TAXATION 471, 475 (2014). *See supra*, at section 2.

Walter Hellerstein wrote an accurate definition of digital economy by paraphrasing U.S. Supreme Court Justice Potter Stewart famous definition of pornography: Although we may not be able to define it, "we know it when we see it." Walter Hellerstein, *Jurisdiction to Tax in the Digital Economy: Permanent and Other Establishments*, 68 BULLETIN FOR INTERNATIONAL TAXATION 346 (2014).

ARTHUR COCKFIELD, WALTER HELLERSTEIN, REBECCA MILLAR & CHRISTOPHE WAERZEGGERS, TAXING GLOBAL DIGITAL COMMERCE 13 (2013). "A bit has no color, size, or weight, and it can travel at the speed of light. It is the smallest atomic element in the DNA of information. It is a state of being: on or off, true or false, up or down, in or out, black or white. For practical purposes we consider a bit to be a 1 or a 0." NICHOLAS NEGROPONTE, BEING DIGITAL 11 (1995).

establishment has become redundant. Yet corporations can avoid taxation in the country-of-source by using digital technologies. The rise of the digital economy fundamentally challenges the carefully balanced allocation of the right to tax income between the country-of-residence and the country-of-source.

In September 2014, the OECD issued its deliverable to Action 1 of the OECD's Action Plan on BEPS⁶³ followed by the final report, which was published in October 2015.⁶⁴ In these publications the OECD explores a variety of measures to address the challenges created by the digital economy. The most important of these measures concentrate on the concept of permanent establishment.⁶⁵ Firstly, the OECD explores whether the list of exceptions for auxiliary and preparatory activities could be altered or even eliminated. Secondly, the OECD examines the introduction of an alternative digital nexus, in other words, the introduction of a digital permanent establishment to be implemented alongside the traditional concept of permanent establishment. Thirdly, as an alternative to a digital permanent establishment, the OECD also considers replacing the traditional concept of permanent establishment with what the OECD calls a "significance presence test"⁶⁶. Finally, the OECD also discusses new forms of source taxes.

a) Amending the List of Exceptions for Auxiliary and Preparatory Activities

To alter the exceptions for preparatory and auxiliary activities the OECD considers two options. Firstly, the OECD explores whether some of the exceptions could be eliminated. Since the delivery of goods or services constitutes a key element in the business models of digital commerce, the OECD discusses deleting the reference to delivery in the list of exceptions. As a result, storage and maintenance would lead to a permanent establishment if it includes the delivery of products to consumers in a foreign country. Secondly, the OECD considers, more radically, eliminating the entire list of exemptions for auxiliary and preparatory activities.

By amending the list of auxiliary and preparatory activities, the OECD targets business models that still depend on the physical delivery of products, such as online retailers like Amazon or eBay. Some commentators, such as Honger and Pistone, have criticized these proposals for being too narrow because they do not cover other forms of digital commerce. However, Blum has pointed out, the effect of these proposals is necessarily limited since permanent establishment still concentrates on the corporations' physical nexus to a country. Instead of changing the wording of

OECD, Addressing the Tax Challenges of the Digital Economy (2015).

Addressing the Tax Challenges of the Digital Economy (2014), at 146.

OECD, Addressing the Tax Challenges of the Digital Economy (2014).

OECD, Addressing the Tax Challenges of the Digital Economy (2015), at 12.

OECD, Addressing the Tax Challenges of the Digital Economy (2015), at 107-11; OECD,

In the deliverable, the OECD refers to subparagraphs (a) to (d) of article 5 (4) of the OECD Model Tax Convention, *see* OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 143; see also OECD, Addressing the Tax Challenges of the Digital Economy (2015), 87-88, 132

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 143.

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 143.

Peter Honger/Pasquale Pistone, IBFD Blueprints for a New PE Nexus to Tax Business Income in the Era of the Digital Economy (IBFD Working Paper 20 January 2015), at 13.

Daniel W. Blum, Permanent Establishment and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative – The Nexus Criterion Redefined?, 69 BULLETIN OF INTERNATIONAL TAXATION 314, 317 (2015).

permanent establishment definitions, Blum suggested to interpret the list of exemptions for auxiliary and preparatory activities in accordance with its purpose: that only truly auxiliary and preparatory activities should be excluded from permanent establishment status.⁷²

b) An Additional Nexus Based on Significant Digital Presence ('Digital Permanent Establishment')

The second major modification to the concept of permanent establishment concerns the introduction of an additional nexus. The OECD states that a corporation "engaged in certain 'fully dematerialised digital activities' could be deemed to have a digital presence in another country if it maintained 'significant digital presence' in the economy of that country."⁷³ This proposal would basically lead to the introduction of a digital permanent establishment.

The OECD's digital permanent establishment would coexist with the traditional concept of permanent establishment and would not apply to all corporate entities. The scope of application is limited to business models that demand no minimal physical nexus to the country-of-source, 74 which is why only corporations involved in "fully dematerialised digital activities" could have a digital permanent establishment. The OECD suggests the following elements to identify whether a business is involved in "fully dematerialised digital activities": 75

- "The core business of the enterprise relies completely or in a considerable part on digital goods or digital services.
- No physical elements or activities are involved in the actual creation of the goods or of the services and their delivery other than the existence, use, or maintenance of servers and websites or other IT tools and the collection, processing, and commercialization of location-relevant data.
- Contracts are generally concluded remotely via the Internet or by telephone.
- Payments are made solely through credit cards or other means of electronic payments using on-line forms or platforms linked or integrated to the relative websites.
- Websites are the only means used to enter into a relationship with the enterprise; no physical stores or agencies exist for the performance of the core activities other than offices located in the parent company or operating company countries.
- All or the vast majority of profits are attributable to the provision of digital goods or services.

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 144; See also Daniel W. Blum, *Permanent Establishment and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative – The Nexus Criterion Redefined?*, 69 BULLETIN OF INTERNATIONAL TAXATION 314, 318 (2015) (observing that the OECD implicitly gives a definition of what is generally considered as digital economy).

Daniel W. Blum, Permanent Establishment and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative – The Nexus Criterion Redefined?, 69 BULLETIN OF INTERNATIONAL TAXATION 314, 317 (2015).

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 143-44 (citation omitted); see also OECD, Addressing the Tax Challenges of the Digital Economy (2015), at 106-111.

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 144.

