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Will tax reforms alone solve the tax avoidance and tax haven problems?

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Abstract
The next decade will test whether new tax reforms can reverse the trend of tax avoidance and tax havens. Tax policies such as OECD's BEPS and EU's CCCTB are being agreed upon and implemented. Our research question is: how effective will these reforms be in significantly reducing the degree of tax avoidance and the problem of tax havens? The effectiveness of tax laws are assessed by focusing on an MNE's response to these laws when choosing its tax practice – what makes the opportunities for tax avoidance possible and acceptable to MNEs. We take an institutional logics perspective to theorize how the interaction of countries' tax laws, other MNEs' tax practices, and the strength of the MNE's social welfare logic influence an MNE's cognitive decision processes in choosing a tax practice. We introduce the *zone of acceptable tax avoidance opportunities* construct whose dimensions imply two complementary approaches to tax reform. Following from theory, we discuss other activities to decrease aggressive tax avoidance whereby countries engage MNE exemplars to help marginalize tax havens.
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INTRODUCTION

The issue of tax avoidance is not new, and the extent of the problem is well accepted (OECD, 2015; Crivelli, Mooij, & Keen, 2015). What is new is the attention the issue has received in recent years from policy makers. New tax reforms as OECD's Base Erosion and Profit Sharing (BEPS) and EU's Common Consolidated Corporate Tax Base (CCCTB) have been defined, and are in the process of being implemented or being agreed upon, respectively. The important policy question and our research question is: How effective will tax reforms be in reducing tax avoidance and tax havens? Professional opinions are mixed (Bell, Bennett, & Parker, 2017; Devereux & Vella, 2014; Graetz, 2016; Khadem, 2015; Turner, 2017a).

It will be several years before we have the data to empirically start to answer this question. However, to address this question now, we employ a two-step theoretical method. In the first step, we take an institutional logics approach (Thornton & Ocasio, 2008; Thornton, Ocasio, & Lounsbury, 2012) to develop theory which posits the

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influences on an MNE's cognitive decision processes in choosing a tax practice. The theory addresses questions such as: when regulated by the same country tax laws and facing the same economic considerations, why do some MNEs choose a more normative tax practice and other MNEs choose manipulation of the tax laws? The theory integrates the antecedents of external institutional forces with MNE internal logics.

In the second step, we examine how new tax reforms affect the theory's antecedents and the corresponding MNE response predicted by the theory. We utilize the theory developed to suggest a complementary approach to solve the tax avoidance problems. Our view is that, by better understanding of why an MNE chooses a tax practice, we gain insights into how to impede MNEs from choosing aggressive tax avoidance practices.

LITERATURE REVIEW AND THEORY SCOPE

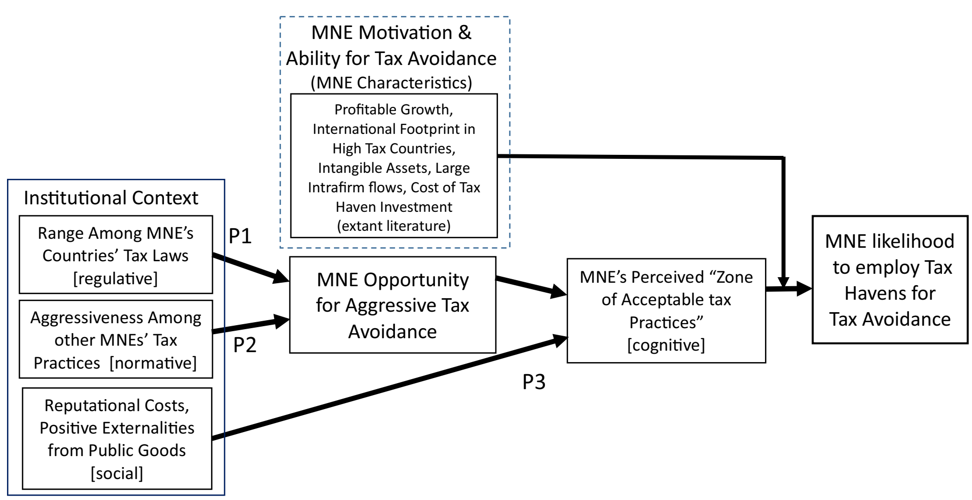
Most of the extant research can be classified into two main categories. One category focuses on the MNE as the central actor, while the other focuses on nation states; our focus is the former. The MNE-focused extant literature, on the motivation and ability of MNEs to practice tax avoidance, is shown within the dashed box at the top left of Figure 1. The dependent variables in this literature are the degree of MNE tax avoidance, whether an MNE uses tax havens, or the percent of subsidiaries in tax havens. This research shows support for MNE organizational and economic characteristics as antecedents, including profitable growth, R&D intensity, and the number of employees and operations in high-tax countries (Desai, Foley, & Hines, 2006; Gupta & Newberry, 1997; Gumpert, Hines, & Schmitzer, 2016). Furthermore, an MNE's ability to practice tax avoidance is positively associated with an extensive international footprint, intangible assets, and intrafirm flows, and negatively associated with the cost of tax haven investment (Brajcich, Friesner, & Schibik, 2016; Hine & Rice, 1994; Rego, 2003). The hypotheses in this empirical work are straightforward and intuitive.

