COOPERATIVE COMPLIANCE PROGRAMMES: WHO PARTICIPATES AND WHY?

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Abstract

This study examines which organisations participate in cooperative compliance programmes (CCPs) and why by comparing large organisations in the Netherlands that do and do not participate in them. We use data from surveys conducted among representatives of large organisations and their Netherlands Tax and Customs Administration (NTCA) account managers between 2014 and 2018 (n=394). The results show that there are few differences in *organisational characteristics* between CCP participants and non-participants, but that larger organisations are more likely to participate in CCPs. Furthermore, CCP participants have better *working relationships* with the NTCA, better Tax Control Frameworks (*TCFs*), and display greater *transparency* than non-participants. In addition, CCP participants report having a greater *need for certainty* and higher perceived *certainty* about their tax positions than non-participants. Within the group of CCP participants, we also assess whether there are differences related to the intensity of contact with the NTCA and the *duration of participation*. We find that the *working relationship* and the level of *transparency* are somewhat better, and that *compliance costs* for the organisation are reduced, when there is more frequent contact between a large organisation and the NTCA. At the same time, we find a negative relationship between the duration of CCP participation and the quality of the *TCF*. We conclude that large organisations may benefit from CCP participation in terms of gaining more *certainty* about their tax position, whereas the tax authority may benefit because the organisation displays greater *transparency*. Both parties may benefit from the development of a better *working relationship*, but it appears that both parties need to continuously invest time and effort into the programme in order to actively maintain the cooperative relationship.

Keywords: Cooperative Compliance Programmes, Corporate Tax Compliance, Working Relationship, Transparency, Tax Control Framework

1. INTRODUCTION

A large number of tax authorities attach high importance to cooperative compliance programmes (CCPs) as a treatment strategy for large (corporate) taxpayers (Organisation for Economic Co-operation and Development [OECD], 2017). Along with the U.K., Ireland, and the U.S., the Netherlands was one of the first countries to introduce a CCP (in 2004) and many other countries followed (OECD, 2017). The aims of a CCP are to move away from an adversarial relationship, to establish a more collaborative relationship, and to better balance the interests of both the tax authority and large organisations. This should lead to improved *transparency* and *tax compliance* on the part of the large organisation, while offering early disclosure and resolution of issues by the tax authority, and thus providing *certainty* about the tax position, minimising unnecessary audit time, and lowering *compliance costs*. Tax

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authorities can then shift resources to the less cooperative and more risky taxpayers, making their treatment strategies more efficient. CCPs thus aim to create a "win-win situation" for both large taxpayers and the tax authority (Majdanska & Leigh Pemberton, 2019; OECD, 2008). CCPs in different countries are all based on three main pillars—mutual trust, understanding and *transparency*—and are rooted in the overall *compliance* strategy of the tax authority (OECD, 2008; 2013). However, they also differ in terms of, for instance, eligibility criteria, their legal basis, and the practical organisation of interactions (Björklund Larsen & Oats, 2019).

While previous studies have addressed the benefits of participation for large taxpayers and participants' reasons for joining the programme (e.g. De Widt & Oats, 2017), no studies have addressed the question of who actually participates in a CCP. We will focus on the Netherlands, where all organisations that qualify as "large", as defined by the Netherlands Tax and Customs Administration (NTCA), have the opportunity to participate in the CCP. However, not all large organisations actually participate in the CCP, which might be due to the eligibility criteria and/or motivations for participation. Therefore, in this study, we will examine possible differences between CCP participants and non-participants in order to shed light on the types of organisations for which participation in the CCP is desirable and attainable. A deeper understanding of what characterises the organisations that participate could help tax authorities to tailor their CCP to potential participants more effectively.

The remainder of this paper is structured as follows. In the next section, we will look at the previous studies on CCPs and develop our research hypotheses. In Section 3, we present the research method used in this study. Data analyses and results are presented in Section 4. In Section 5, we discuss the contributions made by and implications of this paper, as well as its limitations and suggestions for future research.

2. LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

The academic literature regarding CCPs has taken different perspectives and utilised diverse methodologies. Several publications focus on the legal aspects of CCPs (e.g. Hambre, 2019; Huiskers-Stoop & Gribnau, 2019; Majdanska & Leigh Pemberton, 2019) and discuss, for instance, the legal status of the CCP covenant or agreement that is concluded with organisations that join the programme. Some analytical studies explore the underlying assumptions of CCPs (e.g. De Simone et al., 2013; Van der Hel-Van Dijk & Siglé, 2015; Ventry Jr., 2008). These studies suggest that, from a theoretical viewpoint, CCPs might indeed increase taxpayer *compliance* and reduce *compliance costs*. Ventry Jr. (2008), for example, argues that under a cooperative model, taxpayers and their advisors will get *certainty* about tax positions and face fewer post-filing challenges. The tax authority will be in a better position to identify emerging taxpayer issues and *compliance* risks, and be able to shift its limited resources from post-filing activities to other areas. Such a relationship, which is characterised by *transparency* and an open dialogue between taxpayers and tax authorities, is crucial in establishing "a shared understanding of what it means to comply with the law" (Ventry Jr., 2008, p. 466).

Surveys show that, in most countries, large taxpayers are positive about CCPs and those who are in a CCP are positive about being in the programme (e.g. Enachescu et al., 2019; Stevens et al., 2012). Large taxpayers consider the possibility of acquiring faster and greater tax *certainty* to be the most important benefit of a CCP (e.g. De Widt, Mulligan, & Oats, 2019). Other potential benefits for large taxpayers include reputation advantages and reduced *compliance costs* (OECD, 2013).

A few studies have empirically tested (some of) the underlying assumptions of CCPs (e.g., Beck & Lisowsky, 2014; Colon & Swagerman, 2015; Goslinga et al., 2019; Siglé et al., 2020). Most of these studies focus on some of the key elements of CCPs, as described in the OECD publications (e.g. OECD, 2008; 2013). These studies are correlational and do not allow for causal inferences, but do find support for some of the main assumptions underlying CCPs, such as the *need for certainty* as a driver for CCP participation (Beck & Lisowsky, 2014) and the importance of the *working relationship* between large taxpayer and the tax authority, the quality of the so-called *TCF* of the organisation (which enables a large organisation to be "in control" on tax issues), and disclosure and *transparency* for the functioning of the CCP (Goslinga et al., 2019; Siglé et al., 2020).

While the studies conducted so far offer important insights into what large taxpayers consider the benefits of the programme, it is not clear who actually participates and which factors determine whether organisations participate in the programme or not. In most countries, participation in a CCP is voluntary and motivation, such as the *need for certainty* about the tax position and the benefit of reduced *compliance costs,* can therefore be expected to play a role in an organisation's decision to participate in one (De Widt et al., 2019). Eligibility criteria that concern an organisation's characteristics, the way it deals with fulfilling tax obligations, and its interaction with the tax authority could, however, also play a role (OECD, 2013). Some eligibility criteria concern an organisation's objective characteristics—such as its size in terms of turnover or assets, and the complexity of its structure and international operations—which cannot easily be changed. Other criteria for acceptance in the CCP lie within the organisation's range of influence and concern the way that the organisation performs with regard to its internal tax control, *transparency*, and its interaction with the tax authority. Thus, although organisations may perceive participation in a CCP to be beneficial, they may be prevented from joining due to the eligibility criteria.