- The legal or tax residence and the physical location of the vendor are disregarded by the customer and do not influence its choices.
- The actual use of the digital good or the performance of the digital service do not require physical presence or the involvement of a physical product other than the use of a computer, mobile devices or other IT tools."⁷⁶

Moreover, the introduction of a digital permanent establishment makes it necessary to define a "digital presence" in the country-of-source. As with the traditional concept of permanent establishment, a digital permanent establishment should only exist where the activity exceeds a certain threshold that reflects a "substantial ongoing interaction with the economy ... with the country-of-source". The OECD's publications of 2014 discuss a number of criteria to determine whether a corporation has a sufficient digital nexus to the country-of-source, such as:

- "A significant number of contracts for the provision of fully dematerialised digital goods or services are remotely signed between the corporation and a customer that is resident for tax purposes in the country;
- Digital goods or services of the corporations are widely used or consumed in the country;
- Substantial payments are made from clients in the country to the corporation in connection with contractual obligations arising from the provision of digital goods or services as part of the corporation's core business;
- An existing branch of the corporation in the country offers secondary functions such as marketing and consulting functions targeted at clients resident in the country that are strongly related to the core business of the corporation."⁷⁸

The idea of digital permanent establishment is not new. Legal and economic commentators previously discussed the introduction of a concept of digital permanent establishment. While for example Colling and Colling believe a digital permanent establishment should be established for corporations that provide services in another country by using data which a corporation has collected "through regular and systematic monitoring", 79 Pistone and Hongler suggest consumer-based parameters such as counting the amount of users of an application or website over a period of time combined with measuring the amount of revenue that is generated in a given country to determine the digital nexus to the country-of-source.. 80

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 144-45 (citation omitted).

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 144.

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 145; For further discussion of the different elements, see Daniel W. Blum, Permanent Establishment and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative - The Nexus Criterion Redefined? 69 BULLETIN OF INTERNATIONAL TAXATION 314, 318-20 (2015).

Pierre Colling/Nicolas Collin, Task Force on Taxation of the Digital Economy, Ministère de l'Économie et Ministère des Finances Productif de la République Française, Report to the Minister for the Economy and Finance, the Minister for Industrial Recovery, the Minister Delegate for the Budget and the Minister Delegate for Small and Medium-Sized Enterprises, Innovation and the Digital Economy (2013), at 115.

Peter Honger/Pasquale Pistone, IBFD Blueprints for a New PE Nexus to Tax Business Income in the Era of the Digital Economy (IBFD Working Paper 20 January 2015), at 24-25.

As long ago as the 1990s Reuven S. Avi-Yonah and Walter Hellerstein, two legal scholars, proposed to replace the traditional view of permanent establishment with a different type of threshold that relies on consumer-based elements instead of a physical nexus. They argued for a new threshold consisting of "a *de minimis* amount of sales":⁸¹ For example, Amazon would become liable for payment of taxes in every country in which its gross sales exceeds a "*de minmis* amount" of USD 1,000,000. 82 Thereby, Avi-Yonah and Hellerstein suggested determining the country-of-source by taking into account the demand, or consumer, rather than the supply side.

c) Replacing the Traditional Permanent Establishment Concept with a Significant Presence ('Significant Presence Test')

As an alternative to a digital permanent establishment, the OECD's 2014 documents also evaluate the idea of replacing the traditional concept of permanent establishment with a new significant presence test. ⁸³ The significant presence test would not only cover traditional business models, which still rely on a physical interaction with consumers, but it would also encompass business elements of the digital economy. According to the OECD, such a comprehensive significant presence test should include the following elements:

- "Relationships with customers or users extending over six months, combined with some physical presence in the country, directly or via a dependent agent.
- Sale of goods or services by means involving a close relationship with customers in the country, including (i) through a website in the local language, (ii) offering delivery from suppliers in the jurisdiction, (iii) using banking and other facilities from suppliers in the country, or (iv) offering goods or services sourced from suppliers in the country.
- Supplying goods or services to customers in the country resulting from or involving systematic data gathering or contributions of content from persons in the country."⁸⁴

Interestingly, the significant presence test closely resembles the description of permanent establishment for services in the U.N. Model Tax Convention⁸⁵ and is actually a compromise between the traditional physical nexus and the requirements of a digital permanent establishment as discussed above.⁸⁶

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See e.g. Walter Hellerstein, State Taxation of Electronic Commerce, 52 TAX LAW REVIEW 425, 497 (1997) (in the context of U.S. state taxes suggesting that the de minimis amount should be at USD 250,000); Reuven S. Avi-Yonah, International Taxation of Electronic Commerce, 52 TAX LAW REVIEW 507, 535 (1997) (suggesting a de minimis amount of USD 1,000,000).

Reuven S. Avi-Yonah, *International Taxation of Electronic Commerce*, 52 TAX LAW REVIEW 507, 535 (1997).

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 146.

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 146; see also OECD, Addressing the Tax Challenges of the Digital Economy (2015), at 107-13-

See U.N. Model Tax Convention, art. 5 (3)(b); See supra, at section 2.

Daniel W. Blum, Permanent Establishment and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative – The Nexus Criterion Redefined?, 69 BULLETIN FOR INTERNATIONAL TAXATION 314, 318-19 (2015).

d) Introduction of New Source Taxes

Finally, the OECD explores the introduction of new source taxes. The first option that the OECD considers is the introduction of a new withholding tax on payments by residents of a country for digital products and services purchased online from non-resident providers. The new withholding tax would be deducted and withheld by financial institutions whenever they process payments from customers foreign corporations. The OECD argues that a new withholding tax would enable source countries to enforce income taxation, especially in situations where foreign corporations have no physical nexus to the country-of-source and where it is therefore difficult to enforce tax laws. 88

In the deliverables to action 1 the OECD also explores the possibility of a "bit tax". ⁸⁹ Such a tax would be imposed on all corporations that exceed a minimum annual threshold. However, the OECD's elaborations on the 'bit tax' are rather generic: the OECD only mentions that the new tax would depend on the number of bytes used by a website and that the applicable tax rate should be determined based on the corporation's size or turnover. ⁹⁰

3.3.2. Critique

All these proposals for modification of the concept of permanent establishment have one common characteristic: they all introduce new elements creating a link to consumer markets. While the traditional concept of permanent establishment determines the country-of-source by asking for the corporation's physical nexus to foreign countries, the new proposals add a new perspective by looking at the demand side. The traditional view of permanent establishment concerns the input-side of a corporation, meaning its expenses. By introducing consumer-based parameters, the OECD and other commentators have introduced a new perspective looking at the output, or revenue-side, of the corporation. However, looking at revenue in profit and loss statements without considering the expenses as recorded in the profit and loss statements raises a three important questions.

Firstly, do these different perspectives lead to discriminations between different business models? Most of these proposals recommend introducing an additional digital nexus to the existing concept of permanent establishment. Thus, while corporations operating a traditional business model become tax liable according to their physical connections, corporations operating business models for digital commerce would be taxed according to the location of their consumers. Consider the following example: X-Corporation, a steel-producer, and Y-Corporation a software developer, are both resident in Country R. Both corporations supply their products and services to consumers in Country S. While the steel-producer ships his products to Country S, the software developer transmits its products to its customers digitally. Neither the steel-producer nor the software developer has a physical connection to Country S. With the introduction of a digital permanent establishment, the software developer would become liable to tax in Country S but the steel-producer would not. It is difficult to see how the software

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OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 146; OECD, Addressing the Tax Challenges of the Digital Economy (2015), at 113-15.

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 146.