A separate literature stream on tax havens complements this literature. There is no generally agreed definition of the term "tax haven" as not all tax havens are the same. Hines and Rice (1994) identified tax havens based on their average effective tax rates and classified them as the "Big 7" and "dots", mostly island nations. The EU issued a "blacklist" of 17 tax havens (Robertson, 2017) which was widely criticized (Oxfam, 2018) because it did not include any of the EU's own members, notably Luxembourg, the Netherlands, Ireland, and Switzerland. Eden and Kudrle (2005) label these latter countries as "inside renegades," and they call USA and UK tax haven territories "quasi-outsiders" to contrast them with the "outside renegades," or the dots. Both inside renegades and quasi-insiders play an important role in the tax avoidance game, acting as conduits for corporate profits on their way to being transferred to the "dots." The Netherlands, UK, and Switzerland are responsible for channeling 23, 14, and 6 percent, respectively, of offshore investment flows into "dot" tax havens (Garcia-Bernardo, Fichtner, Takes, & Heemskerk, 2017).

Theory's scope

In reviewing the tax literature, Hanlon and Heitzman (2010, p. 145) conclude that "Overall, the field

Figure 1 Theory of MNE tax avoidance.



cannot explain the variation in tax avoidance very well, although strides have been made." The theory developed here examines the influences on the cognitive decision processes during which MNEs choose a tax practice. We view tax avoidance practices as being mapped along a continuum. At one end of the continuum are normal operational activities that are tax-favored, such as tax savings from R&D tax credits or debt versus equity financing. At the other end of the continuum are activities that go beyond normal operations. In these aggressive tax practices, an MNE purposely structures transactions among its geographically distributed entities to take advantage of the ways that transactions are treated for tax purposes by different countries in order to pay the least amount of tax. Aggressive tax practices do not include tax evasion.

Our paper's theory differs from, but complements, the previous literature with an MNE perspective. The first way our theory is different is that it is centered on the *opportunity* for tax avoidance (middle of Figure 1), whereas previous literature emphasizes the *motivation* and *ability* to practice tax avoidance. According to the Motivation, Opportunity, and Ability argument (Blumberg & Pringle, 1982; Brueller, Carmeli, & Markman, 2018; Clark, Abela, & Ambler, 2005; Siemsen, Roth, & Balasubramian, 2008, Chang, Gong, & Peng, 2012), an actor, in our context the MNE, will take action only if it concurrently has the motivation, opportunity, and ability to take this action. Having one or two of these conditions is not sufficient; all three must be present. Our focus on *opportunity* is necessary for our research question because our analysis is ex ante. The extant empirical literature described in the previous subsection examines tax avoidance decades after the tax laws were enacted. Therefore, in this ex post literature, the *opportunity* for tax avoidance is not distinguished from *actual* tax avoidance, as it is assumed that potential opportunities will have been exploited by the time of the analysis. As a result, there is little or no literature which discusses the opportunity to practice tax avoidance. In assessing tax reforms, it is the degree to which these new tax laws reduce the opportunity for MNEs to practice tax avoidance that determines their effectiveness, and therefore it is the antecedents and the consequences of opportunity which are the focus of our propositions.

THEORY DEVELOPMENT

We present two fundamental propositions of the antecedents to the *opportunities* for tax avoidance (middle of Figure 1). One antecedent is the range among countries' tax laws, the regulative leg of institutional theory. Range is indicative of the maximum legal potential for tax avoidance afforded by the countries which comprise an MNE's geographic footprint. Range captures the types of differences among countries' tax laws and the degree of those differences, but only when they enable tax arbitrage and profit shifting. Range does not imply that an MNE will necessarily utilize all, or any, of these opportunities for tax avoidance afforded by these countries. Range assumes that a country enforces its tax laws. An MNE's home country tax laws have a disproportionate influence on the potential for tax avoidance and must be taken into account in assessing range.

If we plot country tax laws on a continuum from least stringent to most stringent, the few countries which are outliers at the least stringent end of the continuum have the ability to be arbitraged against all countries that are more stringent. We label the construct range because it is the distance on the continuum between these outliers that are least stringent and other more stringent tax countries which determines the MNE's opportunity for tax avoidance, and not the distribution of tax law stringency of all the countries on the continuum. Certainly, tax havens are outliers at the least stringent extremity.

If all the countries in the MNE's footprint have exactly the same tax laws, the range is zero, as a uniform law does not have differences or diversity that enables arbitrage. The next simplest case of range is where the tax laws of the countries which comprise the MNE's geographical footprint are identical with the exception of one dimension, for example statutory tax rates. A difference in tax rates presents the opportunity for transfer price manipulation (Bartelsman & Beetsma, 2003; Buckley & Hughes, 2001; Clausing, 2003; Eden, 1998, 2016). However, differences in tax rates alone do not necessarily contribute to range. If the two countries' tax laws implement the OECD transfer pricing guidelines to the degree that they preclude possible transfer price manipulation, this difference in tax rates cannot be arbitraged.

To assess range more generally, one would start with the set of known tax avoidance mechanisms and practices, and determine whether or not, and if so the degree to which, these mechanisms and practices can be used for tax arbitrage or profit shifting for the tax laws of the MNE's set of countries. However, the tax practices used to assess range are not the tax practices of this particular MNE, but the tax practices used by MNEs in general. Therefore, In determining range, known tax practices and mechanisms are applied to the MNE countries' tax laws with the objective of achieving what would be the MNE's lowest possible effective tax rate. If multiple tax practices are not mutually exclusive in their application, their effect on range is additive, as range captures the maximum legal opportunity for tax avoidance.