Furthermore, large taxpayers may have reasons for *not* joining the programme, even when they might benefit from participation. As De Widt (2017) notes, foreign-based multinational enterprises (MNEs) originating from fiscal cultures with adversarial relationships between taxpayers and tax authorities (such as the U.S.) tend to stay out of the Netherlands' CCP because they are reluctant to develop a close relationship with the tax authority. Large taxpayers may also be hesitant to join the CCP because the *transparency* required puts (moral) pressure on fiscal arrangements that are legal, but just within the boundaries of the law (that could be considered as [aggressive] tax planning) (Björklund Larsen, 2016; Freedman et al., 2009).

Qualitative studies that focus on the perceptions and experiences of the parties involved in a CCP corroborate the idea that both large taxpayers and tax authorities perceive participation in CCPs to be beneficial but also raise some questions about whether CCPs deliver on all expectations (Björklund Larsen & Oats, 2019). With regard to the Internal Revenue Service (IRS), De Widt et al. (2019) report that the programme puts a high demand on IRS resources. In addition, both Stevens et al. (2012) and De Widt (2017) note that the expected efficiency of the Netherlands' CCP (i.e. shifting scarce resources to higher risk taxpayers) could not be established. This was due, amongst other things, to the need for the NTCA's resources to support organisations that were in the process of entering the CCP to establish the required higher level of fiscal control (De Widt, 2017). The high workload for the tax authority could threaten the benefits for CCP participants, such as quick responses to questions and resolution of tax issues. This might increase as more large taxpayers enter the programme. The experiences of large taxpayers in the CCP and the benefits they perceive might thus change over time and during participation.

In order to shed some light on what characterises large taxpayers who are in the CCP, the present study will systematically compare large taxpayers that do and do not participate in the programme. Information on an individual or aggregate level about which taxpayers or types of taxpayers are in the CCP is not readily available and, as far as we know, no previous studies have addressed the question of who actually participates in a CCP.

Our study concerns the CCP of the NTCA, the so-called Horizontal Monitoring programme. The Netherlands provides an interesting setting because all organisations that are categorised as "large" by the NTCA have the opportunity to participate in the CCP. Furthermore, the threshold for qualifying as a large organisation is among the lowest of all countries that have introduced CCPs.[4] As a result, the Netherlands has a relatively large "potential" of organisations that could, in principle, participate (about 8,500) and, at this point in time, approximately one out of six of this population actually participate.

We will use data from a survey among representatives of large (corporate) taxpayers and a survey among NTCA's account managers to examine whether large organisations in the Netherlands that do or do not participate in the CCP differ from each other. By comparing organisations with regard to the eligibility criteria for participation in the programme (both the objective and the *performance criteria*), we aim to learn *who* participates and, by comparing the motives for participation, we also aim to learn *why* large taxpayers do or do not participate. These insights could help tax authorities to better tailor CCPs to individual organisations or to design different types of CCPs for specific groups of organisations. Additionally, we examine whether, *within the group of CCP participants*, there are differences related to the *duration* and *intensity of participation*. By doing this, we aim to provide insight into whether the performance and motivation of large taxpayers in a programme changes during their participation in it.

Hypotheses

Organisational characteristics

The size of an organisation is usually one of the eligibility criteria for participation in a CCP. This criterion differs widely between countries. In the Netherlands, CCP participation is possible for all large organisations with a revenue of more than about 10 million euros, while in Italy, participation is limited to large organisations with a revenue of 10 billion euros or more (Rossi, 2013). In the U.S, the CCP programme is open to corporations with assets of more than 10 million US dollars, and in Australia, it is open to entities that are part of an economic group with a combined turnover of more than 250 million Australian dollars.[5] While tax authorities differ in where they draw the line, they all limit participation in the CCP to the largest (corporate) taxpayers.

The OECD focussed on CCPs for large (corporate) taxpayers because these organisations have the ability and the means (e.g. sophisticated advice and legal resources) to enter into complex,

[4] The Dutch tax authority distinguishes large organisations from other taxpayers based on the following criteria: a) turnover exceeds ten million euros and gross wages exceed two million euros; or b) gross wages exceed eight million euros; or c) assets exceed one billion euros.
[5] See: U.S. (Internal Revenue Service, 2019); Australia (Australian Tax Office, 2019).

cross-border tax arrangements that could constitute aggressive tax planning (Huiskers-Stoop & Gribnau, 2019, OECD, 2008). Large corporate taxpayers seek cooperation with tax authorities for reasons related to corporate governance concerns (following financial scandals and new legislation, e.g. the Sarbanes-Oxley Act), financial and other public disclosures (i.e. increased public scrutiny), and accounting for uncertain tax liabilities (e.g. in relation to the evolution of financial accounting standards). Large corporate taxpayers need to have more control over, and more assurance about, their tax position, and perceive that participation in a CCP will meet these needs (OECD, 2008). For MNEs, these needs might be even more pronounced, due to increased public scrutiny into their cross-border activities and the introduction of country-by-country reporting standards. Such standards demand *transparency* from MNEs, while public scrutiny increases the importance of *certainty* for them (e.g. because missteps are likely to have severe effects on their public image). MNEs can also feel morally obligated to participate in a CCP because they want to express to society that they act responsibly and care about *compliance* (Boll & Brehm Johansen, 2018). These demands and needs make MNEs especially suited to CCP participation. For this reason, most countries with CCPs consider MNEs to be their main targets.

All organisations in our sample are large enough to qualify for the CCP. However, since CCPs are deemed to be more suitable for larger organisations and the initial focus was on the largest taxpayers, we expect that CCP participants within the population of large organisations are, on average, larger than non-participants.

In the Netherlands, both large profit and not-for-profit organisations can participate in the CCP.[6] Profit-oriented businesses and not-for-profit organisations can be expected to have different external demands or expectations that may influence their participation. As noted, MNEs might have reasons for participating in a CCP. At the same time, however, for-profit organisations, in general, may be more reluctant to participate in the CCP as a result of shareholder concerns about limited possibilities for tax planning, as this could lead to higher effective tax rates (Siglé et al., 2018). Not-for-profit organisations, on the other hand, are generally funded through (tax funded) public funds. Therefore, we expect government agencies that fund not-for-profit organisations to encourage these organisations to be *transparent* and participate in voluntary *compliance* programmes, such as CCPs, to avoid misuse of public funds.

Within this context, it could be argued that, given the variety of the group of (relatively) large organisations that can formally qualify for participation in a CCP in the Netherlands, a large taxpayer's *organisational characteristics* (e.g. size, MNE status, for-profit/not-for-profit status) may play a role in its decision to participate. We expect that:

Hypothesis 1: Large taxpayers are more likely to participate in the CCP when they are (relatively) larger and when they belong to the MNE and not-for-profit categories.