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 146.

OECD, Addressing the Tax Challenges of the Digital Economy (2014), at 146-47.

producer has a more significant connection to Country S than the steel-producer. It is more difficult to find sound reasons why Country S should be able to tax the software developer but not the steel-producer. The question remains the same if Country S was entitled to impose a tax on payments from its consumers to the software developer but not on payments to the steel-producer. While the software developer becomes tax liable for its outputs, the steel-producer is tax liable for its inputs. Applying different parameters or systems to different business models inevitably leads to arbitrary results.

Secondly, whether digital permanent establishment can be efficiently administered and enforced is doubtful. A new concept for digital permanent establishment must define criteria to distinguish traditional business models from business models for digital commerce. However, even traditional business models encompass digital operations today. Where then to draw the line between corporations engaged in digital commerce and others? Consider the steel-producer, is such a producer engaged in digital commerce or traditional business if contracts with customers are signed online? Does the steel-producer operate a digital business if consumers can order products online? What happens if the steel-producer adds a new development department to the existing business model designing screws, which will eventually allow consumers in foreign countries to print screws on 3-D printers? Will the entirety of the steel producer's business now be considered engaged in digital commerce? Will the rules for digital permanent establishment apply to all of the business or only to the design of screws? If the digital permanent establishment applies only to the screw design business, how can costs be allocated that serve both lines of business? Digital permanent establishment raises a variety of questions, which pose complex practical challenges and which will likely create new discriminations.

Finally, counting clicks and downloads and measuring revenue generated through an application or web site will likely lead to discrimination between countries with large consumer markets and countries with smaller consumer markets. For example, whereas digital businesses would easily exceed a simple 'bit rate' threshold in large countries like China or India, in smaller countries, like Liechtenstein, it would be impossible to become tax liable at all based on such a threshold. Thus, a fair threshold must rely on market shares and not on the mere number of clicks on a website. However, determining the market share for each corporation and each country individually is extremely complicated and administratively burdensome and, therefore, neither a desirable nor a realistic option for practice.

3.3.3. Action 7: Proposals to Prevent the Artificial Avoidance of the Permanent Establishment Status

With action 7 the OECD points to structures of multinational corporations by which they avoid permanent establishment status through commissionaire arrangements. 91 Since commissionaires act in their own names but on behalf of a foreign corporation, they qualify as independent agents and do not create a

OECD, Preventing the Artificial Avoidance of Permanent Establishment Status (2015), at 9-10, 15-27.

permanent establishment of the commissioning corporation in that country. ⁹² This allows corporations to sell their products in foreign countries without creating a permanent establishment in that country.

To counter such avoidance schemes the OECD proposes changing the wording of the permanent establishment concept to encompass any activity that leads to conclusions of contracts. ⁹³ Alternatively, the OECD discusses increasing the requirements for an independent agent such that those agents who exclusively, or almost exclusively, act on behalf of one foreign corporation would no longer be treated as independent agents even if they act in their own name. ⁹⁴

As mentioned above, under the OECD Model Tax Convention a construction site is treated as a permanent establishment if it lasts for at least twelve months. ⁹⁵Corporations often avoid permanent establishment by splitting-up contracts into several parts, each covering a period of less than twelve months ⁹⁶ The OECD believes that such schemes could be eliminated if, for instance, activities of different periods are all added together to determine if a foreign corporation has a permanent establishment. ⁹⁷

The OECD's intention is to realign the concept of permanent establishment with the actual business activities of corporations. Corporations should no longer be able to avoid permanent establishment status in countries in which they have significant business activities.

3.4. Conclusions

Globalization and digitalization have dramatically shaped the world economy. Since Internet technologies have allowed production to be separated from the actual workforce, physical nexus can no longer be the only requirement to determine the country-of-source. Thus, it is necessary to adapt international tax law to the nature of the modern economy.

However, the new measures recommended by the OECD to prevent multinationals from cherry-picking residence and source countries raise serious questions. An additional concept for digital permanent establishment will not only create discrimination between different business models but also could discriminate between large countries with large consumer markets and small countries with small consumer markets. Moreover, a concept that draws a line between the traditional economy and the digital economy is unrealistic: all modern business models rely on digital technologies. A concept that distinguishes between traditional economy and digital economy will therefore fail or lead to arbitrary results.

For the definition of a permanent establishment, *see supra* at section 2.

OECD, Preventing the Artificial Avoidance of Permanent Establishment Status (2015), at 15-

OECD, Preventing the Artificial Avoidance of Permanent Establishment Status (2015), at 16-

For the definition of a permanent establishment, see supra at section 2.

OECD, Preventing the Artificial Avoidance of Permanent Establishment Status (2015), at 10, 28-41.

OECD, Preventing the Artificial Avoidance of Permanent Establishment Status (2015), at 28.

4. Corporate Income Taxation from an Economic Perspective

4.1. Taxation of Corporations is Politically Wanted and Must be Accepted

To achieve greater coherence in the international corporate tax system, international tax law must stop treating corporations as if they were individuals. It is generally accepted amongst economists that corporations pay no taxes since all taxes are ultimately borne by individuals. Since corporations have no principal place of abode, it is also generally accepted that it is impossible to assign a residence to a corporation. Corporations are not individuals. Corporations comprise complex relationships through which various actors conduct economic activities to generate income. Thus, if corporations are to be taxed on their income, then solely because of political or social reasons.

If the right to tax corporate income must be geographically allocated between different countries, it is better to no longer tax corporations on a fictional place of residence as if they are individuals. Rather they should be taxed according to the place where they effectively conduct relevant business activities.

To further understand this perspective, the next sections answer the questions "What is a corporation?" and "What is a corporate income tax?" This provides the theoretical foundations for the proposal of a more coherent international corporate tax system. Subsequently, the article investigates the issue of where corporations effectively conduct business activities. Finally, the article proposes a method for apportioning the right to tax corporate income between different countries-of-source and how the same method applies regardless of the extent to which a business model relies on digital technologies. We conclude that a formulary apportionment between different source countries leads to better outcomes than the OECD proposals in the Action Plan on BEPS.

The following sections take an interdisciplinary approach arguing both from a legal and an economic perspective: they economic inquiry into the essence of corporations draws the same conclusions as a legal perspective on the international corporate tax system.

4.2. What is a Corporation? What is a Corporate Income Tax?

From an economic perspective, a corporation consists of a variety of complex relationships, or contracts, between investors, workers, management and other stakeholders, such as suppliers and customers. It is not a separate and independent entity. Through the interactions between these different participants, inputs are transformed into outputs, which is ultimately reflected in the corporation's profit and loss statement. Corporations are nothing more than this collection of contracts between different parties. Though the inputs of the individuals and groups vary significantly, all of them contribute to the corporation's output: the investor's input is capital, either as shareholder equity or as debt from lenders; employees and the

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See W. Erwin Diewert, The Measurement of Business Capital, Income and Performance 2 (Working Paper 1996).