In general, a high range would result in a low potential effective tax rate. However, there is not an exact relationship between the two as range only reflects tax law differences which provide the opportunity for arbitrage or profit shifting, whereas an effective tax rate reflects all tax laws of a set of countries. Also, range is a different construct from effective tax rate, which is an MNE's actual tax rate, as range is not a tax rate.

The previous example of a country's statutory tax rate is a narrow view of its tax laws. Assessing range involves examining the different variety of tax laws and tax practices. These include, but may not limited to, profit shifting with intangible assets (Dischinger & Riedel, 2011; Grubert, 2003; Jones & Temouri, 2016; Mutti & Grubert, 2009), intrafirm debt and interest expense deductions (Altshuler & Grubert, 2002; Buettner & Wamser, 2013; Graetz, 2016; Harrington & Smith, 2012), hybrid entities such as "check the box" and FCPE regulations (Altshuler & Grubert, 2005; Devereux & Vella, 2014), tax treaties (Avi-Yonah & Xu, 2018; Weyzig, 2013), more complex strategies such as the Dutch Irish sandwich (Fuest, Spengel, Finke, Hockmeyer, & Nusser, 2013), "Single Malt" (Coyle, 2017; Lewis, 2018), and laws which lend themselves to tax "holes" that enable double non-taxation (Kleinbard, 2016). However, the dependent variable in this extant tax literature is the tax avoidance taken by the MNE, not the opportunity for tax avoidance afforded by the countries.

It may seem difficult to examine the variety of differences between countries' tax laws. However, recent tax policy specifications and multilateral organizations tracking and publicly posting their country implementations make this task easier. For example, Action 15 of the BEPS tax reform specifies the Multi-lateral Instrument (MLI) whose goal is to help modify countries' existing bilateral tax treaties to be BEPS-compliant (OECD, 2017). To date, 87 countries have committed to implement MLI, and their commitments to different options within MLI have been posted (OECD, 2019a). Figure 2 summarizes these data. The height of each bar in Figure 2a illustrates the number of rules in Action 15 (MLI) for which each country has "opted-out," or chosen not to implement in its tax treaties (Lewis, 2018). Figure 2b illustrates the same data, but shows the number of countries that have opted out of the least popular rules of MLI.

Finally, since country tax laws change and tax practices change, range may change over time. In summary, the range in country tax laws by itself does not trigger tax avoidance, but it reflects the opportunity for corporations to do so.

Proposition 1: An MNE's opportunity for aggressive tax avoidance is positively associated with the range among its countries' tax laws

Aggressiveness of other MNEs' tax practices

Regardless of the potential opportunities for MNE tax avoidance afforded by countries, MNEs may perceive that the risk of taking these opportunities may lead to negative consequences, such as being scrutinized or audited by tax authorities. We posit the second antecedent of opportunity of tax avoidance as the *aggressiveness* of *other* MNEs' tax practices, related to the normative leg of institutional theory. MNEs can examine various countries' tax laws themselves to identify opportunities for tax avoidance, and assess the risk of these opportunities. However, MNEs have a history of finding opportunities for tax avoidance by copying or adapting the tax practices of other MNE competitors. If corporation A observes corporation B engaging in tax practices which result in reduced taxes, and B is not prosecuted, then A is likely to perceive B's tax practice as an opportunity to reduce its own taxes and to maintain its competitiveness with B. The more MNEs that adopt B's tax practice, the more legitimized this practice becomes in the perceptions of other MNEs regardless of its questionable legal standing. This imitation, or mimetic isomorphism, is a key mechanism in institution theory (DiMaggio & Powell, 1991). This copying of firm tax practices is at the MNE level, not MNE subsidiaries copying local domestic firm practices (Kostova & Zaheer, 1999).