Performance criteria

Tax authorities use various *performance criteria* in order to determine whether large organisations qualify for CCP participation. Generally, these criteria concern the taxpayer's degree of *transparency*, the quality of the *TCF*, and the quality of their *working relationship* with the tax authority (OECD, 2013; Siglé et al., 2020).

[6] As far as we know, the Netherlands is unique in allowing not-for-profit organisations to participate in the CCP.

Within a CCP, taxpayers are expected to be *transparent* about all tax matters that give rise to a material degree of risk or uncertainty (OECD, 2008; 2013)[7] and disclose these in a timely matter (OECD, 2007). This expectation might even go beyond taxpayers' statutory obligations (OECD, 2008). *Transparency* can be expected to discourage aggressive tax planning (European Union, 2018) and contribute to an effective and efficient regulatory process, and thus to the success of the CCP (cf. Rickwood & Braithwaite, 1994).

Taxpayers who want to participate in a CCP should display a sufficient degree of *transparency*, in return for which the tax authority will shift the emphasis of its regulatory activities away from "auditing after filing" to a reliance on the quality of the *TCF* (OECD, 2017). Therefore, the *TCF* has emerged as an important component of a CCP (OECD, 2013; 2016). Within a CCP, a *TCF* serves two functions: first, to enable taxpayer *transparency* and second, to enable taxpayer *compliance* (OECD, 2013; Siglé et al., 2020). A *TCF* signals and informs taxpayers about all tax risks, which can stem from all activities and parts of an organisation, and thus makes it possible for an organisation to be *transparent* by disclosing relevant tax risks to the tax authority. A *TCF* also enables organisations to be compliant, for example, by preventing unintentional non-compliance (OECD, 2014), and by increasing its ability to identify tax risks and implement effective controls, thus preventing these risks from occurring and leading to actual non-compliance.

Large (corporate) taxpayers and tax authorities have a shared interest in making their *working relationship* as effective as possible (OECD, 2007). A better *working relationship* helps both parties to better understand each other's attitudes, behaviours, and needs, and, thus, to provide an ongoing dialogue and make interactions more efficient (Freedman et al., 2009; OECD, 2009; Ventry Jr., 2008). This efficiency is, *inter alia*, achieved through engaging upfront (before submitting a tax return) and working together "in real time", which is an important feature of many CCPs (OECD, 2017).

In the Netherlands, CCP participation is based on a formal agreement or covenant that the NTCA concludes with large organisations. In this covenant, the key elements of the CCP, e.g. building an efficient and effective *working relationship* based upon mutual trust and understanding, *transparency*, and the development of a system of internal and external control (the *TCF*), are explicitly addressed. These elements are eligibility criteria for participation in the CCP that concern the performance of organisations. Accordingly:

Hypothesis 2: Large organisations that do participate in the CCP score more positively on the relevant performance criteria for participation in the CCP (e.g. the working relationship, the TCF, and transparency) than those that do not participate.

It must be noted that the *performance criteria* discussed above often play two roles in a CCP. Organisations have to achieve a minimal level of performance in order to be allowed to enter the CCP. However, the qualifying level leaves room for further improvement, which many CCPs aim to achieve. Participating organisations can, therefore, also differ in how they score in relation to the *performance criteria*. We discuss this further in the development of our fourth hypothesis.

[7] See, for example: Australia (Australian Tax Office, 2018); Ireland (Office of the Revenue Commissioners, 2020).

Motivation

An important feature of most CCPs is that participation is on a voluntary basis (OECD, 2013). Organisations that are likely to participate have to perceive sufficient benefits from participation (Čičin-Šain, 2016). One of the most important benefits of CCP participation is a higher degree of (perceived) tax *certainty* (Beck & Lisowsky, 2014; Goslinga et al., 2019; OECD, 2013). Therefore, the OECD (2013) summarises CCP participation as "*transparency in exchange for certainty*". Another advantage for organisations participating in a CCP is reduced *compliance costs* (Majdanska & Leigh Pemberton, 2019; OECD, 2008). These could be achieved through faster tax issue resolution and less audit intrusion (OECD, 2013). Besides these more direct benefits, large taxpayers "also simply want to signal that they care about their tax compliance by being in the program and that they want to collaborate and have dialogue on a regular basis—in contrast to simply engaging with the authorities when they have a (conflict) case" (Boll & Brehm Johansen, 2018, p.15). Thus, a third possible motivation for participation is the importance that the organisation attaches to *compliance*. CCPs are developed for large taxpayers who are willing to be compliant. By participating, they can efficiently and effectively deal with their tax obligations (OECD, 2013).

The standard covenant between the NTCA and the large organisation articulates that the NTCA will provide rapid *certainty*, as well as its viewpoints regarding the legal consequences of specific issues, when the large organisation actively discloses all facts and circumstances relevant for its fiscal position. In addition, real-time working should enable fast processing of tax returns, which will also increase *certainty* and reduce *compliance costs*. Moreover, in the Netherlands, participating organisations are expected to demonstrate the ability and *willingness to comply* with fiscal rules (De Widt, 2017). Accordingly:

Hypothesis 3: Large organisations that participate in the CCP have a stronger need for certainty about their tax position, incur fewer compliance costs relating to tax matters, and are more willing to comply with tax laws.

CCP participation as a process

As mentioned above, participation in the CCP might influence performance and alter the motivation of organisations over time. The NTCA's decision to allow an organisation access to the CCP is mainly based on the assessment of its level of *transparency* and its willingness to gain tax control (De Widt & Oats, 2017). Some organisations will already possess high levels of tax control when entering the CCP, while others may be allowed access to the CCP under the agreement that they achieve such control within a certain timespan. NTCA documents explicitly state that there is room for the *TCF* to be improved after the covenant between the large organisation and the tax authority has been concluded (NTCA, 2013).

Over time, the *working relationship* and the level of *transparency* could also change for various reasons. The *working relationship* between the tax authority and the large organisation is based upon mutual trust. As mutual trust takes time to build up, improvement in the *working relationship* will not happen instantly, and its development will depend on the contact and exchange between the organisation and the tax authority. When an organisation has a high-quality *TCF* in place, it can detect and disclose relevant tax risks and, when it has a good *working relationship* with the tax authority, it can be *transparent* about these risks. However, if one of the parties is not able to perform as agreed, this could attenuate the *working relationship*. De Widt (2017) suggests that the NTCA's interaction style has changed in recent years due to political and societal factors that have affected the Dutch tax system. This appears to have slowed down the promised "quicker issue resolution" and could thus have a negative influence on the *working relationship*.

Participation in the CCP might also alter the motivation of organisations. If participation delivers the expected benefits, we can expect organisations to stay motivated to remain within the CCP. However, motivation might wane if organisations do not or no longer perceive that participation has (sufficient) benefits (De Widt, 2017) or when working cooperatively within the CCP over time becomes business as usual, which might make the perceived benefits of participation less apparent.