See Michael C. Jensen/William H. Meckling, *Theory of the Firm: Managerial Behavior,* Agency Costs and Ownership Structure, 3 (4) JOURNAL OF FINANCIAL ECONOMICS, 305-360 1976.

management contribute their labor; suppliers deliver intermediate goods and services. In return for their contributions, all these participants expect compensation: shareholders look for dividend payments and capital gains; lenders for interest payments; employees and the management demand a salary and perhaps a bonus; suppliers expect to get paid for their products or services.

The cost of a corporation's inputs and the amount of its output are measured and reported by the corporation's profit and loss statement. The expenses in a profit and loss statement are the costs of the different inputs a corporation receives: salaries for the employees, prices of intermediary products and services; and, even noncash expenses of the depreciation and amortization of previously capitalized assets. the costs of servicing debt. Figure 1 illustrates this transformation process within a corporation.



Figure 1: An abstract representation of a corporation: from inputs to outputs

At an aggregate level, the cost of all the inputs is equal to the value of all the outputs. However, the value of all the output goods or services is at the same time equal to the price consumers pay for those outputs. As a result, countries typically tax economic activity at least twice: on the input-side, labor income, interests on debt and dividend payments on equity are subject to income tax ¹⁰¹ whilst the sale of goods and services on the output-side is subject to VAT or other consumption taxes in virtually all countries. Corporate tax is, effectively, an additional tax on the input-side (on capital income) because in most cases corporate income is taxed again when the shareholders receive dividend payments or when they sell their shares.

4.3. The Pros and Cons of Corporate Income Taxation

Corporate taxation leads to numerous distortions. For example, corporate income tax affects the affects the ways that corporations structure their operations, equity, debt and dividend pay-out. Differences in effective corporate tax rates in different countries influence investment decisions such as the choice of industry,

The only costs that are not reflected in the profit and loss statement are the costs of equity.

Moreover, some countries, for example Switzerland, impose additional taxes on capital and

wealth, see Bundesgesetz pber die Harmonisierung der direkten Steuern der Kantone und Gemeinden [StHG], Loi fédérale sur l'harmonisation des impôts directs des cantons et des communes

⁽LHID), Legge federale sull'armonizzazione delle imposte dirette dei Cantoni e dei Comuni (LAID) [FEDERAL TAX HARMONIZATION ACT] December 14, 1990, SR 642.14 [referred to as 'Swiss Federal Tax Harmonization Act], arts 2 (1)(a),(b).

See Jane G. Gravelle, The Economic Effects of Taxing Capital Income (1994).

asset mix, location, risk-appetite and timing of investment. For instance, Salvador Barrios showed that varying tax rates in OECD countries provide different levels of incentive when considering where to locate manufacturing activity. 104

Because of these distortions, corporations are able to manipulate their tax liability. As a result, the burden of corporate tax is not solely borne by a corporation or its shareholders: ultimately, the cost of corporate taxes falls on employees, lenders, customers, too. 105 The theory of corporate income taxation and practical evidence differ. For instance, William M. Gentry and Williams College argue that the assumption that corporate income tax falls on the owners of the taxable capital must be reconsidered because the workforce bears a substantial portion of the corporate income tax burden. 106 Alan J. Auerbach argues that although shareholders bear at least part of the corporate tax burden, tax may have nonetheless different incidences. 107 According to Kimberly J. Clausing, the effect of corporation taxation rates on salaries is unclear. While she found some indications to suggest that higher corporate taxes cause reduced salaries, the amount of evidence does not support that conclusion. 108 Based on theoretical considerations, Laurence Kotlikoff and Jianjun Miao argue that the corporate tax burden primarily falls on highly-skilled entrepreneurs and on workers. 109 Hence, corporations do not ultimately bear corporate taxes themselves. However, the exact incidence is elusive.

From this perspective corporations are more like tax collectors than taxpayers. Corporate income tax in fact works more like a prepayment on the income that is later taxed again once it has been disbursed to the corporation's stakeholders. Because of this overlap with other taxes and the significant economic distortions it creates , many economists take a stance against corporate taxation. The Nobel Prize winner William S. Vickrey, for example, wrote an article entitled: "The Corporate Income Tax and How to Get Rid of It". 110 Richard M. Bird suggested that "[a]ll in

See Jack Mintz, The Corporation Tax: A Survey, 16 FISCAL STUDIES 23-68 (1995); Duanjie Chen/Kenneth J. McKenzie, The Impact of Taxation on Capital Markets: An International Comparison of Effective Tax Rates on Capital, in FINANCING GROWTH IN CANADA 135-62 (Paul J. Halpern & Canada Industry eds., 1997).

See Salvador Barrios et al., Effective Corporate Taxation, Tax Incidence and Tax Reforms:

Evidence from OECD Countries (European Commission, Taxation Papers, Working Paper Nr. 45, 2014) (The article shows that the OECD tax systems provide different incentives for manufacturing activity across countries and that tax systems are relatively neutral with respect to the sectoral composition of manufacturing activities).

JOSEPH E. STIGLITZ, ECONOMICS OF THE PUBLIC SECTOR (3rd ed 2000), 645 (observing that "[e]conomists agree on one thing (which is not well understood by others: The corporation does not bear the tax. People – shareholders, customer, workers – bear taxes."); *See also* Alan J. Auerbach, *Who Bears the Corporate Tax? A Review of What we Know* (National Bureau of Economic Research, Working Paper 11686, 2005); Richard M. Bird, *Why Tax Corporations?* 56 BULLETIN FOR INTERNATIONAL TAXATION 194, 195 (2002).

William M. Gentry/Williams College, A Review of the Evidence on the Incidence of the Corporate Income Tax (The Department of the Treasury, Assistant Secretary for Tax Policy, Office of Tax Analysis, OTA Paper 101, 2007).

Alan J. Auerbach, *Who Bears the Corporate Tax? A Review of What we Know* (National Bureau of Economic Research, Working Paper 11686, 2005).

Kimberly A. Clausing, In Search of Corporate Tax Incidence, 65 TAX LAW REVIEW 433, 468 (2012).