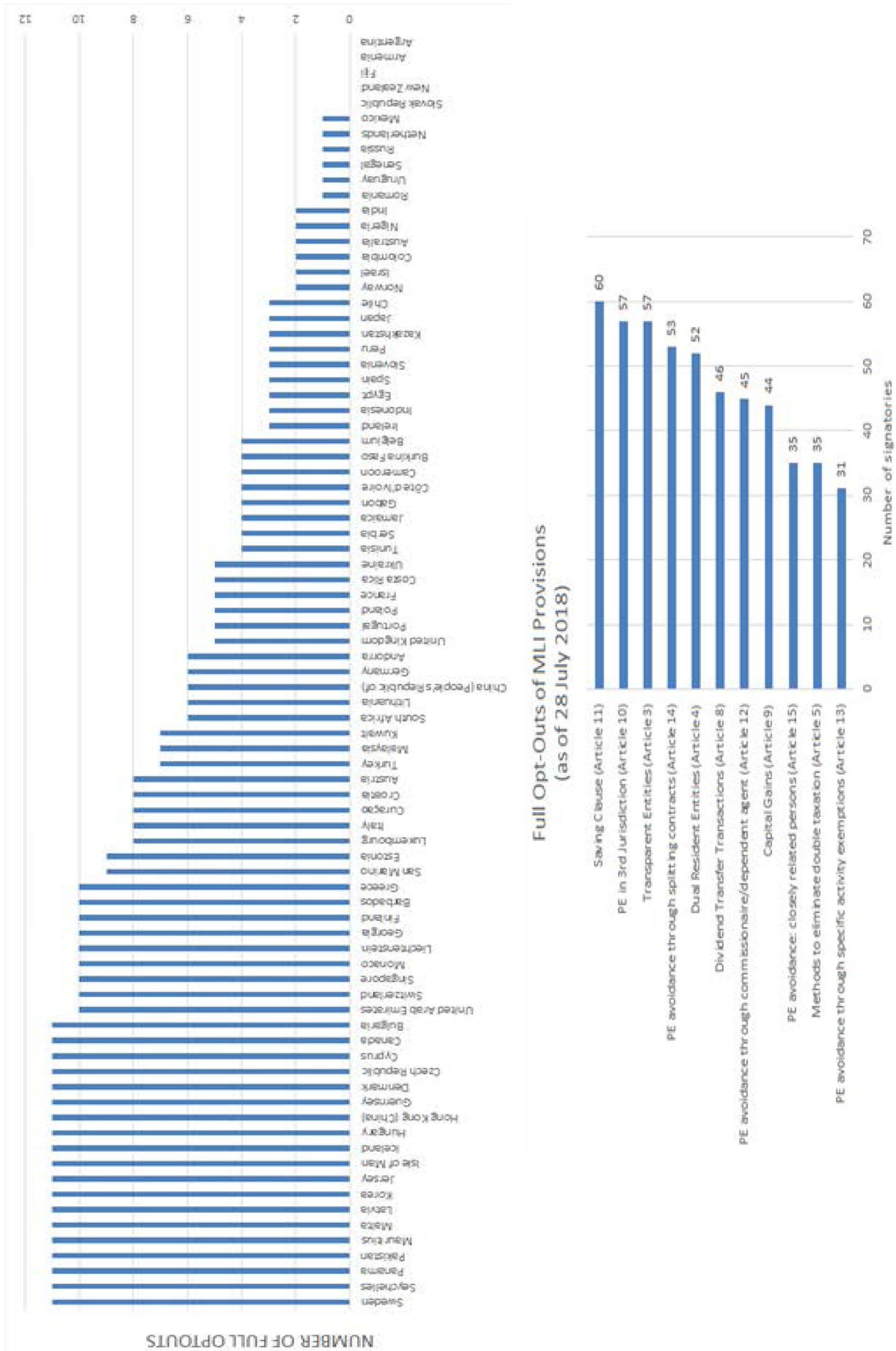


Figure 2 Countries' implementation of BEPS MLI, example data for range measurement (in Lewis, 2018).

More specific to the context of tax, Armstrong, Glaeser, and Kepler (2017) found support for an MNE responding to a competitor's more aggressive corporate tax practices by changing its own tax practices to be more aggressive. While this reaction may be intuitive, what is less intuitive was the imitation they found in the opposite direction. That is, an MNE responds to a competitor changing its corporate tax practices to be less aggressive by changing its own tax practices to be less aggressive. Armstrong et al.'s explanation for this latter reaction was that an MNE did not desire to be an outlier in the tax practice population of all MNEs in the same industry, because being an outlier would make this MNE more likely to be scrutinized or audited by tax authorities. Therefore, an MNE's opportunity for arbitrage is likely to be influenced by the tax practices of other MNEs because it does not want to stand out from them in a "bad way." This desire to be more normative reduces the tendency for firms to devise more aggressive tax strategies that push the limits of the grey area between tax avoidance and tax evasion.

The construct *aggressiveness* of a tax practice in Figure 1 is measured on a scale from normative, being *least aggressive*, on one extreme to *most aggressive* on the other extreme. Least aggressive tax practices take advantage of normal operating activities that are tax-favored, such as raising capital by debt financing versus equity financing to deduct the interest payment. In contrast, the most aggressive extreme is exemplified by MNEs which practice tax avoidance by combining different country tax laws in ways that were never intended or imagined by the governments which passed the tax laws. The measurement of aggressiveness is on an ordinal scale.

An example of a practice on the most aggressive extreme would be the "Double Dutch" or sometimes called "Irish-Dutch sandwich," a tax practice "invented" by Apple in the 1980s. This Apple tax practice was copied by Microsoft, Google, Amazon, Facebook, Starbucks and others in the following decades, with Google alone saving US$3.6 billion in taxes with this practice in 2015 (Wood, 2016). It may seem like an exaggeration to consider a corporation's tax practice as institutionalized. However, this infamous tax practice came to have its own name and thus, in a socio-cognitive way, was institutionalized in industry. The Dutch-Irish sandwich tax practice also serves as an example of how country tax laws and MNE tax practices are distinct constructs which are loosely coupled. In general, state tax laws and MNE tax practices are separate but interdependent institutions which co-evolve.

> **Proposition 2:** An MNE's opportunity for aggressive tax avoidance is positively associated with the aggressiveness of tax practices among *other* MNEs.