Hence, performance and motivation might change over time and this could be dependent on the intensity of the contact between the organisation and the tax authority, and the *duration of participation* in the CCP. However, Enachescu et al. (2019) report that perceptions of CCP participation remain invariant over time, which—as they suggest—might be because perceptions are formed when participation begins and are maintained afterwards (perhaps due to cognitive dissonance). Therefore, whether participation will have a positive, a negative, or no effect on the variables of interest in this study is uncertain and we empirically assess, *within the group of CCP participants*, whether there are differences related to the *duration* and intensity of participation in the CCP. This enables us to study whether the performance and motivation of large organisations change during participation in the CCP. Accordingly:

Hypothesis 4: The duration and intensity of participation in the CCP affect the performance criteria and motivational factors of CCP participants.

3. METHOD

Sample and Procedure

We use data from a large research project carried out by NTCA between 2014 and 2018, in which data was collected on three occasions (in 2014, 2016, and 2018) by means of surveys among representatives of large for-profit and not-for-profit organisations and their account managers at the NTCA.[8] The fieldwork with regard to the surveys was commissioned to an external research agency to guarantee respondents' anonymity. The method of data collection was the same every time: a sample was drawn from a population of approximately 8,500 large organisations[9], and representatives from these organisations and their account managers within the NTCA received requests to fill out an online questionnaire. The data from the representatives from the large organisations and the account managers at the NTCA were later combined at the level of the large organisation.

[8] The data was collected as part of a larger NTCA research project that also comprised field audits of the large organisations in the sample. Field audits require a relatively high investment in terms of tax authority capacity and, therefore, their inclusion in the research project made it necessary to spread the workload over multiple years. In 2014, a large part of the NTCA's audit capacity was reserved for this research project with less capacity reserved for it in 2016 and 2018, leading to smaller sample sizes in those years. We do not believe that this multi-year approach has introduced biases in our study; if anything, it has loaded the dice against our hypotheses by introducing noise caused by possible small changes in the horizontal monitoring approach (and if any such small changes did occur, the inclusion of multiple years increases the external validity of our study). Since the focus of this paper does not concern the results of these audits, we will only report the results of the surveys.

[9] The 81 largest organisations were excluded from the research population, because they receive a somewhat different regulatory treatment from the NTCA.

In 2014, the sample consisted of 350 large organisations, while in 2016 and 2018 the sample size was 100. Large organisations that had already participated were excluded from subsequent sampling frames. Due to non-responses, predominantly among the representatives of the large organisations, complete data is only available for 394 large organisations.

Approximately 18% of the total population of 8,500 large organisations participates in the horizontal monitoring programme. In our sample, 102 of the 394 large organisations participate in horizontal monitoring (26%). This over-representation of participants in horizontal monitoring in our sample is the result of the oversampling of CCP participants in the first instance of data collection and, to a somewhat lesser degree, to a lower response rate among non-participants in 2014.

Participants

The respondents from the large organisations were mostly males (85%) and the majority (77%) were between 40 and 60 years old. Most of them fulfilled the function of director/owner, financial director, or head of finance and control within the organisation. The account managers at the NTCA were also mostly males (71%) and half of them were between 50 and 60 years old.

Most of the large organisations in the sample were for-profit organisations (80%) and 20% were not-for-profit organisations. The number of employees working for each organisation in the Netherlands varied from fewer than 50 to more than 2000, with 72% of the organisations having fewer than 250 employees. A little over 10% of the organisations had a yearly turnover (excluding VAT) of more than 100 million euros, approximately 40% had a turnover of between 25 million and 100 million euros, approximately a third had a turnover of between 10 million and 25 million euros, and fewer than 10% had a turnover of less than 10 million euros. One third of the organisations had branches or establishments abroad.

Measures

CCP participation

We determined whether the large organisations participated in the horizontal monitoring programme based on information obtained from the survey among the NTCA account managers. We used the existence of a formalised covenant as the deciding factor when considering whether an organisation was a CCP participant or not.

Organisational characteristics

We measured the following *organisational characteristics*: for-profit vs. not-for-profit organisation, the size of the organisation (in terms of the number of employees, the yearly turnover, the fiscal complexity of the organisation as measured by the number of fiscal registration numbers, the number of establishments within the Netherlands, and whether the organisation is listed on a stock exchange), and whether the organisation is an MNE (measured by whether the organisation has establishments in other countries).

The survey items used in this study to measure how organisations performed against the *performance criteria* and how they scored for different *motivational factors*, as well as the descriptive statistics and reliability estimates for the multi-item measures, are presented in

Appendix A (items from the survey for the large organisations) and Appendix B (items from the survey for the NTCA account managers). All items were scored on a seven-point scale, ranging from "completely disagree" (1) to "completely agree" (7).

Performance criteria from the survey among the representatives of large organisations

The *working relationship* between the large organisation and the tax authority was assessed using five items (e.g. "The tax authority and my organisation try to cooperate as much as possible"). Cronbach's alpha was .89. Our measure for the quality of the *TCF* consists of 22 items. Initially, 23 items reflecting the five different aspects of internal control as described by the Committee of Sponsoring Organisations of the Treadway Commission (1992) were assessed. However, factor analysis did not yield a clear solution. For this reason, we decided to compute our *TCF* measure as an average of all items except one because of a low factor loading.[10] The remaining 22 items formed a reliable scale with a Cronbach's alpha of .93. *Transparency* was measured with three items (e.g. "My organisation actively shares all relevant tax risks with the tax authority"). Cronbach's alpha was .91.

Motivational factors from the survey among the representatives of large organisations

The *need for certainty* about the tax position was assessed by a single item ("It is of great importance for my organisation to get certainty about the tax position from the tax authority"). *Perceived certainty about the tax position* was measured by four items (e.g. "My organisation feels certain about tax returns that are filed"). Cronbach's alpha was .87. The costs and efforts involved in complying with tax rules and regulations (*compliance costs*) were assessed with three items (e.g. "My organisation is seriously disturbed by administrative burdens related to fiscal matters"). Cronbach's alpha was .68. The importance that large organisations attach to *tax compliance* was measured with three items (e.g. "How important do you think it is that the tax office receives complete and correct tax returns from your organisation?"). Cronbach's alpha for this scale was .93.

Performance criteria from the survey among the account managers of the NTCA

In addition to examining the views and perceptions of the large organisations, we investigated the views and perceptions of account managers from the tax authority. Where possible, similar items were used to measure the quality of the *working relationship*, the quality of the *TCF*, and the degree of *transparency*.

The quality of the *working relationship* was assessed with the same five items that were used in the survey for the large organisations, but the words "organisation" and "tax authority" were switched (e.g. "The organisation and tax authority try to cooperate as much as possible"). Cronbach's alpha was .88. The quality of the *TCF* was assessed with four items (e.g. "The fiscal internal control of the organisation mitigates the relevant tax risks"). Cronbach's alpha was .95. *Transparency* was measured using the same three items that were used in the survey for large organisations. Here, the phrase "my organisation" was replaced with "the organisation" (e.g. "The organisation actively shares all relevant tax risks with the tax authority"). Cronbach's alpha was .90.

[10] The item we dropped was: "In my organisation, internal control monitoring is performed by an external expert (e.g. a tax advisor)".