Laurence J. Kotlikoff/Jianjun Miao, What Does the Corporate Income Tax Tax? A Simple Model Without Capital (National Bureau of Economic Research, Working Paper 16199, 2010).
William S. Vickrey, The Corporate Income Tax and How to Get Rid of It, in RETROSPECTIVES ON PUBLIC FINANCE (L. Eden, ed., 1991); Richard M. Bird, Why Tax Corporations? 56

all, the analysis in the public finance literature of the potential "dark side" of corporate taxation is both extensive and sufficiently persuasive to convince most economists that there is very little, if anything, to be said for corporate taxes and that, on the contrary, there may be substantial economic gains from reducing and even eliminating such taxes."¹¹¹

So why do countries continue to impose income taxes on corporations? The reasons are manifold: Firstly, to abolish corporate income taxation is politically unrealistic as taxing corporations is popular with the electorate as a result of the continuing notion that corporations are independent and separate legal entities, much like individuals:. voters like the (false) impression that by imposing taxes on corporations the tax burden can ultimately be shifted away from the individual taxpayer. Secondly, the main justification for the introduction of the corporate tax was to prevent indefinite deferral of the incidence of tax liability by delaying the distribution of dividends. 112 Thirdly, Bird believes that there is a "strong" administrative rational" for taxing corporations as a withholding tax on dividend payments, interest payments and salaries 113 since in modern economies money sooner or later passes through the hands of corporations, "which generally keep better records and are easier to locate and track than individuals."114 Fourthly, it has been argued that corporate income tax is an instrument of states to govern the activities of corporations. 115 The last, and in our view the most important, reason for taxing corporate income is that only corporate income tax allows taxation of business activities where they actually occur. Without taxation of corporate income revenue would only be taxed in the country in which the investors, the employees and other stakeholders reside. Therefore, if the "fundamental compromise" that the country-ofsource has the right to tax active income while the country-of-residence can tax passive investment income is still the globally-accepted norm, 116 corporate income taxation is required for a fair international allocation of state revenue from taxes.

The following conclusions follow from these justifications. If corporate taxation is a source tax and serves as a prepayment of income tax on dividends then corporate income tax can only serve these purposes if it is imposed at the location where economic activity actually takes place. Therefore, the right to tax corporate income should be allocated among the different countries-of-source in which a given corporation generates income. As a result, the location of registration or the location of incorporation becomes irrelevant and should therefore no longer have a meaning

BULLETIN FOR INTERNATIONAL TAXATION 194, 194 (2002).

Richard M. Bird, *Why Tax Corporations?* 56 BULLETIN FOR INTERNATIONAL TAXATION 194, 194 (2002).

J. Clifton Fleming/Jr. Robert J. Peroni/Stephen E. Shay, Fairness in International Taxation: the Ability-to-Pay Case for Taxing Worldwide Income, 5 FLORIDA TAX LAW REVIEW 299, 318-21 (2001); Richard M. Bird, Why Tax Corporations? 56 BULLETIN FOR INTERNATIONAL TAXATION 194, 199 (2002);

In fact, indefinite deferral has the same effect as an exemption.

Richard M. Bird, *Why Tax Corporations?* 56 BULLETIN FOR INTERNATIONAL TAXATION 194, 199-200 (2002).

Richard M. Bird, *Why Tax Corporations?* 56 BULLETIN FOR INTERNATIONAL TAXATION 194, 199 (2002).

RICHARD A. MUSGRAVE/PEGGY B. MUSGRAVE, PUBLIC FINANCE IN THEORY AND PRACTICE 374-75 (5th ed. 1989); Robert A. Green, the Future of Source-Based Taxation of the Income of Multinational Enterprises, 79 CORNELL LAW REVIEW 18, 31 (1993).

For the further elaborations on the "fundamental compromise", see supra, at section 2.

in international tax law. Moreover, the permanent establishment concept, as it is set forth in double taxation treaties, should become redundant as if, in fact, corporations exclusively pay taxes to the countries-of-source in which they have significant business activities then there is no need to distinguish between the corporation's place of residence and its location of permanent establishment.

However, this train of thought leads to the crucial question: how can the location of business activity, and therefore the country-of-source, be determined?

4.4. The Location of Economic Activity

As mentioned above, business activity of a corporation is best described as a transformation of inputs into outputs. That transformation manifests in the profit and loss statement. In principle, there are, therefore, two methods to determine the location of business activity: either on the corporation's input-side or on the corporation's output-side.

We believe that the corporation's inputs are better suited to determining the location of the country-of-source. Information about the costs of inputs from lenders, employees and other stakeholders are readily available can be derived relatively easily from a corporation's profit and loss statement. By contrast, locating output is more difficult and would require tax authorities to look at the location of the consumers. As explained above, 117 looking at the corporation's output is much more administratively burdensome than referring to the corporation's inputs or costs. Moreover, to avoid discriminations between large countries with large consumer markets and small countries with small consumer markets, an even greater burden of data collection about relevant markets and market shares would be required, similar to investigations under antitrust law.

Whilst it is the case that the country in which the output is located already has the right to levy taxes through VAT or other consumption taxes, the countries where the inputs occur have no other opportunity to benefit from the corporation's economic activity than by imposing a tax on the corporation's income. It is therefore a matter of international fairness that the countries that provide capital, employees and infrastructure, which are essential for the corporation's business activities, should have the right to impose a corporate income tax. We consider, therefore, that the country-of-source should refer to those countries from where corporations receive their different inputs.

To be more precise, we suggest to first look at each individual input and to then decide where this input is typically used and transformed into output. For example, X-Corporation engages a gardening company in Country B to cut the trees and bushes on X-Corporation's campus in Country A. This constitutes an input and X-Corporation will account for the associated costs in its profit and loss statement. Since the gardening work is performed in Country A, the geographic location of the costs is also Country A. However, not all expenses are so simple to locate. For instance, consider that X-Corporation has engaged the same gardening company but this time, as well as cutting trees and bushes the Country A campus, it will also plant new trees cultivated in Country C and shipped from Country C to the X-

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See supra, at section 3.3.2.

Corporation's campus park in Country A. All supplies will be invoiced to X-Corporation. Is the location of the expense Country A, where the workers physically cut the trees and bushes? Or is it Country C where the trees have been grown and shipped? What about the gardening company's headquarters and place of accounting and invoicing in Country B? Must they be taken into account too?

These examples illustrate the difficulties that arise from assigning expenses and business activities to geographic locations. To solve this problem, it is therefore necessary to use some simplifying definitions. ¹¹⁸ One possible example can be found in the rules and principles of VAT law. As in the case of the allocation of the right to tax corporate income, VAT law also needs to make simplifying assumptions to determine the geographic location of the supply of goods and services. The EU's VAT directive ¹¹⁹ has solved this problem as follows:

- Where **goods** are not dispatched or transported, the place of supply shall be deemed to be the place where the goods are located at the time when the supply takes place. ¹²⁰
- Where **goods** are dispatched or transported by the supplier, or by the customer, or by a third person, the place of supply shall be deemed to be the place where the goods are located at the time. ¹²¹
- The place of supply of **services** shall be deemed to be the place where the supplier has established his business or has a fixed establishment from which the service is supplied, or, in the absence of such a place of business or fixed establishment, the place where he has his permanent address or usually resides. 122
- The place of supply of **transport** other than the intra-Community transport of goods shall be the place where the transport takes place, proportionately in terms of distances covered. 123
- The place of supply of the following **services** shall be the place where the customer has established his business or has a fixed establishment for which the service is supplied, or, in the absence of such a place, the place where he has his permanent address or usually resides:
 - (a) transfers and assignments of copyrights, patents, licences, trade marks and similar rights;
 - (b) advertising services;
 - (c) the services of consultants, engineers, consultancy bureaux, lawyers, accountants and other similar services, as well as data processing and the provision of information;

In fact, all legal concepts, which allocate the right to tax to one or the other country, make some simplifying definitions. For instance, the permanent establishment concept assumes that business activities occur only in countries to which corporations have a physical connection, *see supra*, at section 2.