The area of tax avoidance opportunity

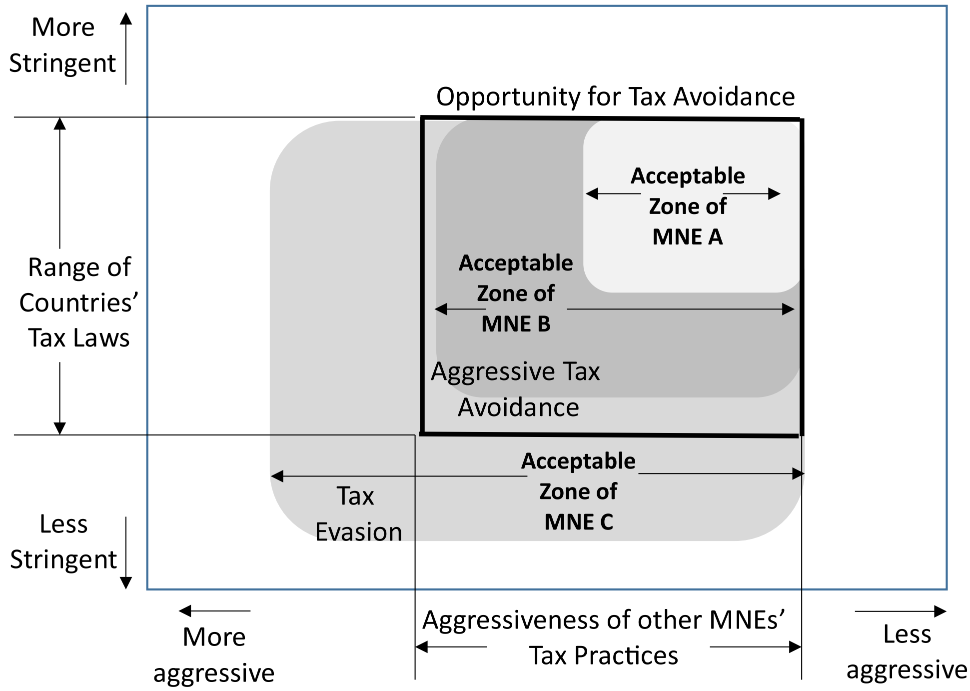
In Figure 3, we plot, on the vertical axis, a continuum from most stringent to least stringent, the range of tax avoidance, discussed for Proposition 1. Similarly, we plot in Figure 3 the aggressiveness of other MNEs' tax practices from least aggressive to most aggressive, as discussed in Proposition 2. The area of the rectangle in the middle of Figure 3 represents the domain of an MNE's possible tax avoidance opportunities as afforded by state laws and influenced by other MNEs. The important inference from the rectangle in Figure 3 is that there are two complementary ways in which to reduce an MNE's opportunities for aggressive tax avoidance. One can reduce the height of the rectangle by convincing countries to make their tax laws more uniform, and one can reduce the width of the rectangle by convincing an MNE's competitors to adopt more normative tax practices.

ZONE OF ACCEPTABLE TAX AVOIDANCE OPPORTUNITIES

We return to the question: given the same tax avoidance opportunity rectangle, why do some MNEs choose a more normative tax practice and other MNEs choose aggressive tax practices? The construct at the middle right of Figure 1 labeled "Perceived Zone of Acceptable Tax Practices" represents the subset of potential tax avoidance opportunities acceptable to an MNE. When regulated by the same country tax laws and a similar awareness of other MNEs tax practices, MNE C is more likely to use tax havens than MNE B in Figure 3, while MNE A is unlikely to use tax havens. In Figure 3, the likelihood that an MNE's tax practice uses tax havens is positively associated with the degree to which this MNE's acceptable zone overlaps the area of aggressive tax avoidance; see the bottom left corner of the rectangle of tax avoidance opportunities.

So far, we have discussed states and MNEs, but not the third actor in our system. This actor is a collective of individuals from all strata of society, and like-minded organizations such as NGOs, that

Figure 3 Opportunities for tax avoidance and the zone of acceptable tax practices.



share a common belief of everyone paying their "fare share" of taxes to support public goods and services. The individuals in this collective may possess many competing logics: consumer, stockholder, and employee, but as taxpayers they believe in the social welfare logic of everyone paying their fare share. The institutional logics literature defines a social welfare logic as a "belief system" in which a "web of individuals" pursue a "social mission" which can be aided by "non-profit partners" (Pache & Santos, 2013, p. 977; Thornton et al., 2012, p. 130). In our context, this social mission is specific to taxation. Normally, these individuals are mostly unconnected and unorganized, but they can become a collective action in an election year. Also, when a salient case or issue occurs which is contrary to their belief, some of these individuals may come together, and, perhaps aided by NGOs, become organized, if maybe only in a fluid or fragmented way, to try to right what they perceive as wrong. This collective action when magnified by the media has the ability to influence the decisions of MNE top management and national politicians. We hereafter refer to the collective of individuals and NGOs as the public, for short, and the logic that represents the belief they espouse in their taxpayer is identitied as the social logic.

The MNE has its dominant commercial logic of a profit maximizer. However, it also has an internal competing minority social logic. All the opportunities in the rectangle of tax avoidance opportunities may not be equally acceptable to an MNE because of the extent to which an MNE is influenced by or integrates the social logic into its mission, practices, and actions. An MNE benefits directly from public goods as infrastructure and security, and public programs indirectly benefit the MNE by helping its employees and its community. An MNE's social logic can cause it to forgo aggressive tax avoidance opportunities as it foresees that continued support of public goods is not sustainable if taxpayers do not pay their fare share and choose instead to become free riders. These socially responsible MNEs look beyond the usual obligation to stockholders to include a broader group of stake holders. These MNEs would be willing to pay what they perceive as "their fare share" even if not doing so is legal. Measures of an MNE's social logic can be proxy measures that capture community engagement and giving. The firm Kinder, Lydenberg and Domini specializes in an annual rating of firms' social performance (Waddock, 2003).