Additional measures

To examine Hypothesis 4, we analysed the association between the intensity and duration of CCP participation and the *performance criteria* and *motivational factors* discussed above. We measured *duration of participation* as the number of years since the conclusion of the covenant. In our sample, the maximum number of years for which an organisation had participated in the CCP was eight. Consequently, the scale used ranges from less than a year to eight years. We measured the *intensity of participation* in two ways. First, within the CCP, the NTCA and the large organisation are expected to discuss the *TCF* on a regular basis and we measured this using the *number of contacts about fiscal control* as reported by the NTCA account managers. The account managers were asked about the number of discussions that had taken place in the past with the organisation about the *TCF*. It is possible that some of these discussions took place before the covenant was formalised. In addition, large organisations are expected to consult the NTCA about any tax issue that might give rise to a material risk. We measured this using the *number of preliminary consultations* that have taken place over the last three years as reported by the NTCA account managers. In the analysis, ordinal scales were used for both the *number of contacts about fiscal control* and the *number of preliminary consultations*, distinguishing between 0, 1, 2, 3, 4, 5 and more than 5 contacts/consultations.

4. RESULTS

Differences in Organisational Characteristics

In order to shed more light on the question of *who* participates, we first examined whether there are systematic differences in the (objective) *organisational characteristics* of the large organisations that do and do not participate in the CCP. All large organisations in our sample are—as far as their (objective) characteristics are concerned—eligible for participation in principle, since they belong to the population of large organisations as defined by the NTCA. However, as we discussed in Section 2, *organisational characteristics* could play a role in an organisation's decision to participate.

We examined CCP participation in relation to seven *organisational characteristics*. The results are displayed in Table 1.

The rate of participation in the CCP does not differ between for-profit and not-for-profit organisations. When organisations are bigger, both in terms of number of employees and yearly turnover in the Netherlands, the chance that they participate in the CCP is greater.[11] No differences between CCP participants and non-participants emerged with regard to any of the other characteristics. Thus, only the size of the organisation is related to the chance of participation in the CCP.

[11] For-profit and not-for-profit organisations do not significantly differ in their number of employees and yearly turnovers.

Table 1. Differences in organisational characteristics of large organisations that do and do not participate in the CCP (n=394)

	CCP (N=102)	**Not CCP (N=292)**	**X^2**	**p**
Not-for-profit or profit organisation			*0.07*	*.79*
Not-for-profit	18.6%	19.9%		
Profit	81.4%	80.1%		
Number of employees in the Netherlands			*10.61*	*.01*
Fewer than 100	26.5%	44.2%		
100-249	37.3%	31.2%		
250-499	15.7%	11.3%		
500 or more	20.6%	13.4%		
Turnover			*9.71*	*.02*
Fewer than 10 mln Euros	12.7%	12.7%		
10 - 25 mln Euros	22.5%	38.4%		
25 - 50 mln Euros	28.4%	24.3%		
50 mln Euros or more	36.3%	24.7%		
Number of fiscal numbers (fiscal complexity)			*1.99*	*.74*
1-3	13.7%	19.2%		
4-7	15.7%	16.1%		
8-15	19.6%	18.2%		
16-31	23.5%	23.6%		
32 or more	27.5%	22.9%		
Number of establishments			*2.83*	*.42*
1	47.1%	51.7%		
2	12.7%	13.7%		
3-5	16.7%	18.5%		
6 or more	23.5%	16.1%		
Establishments in foreign countries			*.00*	*.97*
Yes	33.3%	33.6%		
No	66.7%	66.4%		
Listed on a stock exchange			*.09*	*.77*
Yes	12.7%	11.6%		
No	87.3%	88.4%		

Differences in Performance Criteria as Reported by Large Organisations

As mentioned before, as is the case with CCPs in other countries, large organisations that want to participate in the horizontal monitoring programme in the Netherlands have to meet several *performance criteria*. They need to establish that they have a sufficiently effective *TCF* in place, maintain a professional *working relationship* with the NTCA, and be *transparent* by disclosing and discussing all relevant tax issues with the NTCA. Therefore, we expect large organisations that participate in the CCP to differ from those that do not participate in it on these three *performance criteria*. Table 2 presents the scores for these variables for CCP participants and non-participants.

Table 2. Differences in performance criteria of large organisations that do and do not participate in the CCP as reported by contact persons at the large organisations (n=394)

	Means (SD)		**F**	**p**
	CCP (N=102)	**Not CCP (N=292)**		
Working relationship	5.93 (0.86)	5.02 (1.09)	58,4	< 0.01
TCF	4.84 (0.89)	4.20 (1.10)	28.5	< 0.01
Transparency	5.61 (1.12)	3.68 (1.58)	129.3	< 0.01

We find that large organisations that participate in the CCP have higher average scores for all *performance criteria* than large organisations that do not participate. The differences are significant and substantial, especially with regard to the reported level of *transparency* towards the NTCA.

Differences In Motivational Factors as Reported by Large Organisations

As indicated in Section 2, the motivation of large organisations to participate in the CCP might stem from the expected benefits involved, such as more *certainty* about their tax position and fewer *compliance costs*, as well as from the wish to be compliant. We examined whether large organisations that participate in the CCP differ from those that do not participate in respect of their *need for certainty* about their tax position, their *tax compliance costs*, and the importance that they attach to *tax compliance*. The results are displayed in Table 3.

Large organisations that participate in the CCP have higher average scores for the *need for certainty* about their tax position and for perceived *certainty* about their tax position. No significant differences emerged between CCP participants and non-participants with regard to their *compliance costs* and the importance that they attach to *compliance*.

Table 3. Differences in motivational factors of large organisations that do and do not participate in the CCP as reported by contact persons at the large organisations (n=394)

	Means (SD)		**F**	**p**
	CCP (N=102)	**Not CCP (N=292)**		
Need for certainty	6.00 (1.05)	5.59 (1.21)	6.4	< .05
Perceived certainty	6.12 (0.67)	5.71 (0.93)	17.2	< 0.01
Compliance costs	3.51 (1.14)	3.64 (1.09)	1.1	0.10
Importance of compliance	6.42 (0.94)	6.24 (0.97)	2.6	0.10

Differences in Performance Criteria as Perceived by the NTCA

In addition to examining the views and perceptions of the large organisations, we also investigated whether the NTCA account managers responsible for those large organisations perceived differences in the *performance criteria* of large organisations that do and do not participate in the CCP. The account managers were asked about their perceptions regarding the quality of the *working relationship*, the quality of the *TCF* and the level of *transparency*. The differences in these *performance criteria* between CCP participants and non-participants are presented in Table 4.

Table 4. Differences in performance criteria of large organisations that do and do not participate in the CCP as reported by the account managers of the NTCA (n=394)

	Means (SD)		**F(1,392)**	**p**
	CCP (N=102)	**Not CCP (N=292)**		
Working relationship	5.91 (0.92)	4.90 (1.08)	70,5	< 0.01
TCF	4.84 (0.93)	3.88 (0.79)	101.9	< 0.01
Transparency	4.79 (1.17)	3.20 (1.27)	123.0	< 0.01

The results are in line with the findings from the survey among the representatives of large organisations. The NTCA account managers evaluate large organisations that participate in the CCP differently from non-participants on all three constructs. CCP participants are perceived to have higher quality *TCFs* and to be more *transparent*. The account managers also perceive that they have better *working relationships* with participating large organisations than with non-participants.