Council Directive 2006/112/EC of 28 November 2006, On the Common System of Value Added Tax [hereinafter "EU VAT Directive"].

EU VAT Directive, art. 31 (emphasis added).

EU VAT Directive, art. 32 (1) (emphasis added).

EU VAT Directive, art. 43 (emphasis added).

EU VAT Directive, art. 46 (emphasis added).

- (d) obligations to refrain from pursuing or exercising, in whole or in part, a business activity or a right referred to in this paragraph;
- (e) banking, financial and insurance transactions, including reinsurance, with the exception of the hire of safes;
- (f) the supply of staff;
- (g) he hiring out of movable tangible property, with the exception of all means of transport;
- (h) the provision of access to, and of transport or transmission through, natural gas and electricity distribution systems and the provision of other services directly linked thereto;
- (i) telecommunications services;
- (j) radio and television broadcasting services;
- (k) electronically supplied services;
- (1) the supply of services by intermediaries, acting in the name and on behalf of other persons, where those intermediaries take part in the supply of the services referred to in this paragraph.radio (m) 124

Thus, following the example of the EU VAT Directive, if the gardening company delivers trees from Country C to the X-Corporation's campus park in Country A, the expenses for the supply of trees is assigned to Country C. We believe that this is appropriate since the actual business activity, cultivating the trees, occurred in Country C. However, what happens if the gardening company sends an invoice to the X-Corporation with one price covering both the cutting of the trees and bushes and the supply of the trees from Country C? Here, the article takes a pragmatic approach and suggests that the expenses should be allocated to the country in which the predominant part of the business activities take place: thus, if the costs for cutting trees and bushes exceeds the costs for delivering trees, then the expense should be allocated to Country A. If the delivery of tress is the greater cost then the expense should be allocated to Country C. The part of the invoice that falls on the gardening company expenses for accounting and invoicing are relatively minor and should not be taken into account.

In addition to the rules for the supply of goods, the EU VAT Directive also defines where the supply of services takes place. Consider an example in which a bank has outsourced its IT department to a service provider with operations in a foreign country. Since the services are effectively performed abroad, the expenses are allocated to this foreign country. In fact, this solution corresponds with the general principle in the EU VAT Directive, which in general allocates the supply of services to the location of the service provider. 125 In fact, this approach offers an efficient method to determine the location of services, which rely on traditional business models and tangible goods, such as the sale of a CD or a memory stick. However, it is more difficult to locate services when the the customer receives the services in an electronic format. Again, following the example of VAT rules and regulations, these services could be assigned to the country of the consumer. ¹²⁶ Since these services do not involve any physical activities and can therefore occur anywhere, the consumers provide the best indication for locating the expenses.

See EU VAT Directive, art. 56 (1) (emphasis added).

¹²⁴ EU VAT Directive, art. 56 (1) (citation omitted) (emphasis added).

¹²⁵ See EU VAT Directive, art. 43 (emphasis added).

Hence, VAT law provides a good example for rules by which supplies and services are geographically allocated. However, there are number of expenses which are not subject to the VAT and for which VAT law therefore gives no answer, such as: depreciations; interest payments; royalty payments; and, exchange rate losses. We think that deprecations of movable assets should be assigned to the country in which the asset are primarily used. For example, depreciations of a production machine used in Switzerland must be allocated to Switzerland. Deprecation of immovable assets should also be ascribed to the location of these assets. Thus, depreciation of real estate in the United States is allocated to the United States. Moreover, the costs of debt belong to the location of the creditors and royalty payments can be ascribed to the location of the owner of the license. Finally, we suggest to assign exchange rate losses to the location of the corporation's headquarters since most corporations record their financial statement in the currency of the country in which their headquarters are located and this is where the risk of currency losses materializes.

In summary, we suggest that corporations should exclusively pay income taxes to the country-of-source, which we define as the country from where corporations receive input. The right to tax corporate income should be allocated accordingly among the different source countries by way of a formulary apportionment. The following section outlines the proposed formulary apportionment in more details.

5. Proposal for a Formulary Apportionment

We propose a formulary apportionment of net income before tax proportional to all expenses. Table 1 shows a stylized example.

Assume that X-Corporation uses inputs from Country A and Country B. X-Corporation's net income before tax amounts to 50. Total expenses amount to 30 in Country A and 20 in Country B. At an average tax rate of 30% in Country A and 40% in Country B, the corporate income tax liability amounts to 9 in Country A and 8 in Country B. Hence, taxation of net income before tax (shaded row) is carried out based on the relative expense shares (second shaded row).

	Total	Country A	Country B
Revenue	Y = 100		
Labor expenses	$w(L_A + L_B) = 20$	$wL_A = 10$	$wL_B = 10$
Interest	$i(D_A + D_B) = 30$	$iD_A=20$	$iD_A = 10$
Net income before tax	50		
Tax	17	9	8
Net income accruing to shareholders	33		
Total expenses		30	20
Income tax rate		30%	40%

Table 1: Stylized example of a formulary apportionment

The approach shown in Table 1 can also be illustrated by a stylized formal model. There are two countries $j \in \{A, B\}$. We assume that X-Corporation is incorporated in Country A and that there is one individual in each of countries A and B. There are three input factors: equity E; debt D; and labor L. With the output good being the numéraire, the output goods' prices are written as r (cost of equity), i (cost of debt, interest rate) and w (cost of labor, wage rate). Without tax the income distribution is

$$Y = r(E_A + E_B) + i(D_A + D_B) + w(L_A + L_B).$$

Corporate income before tax is

$$r(E_A + E_B) = Y - i(D_A + D_B) - w(L_A + L_B)$$

We denote the corporate tax rate by τ^{C} and the personal income tax rate by τ^{P} . Corporate income after tax is

$$(1 - \tau_A^C)r(E_A + E_B) = (1 - \tau_A^C)[Y - i(D_A + D_B) - w(L_A + L_B)].$$

The net income of the household in country j is equal to

$$(1-\tau_i^P)[(1-\tau_A^C)rE_i+iD_i+wL_i].$$

In the following, we study three cases: a situation without corporate income tax; a situation with corporate income tax, which is apportioned according to the country of residence (a simplified representation of the current situation); and, a situation with a new corporate income tax according to our proposal.