In contrast, an MNE's commercial logic may cause it to take a more economic view of stakeholder relations. This view can cause an MNE to forgo aggressive tax avoidance opportunities because of the perceived risk of reputation costs in terms of possible lost sales from customers or investments not taken by potential bond holders. The public scrutiny and public pressure from outside groups labeling the MNE as a tax avoider can result in a more widespread backlash even if the MNE's form of tax avoidance is legal. This was evident when Starbucks was lambasted in the UK press for paying corporate taxes once in 15 years. Starbucks managing director Engskov announced that the company would "voluntarily" choose not to claim UK tax deductions for inter-company royalty payments, interest charges, or mark-ups included in transfer prices (Engskov, 2012). The BBC responded: "People have been joking that some of these multinationals seem to think that paying tax is voluntary. Well Starbucks has just confirmed the joke, really" (BBC, 2012). Clearly, Engskov's use of the word "voluntarily" reveals Starbucks' focus on legal compliance, in contrast with the BBC use of the word reflecting the public's social logic. The perceived risk of reputation costs can be measured by adapting scales found in the environmental literature (Vasi & King, 2012).

Transparency, making an MNE's tax practices publicly available, further increases the likelihood of reputational costs, which changes the cost versus benefit trade-off of tax avoidance practices. Dyreng, Hoopes, and Wilde (2016) examined actions of FTSE 100 firms after passage of a new UK law requiring these firms to disclose the locations of all subsidiaries. After an activist group publicized those MNEs with subsidiaries in tax havens, Dyreng et al. found FTSE 100 firms decreased tax avoidance and reduced the use of subsidiaries in tax haven countries compared to other firms which were not subject to public pressure.

However a lack of transparency benefits the MNE, as in most cases the MNE simply wants the public to leave it alone. A lack of public awareness lets the MNE retain its legitimacy, while focusing on legal compliance at the expense of the social logic. Legitimacy is defined as a generalized public perception or assumption that an MNE's actions are desirable, proper, or appropriate within some socially constructed system of norms, values, and beliefs (Kostova & Zaheer, 1999; Suchman, 1995). MNEs are content with this passive support from the public, and it is only when a disclosure that the MNE diverges from societal norms is made known, as in the Starbucks case above, that the MNE seeks active support from the public of its legitimacy. MNEs that routinely or frequently depart from societal norms lose legitimacy and are vulnerable to claims that they are negligent and unlawful. MNEs can only regain their legitimacy by conveying a credible account explaining what the MNE is doing and why. Therefore, MNEs are to a certain degree dependent on the public perception of legitimacy.

We summarize the above arguments in the following proposition.

Proposition 3: The scope of an MNE's *zone of acceptable arbitrage opportunities* is decreased, or more normative, the greater the

(a) influence of the social logic within the MNE
(b) MNE's perceived risk of incurring reputational costs from stakeholders
(c) transparency of the MNE's tax reporting
(d) MNE seeks legitimacy

NEW TAX REFORMS AND RANGE

We can use the theory described in the previous section to examine the degree to which tax reform policies solve the tax avoidance and tax haven problems. Tax policies are effective in reducing tax arbitrage only to the degree that they reduce the range among countries' tax laws (Proposition 1). In general, the more specific and comprehensive a proposed tax reform's requirements, the fewer the number of countries which will agree to adopt and abide by these covenants. Getting countries to agree to counter tax avoidance is easy, but getting countries to agree on the specifics of how to do this has proven to be difficult.

Pan-EU tax reform has been an example of this. The EU has been at the forefront of new tax policy. However, the EU has been unsuccessful in getting its new harmonized tax proposals to be agreed upon because its member states must vote unanimously to adopt the new tax policy. In any CIT policy change, there will be some countries who benefit and some countries who lose, because MNEs cannot be double-taxed. The countries who stand to lose will vote against the proposed policy, which has been the case in the EU. The EU initially proposed a new tax reform policy in 2011 which was stalled in country debate for years. In 2016 the EU relaunched its tax reform proposal as a two-step process. The first step, CCTB, was to include more easily agreed upon issues because the more contentious issues from 2011 were deferred to the second step, CCCTB. However, given the current member state lack of agreement to CCTB, together with the fact that CCCTB's issues are even more contentious and approval must be unanimous, one wonders whether CCCTB is possible.

States have difficulty agreeing on a uniform tax law because they are unwilling to surrender control to others as to how economic activity is taxed within their borders. A country cannot be forced to relinquish control over its tax system as sovereignty enables a country to set its tax laws as it sees fit. Thus, a primary factor that contributes to the opportunity for MNEs tax avoidance is a fundamental tension between sovereignty and greater uniformity of tax laws across countries.

The second type of tax policy reform is one that enables different country implementation options. This flexibility results in more widespread country acceptance as countries have the discretion to chose which options they will adopt into law. However, the disadvantage of such a tax standard is that it enables variety in countries' tax laws despite their adopting a common tax policy. The minimum subset of the tax policy required to be compliant with the policy becomes, in effect, the uniform tax code across countries which precludes tax avoidance.

OECD's BEPS reform is an example of this. To date, 129 countries have committed to the BEPS standard (OECD, 2019b). The way the OECD was able to achieve this acceptance was specifying that being "BEPS-compliant" only requires a country to implement only 4 of its 15 actions. Furthermore, within these 4 required actions are many options of implementation, each of which meets the standard. Therefore, despite BEPS' wide-reaching and comprehensive framework, BEPS ability to harmonize tax law is restricted to the common denominator among all BEPS compliant countries. This minimum compliance requirement has enabled tax haven countries to be what the literature calls "mock compliant," or being compliant in name only by being compliant with the letter of the law without changing their behavior and integrating the spirit of the law (Walter, 2008).