Differences Related to the Intensity and Duration of Participation in the CCP

In the previous paragraphs, we examined the differences in *organisational characteristics*, *performance criteria*, and motivation between participating and non-participating large organisations. Not only are the *performance criteria* and the motivation for participation important factors in terms of the decision to participate, it is expected that they can be (further) influenced by intensity and *duration of participation*. CCP participation is expected to improve the *performance criteria* (i.e. the *working relationship*, the quality of the *TCF*, and the degree of *transparency*) of large organisations. Furthermore, CCP participation might also influence the *motivational factors*, especially those related to the direct benefits that are expected from participating, i.e. increased *certainty* and reduced *compliance costs*. In order to examine these dynamics of CCP participation, we performed additional analysis of the relationships between the intensity and *duration of participation* in the CCP and the *performance criteria* and *motivational factors within the group of CCP participants*.

The organisations in the CCP had, on average, participated in it for about four years. Only four organisations had entered the CCP in the year preceding the survey, while six organisations had been in it for eight years (see Table 5). Table 5 shows the *number of preliminary consultations* and the *number of contacts about fiscal control* for participating organisations.

Table 5. Descriptives of intensity and duration of participation for CCP participants

Number of preliminary consultations		**Number of contacts about fiscal control**		**Number of years in the CCP**	
0	7	**0**	2	**≤1**	4
1	15	**1**	9	**2**	19
2	19	**2**	24	**3**	25
3	17	**3**	26	**4**	18
4	14	**4**	19	**5**	12
5	10	**5**	12	**6**	10
>5	20	**>5**	10	**7**	8
				8	6
Total	**102**		**102**		**102**

We also calculated the correlations between the *number of preliminary consultations* and the *number of contacts about fiscal control* and the duration of CCP participation. The results show that the *number of preliminary consultations* and the *number of contacts about fiscal control* are positively and significantly associated (r=.33, p<.01). The duration of CCP participation is not significantly associated with the *number of preliminary consultations* or with the *number of contacts about fiscal control*.

We used linear regression analyses to analyse the relationships between the intensity and the *duration of participation* in the CCP and the *performance criteria* and *motivational factors*. In these analyses, we controlled for three *organisational characteristics* of the large organisations in order to rule out the possibility that these were the drivers of any effects we might find: the fiscal complexity of the organisation, the difference between for-profit and not-for-profit organisations, and the size of the organisation measured in annual turnover. The results are presented in Table 6 (*performance criteria*) and Table 7 (*motivational factors*).

When, during the period of CCP participation, the large organisations and the NTCA had more intensive contact in the form of preliminary consultations, the *working relationships* were evaluated more positively by the representatives of the large organisations (β=.22, p=.05). We find a marginally significant relationship between the *number of contacts about fiscal control* and the *working relationship* (β=.20, p=.06). When assessing the other two *performance criteria* (i.e. the quality of the *TCF* and the degree of *transparency*), we only find a marginally significant relationship between the *number of contacts about fiscal control* and *transparency* (β=.20, p=.06).

Table 6. Regression analyses of the performance criteria for the group of CCP participants as reported by contact persons at the large organisations (n=102)

	Working relationship		**TCF**		**Transparency**	
	Beta	*p*	*Beta*	*p*	*Beta*	*p*
Complexity	-.02	.84	-.04	.73	-.18	.12
Not-for-profit	-.19	.09	-.03	.77	-.28	.02
Size	.02	.82	-.19	.09	-.05	.68
Preliminary consultations	.22	.05	.12	.29	.16	.15
Contacts about fiscal control	.20	.06	.14	.21	.20	.06
Years in the CCP	-.15	.12	-.23	.03	-.10	.31
F	*3,13***		*1,85†*		*2,48**	
adj. R2	*.11*		*.05*		*.08*	

*†=two-tailed p<.10, *=two-tailed p<.05, **two-tailed p=<.01*

The regression model with the quality of the *TCF* as the dependent variable is only marginally significant. Interestingly, large organisations that had been in the CCP for a longer period were less positive about the quality of their *TCFs* than those who had participated in it for fewer years (β=-.23, p=.03). It might be that large organisations improve the quality of their *TCFs* in order to be able to participate and pay less attention to them after that. We also find negative but non-significant coefficients for the relationships between the duration of CCP participation and the quality of the *working relationship* and the level of *transparency*.

The regression model for the *need for certainty* is significant. There is one marginally significant predictor in this model, namely the *number of contacts about fiscal control* (β=.20, p=.06). The causal direction of this association is not clear; a higher *need for certainty* could motivate organisations to have contact with the NTCA about their fiscal control, but it could also be that contact about fiscal control makes organisations more aware of the relevance of fiscal control and that this increases the *need for certainty*.

The regression model with *compliance costs* as the dependent variable is also significant. A higher number of preliminary consultations is negatively and significantly related to the perceived *compliance costs* of the participating large organisations (β=-.25, p=.03). It seems that more frequent preliminary consultations with the NTCA help to reduce an organisation's *compliance costs*. The *number of contacts about fiscal control* and the *duration of participation* are not significantly related to the perceived costs of *compliance*.

Table 7. Regression analyses of the motivational factors for the group of CCP participants as reported by contact persons at the large organisations (n=102)

	Need for certainty		**Perceived certainty**		**Compliance costs**		**Importance of compliance**	
	Beta	*p*	*Beta*	*p*	*Beta*	*p*	*Beta*	*p*
Complexity	-.25	.03	-.04	.74	-.16	.16	.07	.54
Not-for-profit	-.12	.29	-.16	.18	.19	.11	-.14	.22
Size	.12	.28	.12	.27	.16	.14	.12	.29
Preliminary consultations	.03	.76	-.03	.77	-.25	.03	.18	.11
Contacts about fiscal control	.20	.06	.10	.38	.13	.23	-.02	.89
Years in the CCP	-.10	.23	.04	.69	.09	.37	.07	.47
F	*2,72**		*0,81*		*2,26**		*1,56*	
adj. R2	*.09*		*-.01*		*.07*		*.03*	

*†=two-tailed p<.10, *=two-tailed p<.05, **two-tailed p=<.01*

The regression models with perceived *certainty* and the importance of *compliance* as the dependent variables are not significant. Apparently, the degree of perceived *certainty* and importance attached to *compliance* are not dependent on the intensity and duration of CCP participation. Taken together, these results suggest that the *motivational factors* of CCP participants are not strongly affected by the intensity of the contacts and duration of CCP participation.

With regard to the *performance criteria*, we also performed a regression analysis using the perceptions of the NTCA account managers as dependent variables. The results are presented in Table 8.