No corporate income tax $(\tau_A^C = 0)$

Without corporate income tax, tax revenue T in Country A an B is equal to

$$T_{A} = \underbrace{\tau_{A}^{P}[rE_{A} + iD_{A} + wL_{A}]}_{Personal income tax}$$

$$T_{B} = \underbrace{\tau_{B}^{P}[rE_{B} + iD_{B} + wL_{B}]}_{Personal income tax},$$

respectively. Hence, for a situation without corporate income tax we can make the observation that there is no taxation by the country-of-source since personal income is only taxed in the country-of-residence. 127

Current corporate income tax (by country of residence)

In the current corporate income tax regime, income is taxed primarily in country-of-residence (Country A). Tax revenue in Country A is then

$$T_{A} = \underbrace{\tau_{A}^{C}[r(E_{A} + E_{B})]}_{Corporate \ tax} + \underbrace{\tau_{A}^{P}[(1 - \tau_{A}^{C})rE_{A} + iD_{A} + wL_{A}]}_{Personal \ income \ tax},$$

While tax revenue in Country B is

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See supra, at section 2.

$$T_{B} = \underbrace{\tau_{B}^{P}[(1 - \tau_{A}^{C})rE_{B} + iD_{B} + wL_{B}]}_{\text{Personal income tax}}.$$

This example shows that there is double taxation of capital income on equity wherein the corporate income tax acts as taxation at source As a result, effective tax rates and the t incidence of the corporate tax are unclear. Additionally, corporate taxation in Country A is not necessarily linked to business activity. Corporate residence is only meaningful to a very limited degree since it can be freely chosen by each corporation without actual economic activity in the country-of-residence.

Proposed corporate income tax

In the proposed approach to corporate income tax, corporate income would be taxed in the countries in which a corporation conducts business activity, as determined by the location of a corporation's costs. ¹²⁹ In this regime, total tax revenue in Country A is

$$T_{A} = \underbrace{\tau_{A}^{C} \left[r(E_{A} + E_{B}) \frac{iD_{A} + wL_{A}}{i(D_{A} + D_{B}) + w(L_{A} + L_{B})} \right]}_{Corporate\ tax} + \underbrace{\tau_{A}^{P} \left[\left(1 - \tau_{A}^{C} \right) rE_{A} + iD_{A} + wL_{A} \right]}_{Personal\ income\ tax},$$

While tax revenue in Country B is

$$T_{A} = \underbrace{\tau_{B}^{C} \left[r(E_{A} + E_{B}) \frac{iD_{B} + wL_{B}}{i(D_{A} + D_{B}) + w(L_{A} + L_{B})} \right]}_{Corporate \ tax} + \underbrace{\tau_{A}^{P} \left[\left(1 - \tau_{A}^{C} \right) rE_{A} + iD_{A} + wL_{A} \right]}_{Personal \ income \ tax}.$$

Hence, corporate income is taxed by the source country, as determined by the location of the company's business activity.

Table 3 shows a formulary apportionment using the example of Google's profit and loss statement. It demonstrates that the cost-orientation of our concept allows it to be directly linked to a corporation's income statement. In addition to the financial data, which is already available, each cost element must be split between the different countries-of-source.

million USD, 2014	Total Co		ntry A
Revenues	66,001		
Costs and expenses		in %	absolute
Cost of revenues	25,691	10%	2,569
Research and development	9,832	12%	1,180
Sales and marketing	8,131	5%	407

Tax incidence is not visible here as factor inputs are taken as constant. Under profit maximization, they depend on the relevant input prices (taking account of taxes).

The profit accruing to shareholders might also be considered to be part of the corporation's cost. We refrain from taking it into account in the tax allocation since it is already taxed as a capital income at the shareholder's country-of-residence.

General and administrative	5,851	7%	410
Total costs and expenses	49,505		4,565
Income from operations	16,496	8%	1,320
Interest and other income, net	763	6%	46
Income from continuing operations before income taxes	17,259		
Total acet	((7(4		5.021
Total cost	66,764		5,931
Total cost share		9%	
Corporate income tax rate		30%	
Corporate income tax			460

Table 2: Google's consolidated statements of income 2014

The second column of Table 2 displays the total value of Google's cost elements according to its consolidated income statement of 2014. The third column shows the cost percentage originating in a hypothetical Country A; the third represents the absolute cost incurred in Country A. In the example above we assume that Country A contributed 10% of Google's cost of revenues. Country A's share in total cost (USD 5,931m of USD 66,764 or 9%) is equal to the share of Google's income (USD 17,259) to be taxed in Country A at the country's corporate income tax rate of 30%. Hence, Google's tax burden in Country A is USD 17,259*9%*30% which is equal to USD 460m.

This example using Google shows that the even using consolidated numbers brings an advantage: that internal transfer pricing does not affect the allocation of the tax burden. Since consolidated accounts eliminate intragroup transactions, transfer pricing becomes mostly irrelevant. As a result, corporations can only shift their tax burden between countries by moving their actual assets or production processes and thereby their costs. Shifting profits by adjusting internal transfer payments is no longer possible.

Moreover, to avoid unnecessary and costly fragmentation of the jurisdiction to tax, we propose to introduce a minimum threshold for taxation in the country-of-source. Thus, a country-of-source would only be entitled to tax corporate income if the amount of expenses assigned to that country exceeds a certain threshold, for instance 10% of the corporation's total expenses. Such a threshold is already used with the concept of permanent establishment, where business activities of "non-productive" character are ignored. It will ensure that corporations are not discouraged from investing in the country-of-source and will also avoid fragmentation of the jurisdiction to tax. 131

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Such a threshold needs to be defined consistently among jurisdictions.

EKKEHART REIMER, STEFAN SCHMID, MARIANNE ORELL, PERMANENT ESTABLISHMENTS, A DOMESTIC TAXATION, BILATERAL TAX TREATY AND OECD PERSPECTIVE, §1.01 n. 40-41 (4th eds., 2015).

Another practical issue when implementing our proposed formulary apportionment is the impact on accounting standards and the heterogeneous treatment of cost in a corporation's income statement. The outlined approach does not require that all countries apply the same accounting standards. However, countries must recognize each other's standards of cost allocation and the resulting allocation of taxable profit among countries. Then, it would be sufficient for consistent taxation that the country-of-residence enforce its accounting standard, as it is currently the case.

Alternative Implementations

The approach to a formulary appointment outlined above is directly derived from a corporation's accounting statements. As such, the allocation of cost to country A and B only takes into account the cost represented in the corporation's income statement. This neglects the full cost of capital, which consists of both the cost of debt and the cost of equity (only the former is explicitly included in a corporation's income statement). From an economic point of view, the cost of equity should be included for the sake of overall consistency. This could be implemented in one of two ways, either by:

- 1. using net income accruing to shareholders (after tax); or
- 2. using net income (before tax)

In the first scenario, there are two options: either the notional cost of equity or the entire profit (i.e. the actual return on equity) can be treated as a cost element. However, both options introduce significant complications for the practical implementation the formulary apportionment. On one hand, the corporation's profit (i.e. the net income accruing to shareholders) to be taxed in each country depends on the total tax burden (calculated as the profit before tax minus taxes). On the other hand, the total tax burden depends on the corporation's profit and its allocation among countries. This interdependency can be easily solved numerically (Table 3 makes the assumption that shares are equally distributed between countries A and B). However, the process of tax allocation would become more opaque and complicated. In the example in Table 4, the total expenses used as the basis for the allocation of profits to be taxed in each country amount to 100.