Mauritius is an island tax haven in the Indian Ocean about 1200 km southeast of Africa, and a good example of mock compliance. In the decade from 2004 to 2014, 39% of all FDI into India came from Mauritius, and 97% of that FDI was funneled through Mauritius from other countries because of Mauritius' MNE favorable tax treaty with India (Jaiswal, 2017). As a BEPS signatory, Mauritius has agreed to adopt Action 15 on tax treaties which specifies the MLI. MLI's goal is to help modify countries' existing bilateral tax treaties to be BEPS's compliant. Mauritius has options, or in OECD parlance "preferences," as to which of Action 15's anti-tax avoidance provisions it chooses to implement in its tax treaties. Mauritius's "preferences" include *not* implementing a number of important tax treaty provisions including "strengthening capital gains tax from the sale of participations in domestic companies (article 9), the transfer of dividends (article 8), provisions to prevent tax abuse of income from permanent establishments in third countries (article 10), and the artificial avoidance of permanent establishment status (articles 12 and 13)" (Turner, 2017b). In fact, Mauritius only implements 4 of the 15 articles within MLI, and hence it is shown at the far left of Figure 2a as opting out of 11 articles. By choosing these options, Mauritius enables MNEs to avoid taxes and at the same time pay lip service to BEPS compliance.

A mock compliance strategy is likely to be adopted by countries which believe that: (1) failing to be labeled compliant will make them more salient, which may lead to negative consequences, (2) proving country non-compliance of the standard will be difficult for others, and (3) being fully compliant would impose significant costs (Woodward, 2016). Evidence of the prevalence of this trend is the OECD's own Committee on Fiscal Affairs which states that "no jurisdiction is currently listed as an uncooperative tax haven" (OECD, 2018a, b).

An obstacle to any type of tax reform is the many small island countries who will continue to choose to be tax havens. These tax havens are outliers in the population distribution of all countries' tax laws. Since tax avoidance is directly related to the range of country tax laws (Proposition 1) having tax haven outliers in the tail of the tax law's distribution will continue to enable tax arbitrage. Tax reform agreements among a subset of countries which does not include tax havens may reduce the spread or dispersion of countries around the mean of the distribution, but they do not reduce the range of the distribution. If tax reforms do not eliminate tax havens, they cannot effectively reduce the vertical height of the rectangle in Figure 3. In summary, although the new tax laws are an important step in the right direction, differences in their design and country implementation leave the door open for MNEs to exploit these differences.

IMPLICATIONS OF THE ZONE OF ACCEPTABLE OPPORTUNITIES

This conclusion causes us to ask what other activities can help solve the problem. In this section, we propose a suggestion that follows from our propositions. Based on arguments made for Proposition 3, more transparency of MNE tax-related activities is a necessary first step. Public participation has been effective in reversing tax avoidance actions of MNEs, but only when this type of information has been made public by the press in cases of flagrant, aggressive tax avoidance. Instances of the public simply labelling MNEs as tax avoiders, without more information explaining what the MNEs have done and the degree of tax avoidance,have not been as effective. An example is the "name and shame" of tax havens named on the OECD's blacklist in the early 2000s. Kudrle (2009) examined investment in, and financial flows to, 38 tax havens for the years following 2000, when they were named on the OECD's blacklist. He found no substantial and consistent impact on the investment in and financial flows of the blacklisted tax havens.

When knowledge of MNE tax practices has been more completely publicly divulged, as in the UK law requiring all UK MNEs to disclose all their subsidiary locations, the response of MNEs was to change their tax practices (Dyreng, Hoopes, & Wilde, 2016). BEPS Action 13 requires Country by Country Reports (CbCR) to be submitted by all MNEs. All BEPS-compliant countries require MNEs with entities in their country to submit annual MNE CbCR. These reports list for each country in which the MNE has some type of economic activity, the sales, profits, income tax paid, accumulated earnings, number of employees, and assets among other items (Murphy, 2016; OECD, 2018a, b). CbCR have the potential to reduce tax evasion by "shining a light in dark corners" (Eden, 2017) through transparency. However, this transparency assumes that government tax agencies have the resources to analyze the sets of CbCR tax submissions from each MNE.

To date, MNE CbCR are submitted to state tax agencies and not publicly disclosed. However, public disclosure of CbCR by EU banks has been mandatory from 2015. Given this precedent, it is an incremental step for countries to ask MNEs to make their CbCR public. An advantage of CbCR public disclosure is that as government tax enforcement agencies, like the HMRC and IRS, are increasingly faced with budget and personnel reductions, scrutiny of MNE CbCR tax submissions can also be performed by non-profit organizations. These non-profits have the knowledge and resources to analyze CbCR that the public does not, but these organizations share the public's social logic. A valid criticism of making MNE CbCR public is that they do not provide a sufficient level of detail to determine whether an MNE pays the correct amount of tax in a particular country. However, performing a comprehensive tax audit would not be the purpose of non-profits scrutinizing CbCR. Rather, non-profits examination of an MNE's CbCR for tax haven countries can then be brought to the attention of tax agencies which would have more detailed information to perform a more comprehensive tax audit.

Given the trend of countries lowering corporate tax rates, why not have countries ask MNEs to give something back to countries in return for these lower tax rates? In particular, our suggestion is that countries ask MNEs for: (1) a pledge to stop aggressive tax avoidance, and (2) transparency by making their CbCR public. It is unrealistic to assume that all countries will agree to require CbCR to be made public. Therefore, one must assume that MNE public disclosure of CbCR must be voluntary. However, we suggest that country members impose a penalty on MNEs which choose not to be transparent. The penalty could be a higher country statutory tax rate for MNEs that do not pledge transparency. This proposal would not require countries to further reduce existing statutory rates, as a country can choose to use its existing tax rate for MNE participants and the default is a higher tax rate for non-participants.