The results are quite similar to those based on the responses of the representatives of the large organisations. As with those results, we find that the *number of contacts about fiscal control* is (marginally) significantly related to the quality of the *working relationship* (β=.18, p=.09) and the degree of *transparency* (β=.29, p=.00) but not to the quality of the *TCF*. In contrast to those results, we find no relationship between the *number of preliminary consultations* and the quality of the *working relationship*. This might reflect that preliminary consultations are more important for the large organisation than for the NTCA. Like the results of the representatives of the large organisations, these results show that perceived quality of the *TCF* is lower when an organisation has participated in the CCP for longer (β=.-22, p=.03). When considering the perceptions of the NTCA account managers, we also find a negative relationship between the number of years in the CCP and the *working relationship* (β=.-22, p=.03) and a marginally significant relationship, which is also negative, between the duration of CCP participation and the level of *transparency* (β=.-18, p=.06).

Table 8. Regression analyses of the performance criteria for the group of CCP participants as reported by the account managers of the NTCA (n=102)

	Working relationship		**TCF**		**Transparency**	
	Beta	*p*	*Beta*	*p*	*Beta*	*p*
Complexity	-.05	.67	-.13	.25	-.05	.63
Not-for-profit	.10	.38	-.11	.34	.01	.95
Size	.13	.23	.23	.03	.22	.03
Preliminary consultations	-.02	.84	-.16	.13	.00	.99
Contacts about fiscal control	.18	.09	.16	.12	.29	.00
Years in the CCP	-.22	.03	-.22	.03	-.18	.06
F	*2,91**		*3,14***		*5,02***	
adj. R2	*.10*		*.11*		*.19*	

*†=two-tailed p<.10, *=two-tailed p<.05, **two-tailed p=<.01*

5. CONCLUSIONS AND DISCUSSION

We used data from a survey conducted among representatives of large taxpayers and a survey conducted among NTCA account managers to examine whether large organisations in the Netherlands that participate in the CCP differ from large organisations that do not in respect of their *organisational characteristics*, *performance criteria*, and *motivational factors*. To figure out whether differences emerge because of (self-)selection or as a consequence of actual participation in the CCP (or both), we also examine whether, within the group of participating organisations, differences can be linked to the intensity and the *duration of participation*.

As expected, with regard to *organisational characteristics,* we find that larger (both in terms of yearly turnover and number of employees, but not in terms of fiscal complexity, number of establishments, and whether or not the organisation is listed on the stock exchange) organisations are more likely to participate in a CCP. This could suggest that CCP participation is more feasible or beneficial for the larger organisations within the population. Changes in the Dutch Corporate Governance Code have compelled larger organisations to invest in their internal control systems for purposes other than tax (Stevens et al., 2012). Therefore, the (additional) investments that they have to make in their *TCFs* and in the intensification of their contact with the tax authority in order to participate in the CCP are relatively easier to realise. We find no difference in participation rates between for-profit and not-for-profit organisations. In many countries, CCP participation is limited to for-profit organisations. Our results indicate that when participation is possible, it can also be interesting and feasible for not-for-profit organisations. It is not explicitly clear whether other countries also allow not-for-profit organisations to participate in their CCPs, but the literature suggests that they do not. Based on our findings, tax authorities might reconsider the exclusion of not-for-profit organisations. The reasons for allowing or not allowing large not-for-profit organisations to participate in the CCP, and the possible benefits for tax authorities and participating organisations are interesting topics for future studies.

With regard to the *performance criteria*, we find that participating organisations report having better quality *TCFs*, better quality *working relationships* with the NTCA, and higher levels of *transparency*. Analyses of the data obtained from the survey carried out among NTCA account managers confirm these results. These results are in line with the way that the CCP is expected to function, as described in the documents and guidelines of both the NTCA (2013) and the OECD (2016). However, as we will discuss later, these findings could also mean that CCP participants and non-participants already differed at the time of entry into the programme, or that they changed because of and during participation, or both.

Regarding the *motivational factors*, we find that participating organisations have greater need for tax *certainty* than non-participating organisations. However, our results show that participating and non-participating organisations do not differ in respect of their perceived *compliance costs* or the importance that they attach to *tax compliance*. This suggests that the dominant motive for CCP participation is the *need for certainty* about the tax position and not a possible reduction of *compliance costs* or the wish or need to be (more) tax compliant. This acknowledges the importance of tax *certainty* as a driver for CCP participation (cf. Beck & Lisowsky, 2014; De Widt et al., 2019; OECD, 2013; 2016).

We conclude that the organisations that enter the CCP are the larger organisations from the population that are able to meet the *performance criteria* of having a good *TCF*, being *transparent* about tax issues, and maintaining a good *working relationship* with the tax authority, and that have a relatively high *need for certainty* about the tax position.

An important question regarding the differences between participating and non-participating organisations is whether these differences emerge because of selection by the tax authorities or the organisation (self-selection), or as a consequence of actual participation in the CCP (or both). We therefore examined whether any differences within the group of participating organisations can be linked to the intensity and the *duration of participation*.

With regard to the *performance criteria*, we find (some partly marginally significant) evidence that a more intensive relationship is associated with a better *working relationship* and more *transparency*, but not with the quality of the *TCF*. It thus seems that a beneficial cooperative relationship can (further) develop when parties invest in their contacts. It is possible that the quality of the *TCF* is a hard criterion for entry and, therefore, does not (have to) improve. It could also be that the NTCA tailors the number and intensity of the contacts about fiscal control to specific organisations so that all organisations' *TCFs* reach the required level of quality in a short time. Another explanation could be that organisations with lower quality *TCFs* do not opt to participate in the CCP because, for instance, they do not have the means to or do not want to invest in improving their *TCFs*.

We find that the *duration of participation* in the CCP is negatively related to the quality of the *TCF* and also, to some extent, to the quality of the *working relationship*. A possible explanation for these negative effects of the *duration of participation* is that, in order to enter the CCP, large organisations and the NTCA invest in their relationships, and the organisations' *TCFs* and *transparency*, as De Widt (2017) reports, but that their attention eventually wanes. On the taxpayer's part, being admitted into the programme could be perceived as a signal that no further improvement is necessary and, over time, a lack of attention could lead to a decline in the quality of the *TCF*. Meanwhile, the NTCA might shift its attention to other, higher risk taxpayers, something which, after all, should be one of the merits of the CCP (Majdanska & Leigh Pemberton, 2019). Previous studies suggest, however, that tax authorities do not succeed in shifting resources because the existence of a CCP forces them to devote a lot of their attention to (potential) participants (De Widt et al., 2019; De Widt & Oats, 2017). Another explanation is that we pick up some kind of a cohort effect, whereby the organisations that joined in the earlier days of the CCP differ from those who joined later. Since we have no (longitudinal) data on criteria for participating in the CCP, it is hard to interpret these findings and draw conclusions. Future research is needed to examine the possible explanations for these findings, and to map the dynamics and possible changes in performance during CCP participation.