	Total	Country A	Country B
Revenue	100.00		_
Labor expenses	20.00	10.00	10.00
Interest	30.00	20.00	10.00
Net income before taxes	50.00	25.00	25.00
Taxes	17.25	6.00	8.00
Net income accruing to shareholders	32.75	16.38	16.38
Total expenses	100.00	55.00	45.00
Income tax rate		30%	40%

Table 3: Alternative formulary apportionment treating profit before taxes as cost

A solution to this issue might be to consider a notional cost of equity instead of total profit. This number can be calculated without reference to the tax burden. However, this number might be larger than the actual return on equity. If it were taxed fully, the calculation base for this profit tax would be larger than the actual profit, which seems unfair and cumbersome. Hence, this approach does not always solve the issue should not be stipulated as a general rule.

The second option uses net income (before tax) as a cost element. This is much simpler because it, as with all other cost elements, is independent of taxes. Then, as shown inTable 4, total expenses used as the basis for the allocation of profits to be taxed in each country amount to 82.80 (the example also makes the assumption that shares are equally distributed between countries A and B). This approach gives more weight to the country in which shareholders are located (which is typically the country in which a corporation resides).

	Total	Country A	Country B
Revenue	100.00		_
Labor expenses	20.00	10.00	10.00
Interest	30.00	20.00	10.00
Net income before taxes	50.00		
Taxes	17.20	8.41	8.79
Net income accruing to shareholders	32.80	16.40	16.40
Total expenses	82.80	46.40	36.40
Income tax rate		30%	40%

Table 4: Alternative formulary apportionment treating profit after taxes as cost

Implications of the Formulary Apportionment

This section addresses three implications of the formulary appointment method in Section 4. What does a formulary apportionment between the different countries-of-source imply for the tax planning of multinational corporations? What are the implications for the taxation of digital business activities? What are the implications of a formulary apportionment if allocation among the different source countries is according to expenses in the corporation's profit and loss statement? Additionally, how do these implications compare to the OECD's proposals for digital permanent establishment as a way to prevent treaty abuse?

A formulary apportionment among source countries provides an incentive to multinational corporations to allocate costs to countries with low taxes. As a result, countries with low tax policies would no longer attract the residence of corporations alone but actual business activities as well. Tax structures using shell corporations in low tax counties, and tax inversion schemes by which corporations move the legal residence to countries offering preferential tax regimes, would therefore become less attractive for multinational corporations. Thus a formulary apportionment among

source countries would align corporate income taxation with the location of actual business activities.

In the Section 1 we explained why the idea of a digital permanent establishment creates discriminations between different types of business model on the one hand and between countries with large consumer markets and countries with small consumer markets on the other hand. A formulary apportionment between source countries does not distinguish between business models or consumer markets. Instead, it applies equally to all corporations no matter if they physically interact with costumers or if they only use on digital technologies.

Moreover, all corporations record their expenses in their profit and loss statements. The data for a formulary apportionment among source countries is readily available. By contrast, the concept of a digital permanent establishment not only requires a complicated definition of the term 'digital economy' but the digital nexus to a country is also difficult to determine. Thus, we believe that a formulary apportionment among source countries creates fewer distortions and is also less administratively burdensome than an additional permanent establishment for digital business models.

Finally, the formulary apportionment is comparable to some of the OECD's proposals in that it looks at the corporation's profit and loss statement to determine the location of actual business activities and to prevent corporations from treaty-shopping. This is consistent with the second of the OECD's proposed structural tests, which requires that less than 50% of the corporation's gross income is paid, directly or indirectly, to third country residents by means of deductible payments. This test shares with the formulary apportionment method the intention of ensuring that no corporation can claim treaty benefits from a country in which it has no substantial business activities. However, the formulary apportionment achieves this aim in a more efficient manner than determining a digital permanent establishment. A formulary apportionment among countries-of-source is, therefore, a consistent extension of existing tax policy that aligns the right to tax with the location of actual business activity.

6. Conclusion

More coherence in the international corporate tax system begins with the acknowledgement that corporations are not like individuals: a corporation neither has a residence nor does it pay taxes since all corporate taxes are ultimately borne by individuals. Why is corporate taxation still desirable? We argued that in the context of cross-border income, the best justification for corporate income taxation is that corporate taxation effectively allocates the right to tax to source countries. Without corporate income taxation it would be impossible for the source countries to tax the business activities of foreign taxpayers. A coherent international corporate tax system therefore requires treating corporations as what they are. That is, as the most

OECD, Preventing the Granting of Treaty Benefits in Inappropriate Circumstances (2014), at 25-26.

See supra, at section 3.3.2.

See supra, at section 3.3.2.

important instrument for countries-of-source to tax the business activities of foreign corporations in their territory. As a result, we argued that not only should corporate residences become irrelevant but that the entire concept of permanent establishment be consigned to history.

Instead, the right to tax business income should be allocated among the different countries-of-source. To determine those countries, we examined corporations from an economic perspective and observed that a corporation consists of nothing more than a variety of complex relationships between investors, employees and other stakeholders, such as suppliers and customers. By interacting with each other these different stakeholders transform inputs, such as labor, debt and capital, into outputs in the form of products or services. This transformation process is best observed in a corporation's profit and loss statement where expenses are the result of the various inputs and income is the result of the corporation's output. We argued that the source of income is more closely connected to the input-side than the output-side of the profit and loss statement. Accordingly, we concluded that the countries-of-source correspond more closely with the location of a corporation's business expenses than with its income. This implies that to determine the countries-of-source it is necessary to locate the corporations' business expenses.

At the same time, however, it remains difficult to determine the geographical location of corporate expenses. It is therefore advisable to use simplifying definitions such as those used by VAT law to locate the place of the supply of goods and services. We therefore believe that these methods could be used to determine the locations of expenses by analogy.

Finally, we offered a method for a formulary apportionment among source countries by which the right to tax corporate income is allocated according the corporations' expenses and their location. Based on concrete case studies we explored how such a formulary apportionment among countries-of-source could be designed. We showed that source country taxation and a formulary apportionment are better suited to address the challenges of globalization and digitalization than any of the proposals that the OECD currently discusses in its BEPS project. In contrast to the suggestions to introduce an additional concept for digital permanent establishments, a formulary apportionment between source countries does not only avoid distortions but is also administratively more efficient.

However, we emphasize that any geographic determination of business activities will remain difficult. The same is true for the allocation of the right to tax corporate income. The problem is undoubtedly greater when the allocation of the right to tax involves income resulting from products or services delivered through the Internet. Nonetheless, a formulary apportionment among countries-of-source is more coherent with the essence of corporate income taxation as source taxation than the current system in which corporations are taxed at their legal residence and where source countries can tax business activities of foreign taxpayers if those taxpayers have a physical presence within their borders. A formulary apportionment among source countries ensures that taxation aligns with the actual business activities of corporations and that is what is necessary for a coherent taxation of multinational corporations.