This initial hybrid network of a several notable MNEs and countries could urge all other countries and MNEs to join them. It would be hard for an MNE to defend its position of non-participation when its competitors participate and it is given a financial incentive to participate. The pointed question to be asked of MNEs who do not pledge tax avoidance and public CbCR disclosure is: Since you are being given a financial incentive to participate, but choose not to, what are you trying to hide? The pointed question to be asked of a country that does not participate by its citizens is: Why are you raising my taxes, instead of raising corporate taxes like other countries who are participating?

A benefit of starting with a small number of countries and MNEs is that the time to implement this network would be relatively short compared to the 5 years it has taken multilateral organizations to define and agree on tax proposals. The time would be shorter because there does not need to be much upfront debate and negotiation by many countries to come to a mutual agreement.

As more MNEs accept this country incentive and pledge transparency, other MNEs will be more reluctant to be aggressive tax avoiders as argued in Proposition 2: when an MNE's competitor stops engaging in tax avoidance, the MNE likewise stops its tax avoidance practice. These results are encouraging because they suggest that, if there is a critical mass of MNE exemplars who publicize their "paying their fare share," many other MNEs in their industry will do the same. Referring to Figure 3, this would decrease the aggressiveness of the MNE tax practice distribution by decreasing the width of the rectangle and decreasing the opportunity for aggressive tax avoidance. This would change an MNEs' mindset as to what is an acceptable versus unacceptable tax avoidance.

Furthermore, only a relatively small initial number of large MNEs would need to participate for this suggestion to be effective. A study by Gardner, McIntyre, and Phillips (2017) of Fortune 500 companies examined the 285 firms which were profitable *every* year from 2008 to 2015. The tax breaks enjoyed by all 258 firms for the 8 years totaled US$527 billion. However, the top five MNEs (2% of the 258 MNEs) by themselves accounted for more than 25% of the total in tax breaks, and the top 25 MNEs (10%) accounted for 54% of the total. Hence, a large percentage of tax avoidance is highly concentrated in the hands of a small percentage of large corporations.

Our proposed suggestion may be more practical than politically palatable to some. Countries and tax activist groups might react to our proposal with the point: Why should we give an incentive to MNEs to motivate them to pay their fair share when they are obligated to pay their fare share anyway? We would argue that, even if countries had to settle for half of the US$240–650 billion of annually avoided taxes to motivate MNEs to pay their half of this amount now, it would be worthwhile. Countries have to realistically answer the question, would you rather: (1) fight MNE tax lawyers in court for years to try to collect some of this amount, or (2) split this amount with MNEs and collect your half of the amount now? We think most country leaders would choose the latter.

Over time, as more countries and MNEs join this "fair share network" of MNEs and countries, the demand for tax havens would continue to dwindle to the point of some tax havens abandoning this economic model. The benefit of a coordinated network of countries, exemplar MNEs, and pubic organizations is that they could together achieve a degree of anti-tax avoidance that none could achieve separately. In effect, this fluid, hybrid network fueled by the tax avoidance issue could be an informal form of transnational governance (Djelic & Sahlin-Anderson, 2006). We summarize the implications of our suggestion of the "fair share network" on tax havens as follows:

Proposition 4: In a situation where tax havens do not comply with tax reform agreements, or "mock comply," tax havens can be marginalized to the degree that

(a) Tax activities of MNEs are made more transparent
(b) MNEs increasingly integrate the social logic and seek legitimacy
(c) MNEs have incentives to forgo tax law manipulation

CONCLUSIONS AND CONTRIBUTIONS

The methods to reduce aggressive tax avoidance can be best understood by examining the antecedents that make the opportunities for tax avoidance possible and acceptable to MNEs. The antecedents of these two factors are the range among country tax laws and the aggressiveness of other MNEs' tax practices; the two dimensions in Figure 3. The ability of state tax laws alone to legislate tax avoidance out of existence is inherently limited because of: (1) the fundamental tension between sovereignty and increased harmony of tax laws as governments are reluctant to surrender control of their tax revenues, and (2) outlier states will continue to operate as tax havens.

Our contribution is to develop a theory of MNE tax avoidance which complements the existing tax literature which is mostly empirical and atheoretical. A second contribution is a suggestion following from developed theory. The current tax reforms attempt to decrease the opportunities for tax avoidance by decreasing the range of country tax laws; the vertical height of the rectangle in Figure 3. The unexplored option is changing other MNE tax practices through MNE exemplars to reduce the variance in MNE tax practices; the horizontal axis of Figure 3. We argue that trying to legislate tax avoidance and tax havens out of existence when MNEs have not bought into the tax reform process is like pushing on a rope. Socially minded MNE exemplars can lead by saying and demonstrating to other MNEs that we can sustain a profitable business without tax avoidance practices, and so also can you. This leadership, together with financial incentives, will more generally engage MNEs and create a pull effect on the rope that current tax reforms are pushing. We do not suggest that one approach is better than the other; rather, the two approaches are complementary and should be pursued simultaneously to create a push–pull effect.

The next 10 years will be the acid test of whether tax reforms can reverse the worldwide trend of an increasing degree of tax avoidance, and increasing popularity of tax havens. The period will also be a critical time for countries in dire need of sufficient budgets to provide public services. Our paper's theory and its suggestion strive to fill a gap in expectations and understanding between country policy makers and MNE tax planners in order that they might help each other achieve their respective economic goals at the expense of tax havens.

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