With regard to the *motivational factors*, a more intensive relationship is not associated with *perceived certainty about the tax position* and the importance that organisations attach to *compliance*. We do find that a more intensive relationship is associated with lower perceived *compliance costs*. Lower *compliance* costs are important for large taxpayers (Majdanska & Leigh Pemberton, 2019; OECD, 2008). The effect of the number of preliminary consultations on *compliance costs* is likely to be because post-filing audit time is shorter (cf. De Simone et al., 2013; Ventry Jr., 2008) and there is less need to invest in knowledge (e.g. through hiring external advisors) since the position has been approved up front by the tax authority.

We find that the *duration of participation* in the CCP is not related to any of the *motivational factors*. This might suggest that the benefits of participation are received from the moment of entry and the motivation to participate does not change over time. This is in line with Enachescu et al. (2019), who also reported that perceptions of CCP participation remained invariant over time.

The present study has some limitations which mean that the findings should be interpreted with some care. First, our study is based on cross-sectional data and therefore produces associative rather than causal results. Second, we presented the choice to participate as being a large organisation's decision provided it meets certain criteria laid down by the tax authority. However, in practice, it might also be that tax authorities actively approach certain large organisations with a participation request. This could mean that motivation is a less important factor than we assumed and might explain why we do not find strong differences between CCP participants and non-participants in respect of the *motivational factors*. Third, we differentiated between participating and non-participating organisations based on the conclusion of a covenant. However, it could be that some organisations are working, together with the tax authorities, to develop a covenant and are therefore operating in an arrangement that is along the lines of the CCP. It is also possible that some organisations are, perhaps for legal or cultural reasons (cf. De Widt, 2017), unable to conclude a covenant but are also working together with the tax authorities in an arrangement which is along the lines of the CCP. This could mean that we underestimate the differences between those in cooperative relationships and those not in cooperative relationships when using formal CCP participation as a criterion. Fourth, our study concerns only one country and this raises the question of external validity with regard to other countries. Although the Netherlands has played a pioneering role in shaping thoughts about CCPs internationally (e.g. by helping other countries and sponsoring the OECD's 2013 report on cooperative compliance), it still is a unique setting. CCPs in different countries share a lot of similarities but also differ in important aspects (see Björklund Larsen et al., 2018; De Widt et al., 2019; De Widt & Oats, 2017; Holmes, 2010; Nolan & Ng, 2011). On the other hand, there is little reason to expect that the key dynamics will be very different in other countries.

CCPs commonly balance the interests of large (corporate) taxpayers and tax authorities by providing *certainty* in exchange for *transparency*. The only way to find out whether the presented results are also valid for other countries is to conduct more comparable studies in different countries.

CCPs were introduced so that tax authorities and large organisations could move away from adversarial relationships and establish more collaborative relationships. It appears that such a cooperative way of working can indeed be realised with larger organisations that meet the criteria for participation and are in need of *certainty* about their tax positions. Large organisations may benefit from participating in an CCP by gaining more *certainty* about their tax positions, while the tax authority may benefit because the organisation is more *transparent*, and both parties may benefit because they have a better *working relationship*. We find some indications that cooperation within the CCP may recede over time. More (intensive) contact, however, seems to improve the relationship and to safeguard the benefits. It thus appears that both parties need to continuously invest time and effort in the programme in order to actively maintain the cooperative relationship.

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APPENDIX A

Questionnaire items, descriptive statistics, and reliability estimates for the respondents from the large taxpayers (n=394)

Variable	Items	M	SD
TCF	*In my organisation…*		
CR=.93	…the fiscal strategy is clear.	5.41	1.35
	…the fiscal targets are clear.	5.00	1.50
	…the fiscal targets are realistic.	5.03	1.47
	…the fiscal strategy contributes to compliance with tax laws and regulations.	5.19	1.64
	…unambiguous fiscal targets are derived from the fiscal strategy.	4.24	1.65
	…fiscal risks are identified.	5.22	1.34
	…the identification of fiscal risks is updated yearly.	3.80	1.87
	…it is stated what fiscal risks must be avoided.	5.35	1.30
	…processes are formally described (for example, in a manual).	4.30	1.91
	…the descriptions of processes include tax risks.	3.34	1.70
	…the descriptions of processes include (formal) internal controls.	4.00	1.83
	…fiscal risks are controlled using (formal) internal monitoring.	4.78	1.64
	…the correct operation of fiscal internal controls is subject to monitoring.	4.40	1.58
	…the monitoring of internal controls is described in a plan.	3.46	1.85
	…the monitoring of internal controls is performed by a separate internal audit department or an internal auditor.	2.95	2.06
	… fiscal performance indicators are derived from the fiscal targets.	3.31	1.69
	… fiscal performance indicators are unambiguous.	3.56	1.77
	…the realisation of fiscal targets is periodically reported to the board.	3.80	1.93
	…the roles and responsibilities of fiscal staff are clear.	4.94	1.65
	…the roles and responsibilities of fiscal staff are formally stated.	4.00	1.86
	…we invest in training and education to keep the knowledge of fiscal staff up to date.	4.66	1.76
	…employees in fiscal positions are competent enough to carry out these tasks.	5.48	1.29

Working relationship	The tax authority and my organisation try to cooperate as much as possible	5.12	1.36
CR = .89	The tax authority invests in the relationship with my organisation	4.80	1.50
	My organisation invests in the relationship with the tax authority	4.96	1.43
	The relationship between the tax authority and my organisation leaves much to be desired RECODED	5.65	1.27
	The tax authority and my organisation respect each other	5.74	1.08
Transparency	*My organisation actively shares…*		
CR = .91	...its tax strategy with the tax authority	4.24	1.87
	...all relevant tax risks with the tax authority	4.40	1.79
	...the findings from its own monitoring of internal control	3.90	1.86
Need for Certainty	It is of great importance for my organisation to get certainty about the tax position from the tax authority.	5.69	1.18
Perceived certainty about the tax position	My organisation feels certain about tax returns that are filed.	6.08	0.87
CR = .87	My organisation receives sufficient certainty from the tax authority regarding its tax position.	5.47	1.25
	The handling of tax returns provides no surprises for my organisation.	5.91	0.99
	My organisation knows where it stands with regard to fiscal matters.	5.79	1.02
Compliance costs	Tax matters are easy to deal with RECODED	3.95	1.42
CR = .68	It is well manageable to comply with all tax obligations RECODED	3.11	1.43
	My organisation is seriously disturbed by administrative burdens related to fiscal matters	3.59	1.49

Importance of Tax Compliance	*How important do you think it is that the tax office…*		
CR=.93	…receives your organisation's tax returns on time?	6.22	1.06
	…receives complete and correct tax returns from your organisation?	6.41	0.94
	…receives timely payments from your organisation?	6.25	1.11
Notes: *All items were measured on a seven-point scale (1=completely disagree to 7=completely agree)*			
All translations from Dutch by the authors			
CR=Composite Reliability, M=Mean, SD=Standard Deviation			

APPENDIX B

Questionnaire items, descriptive statistics, and reliability estimates for the account managers of the NTCA (n=394)

Variable	**Items**	**M**	**SD**
TCF	The fiscal internal control of the organisation detects the fiscal risks timely.	4.22	0.98
CR=.95	The fiscal internal control of the organisation mitigates the relevant tax risks.	4.23	0.98
	The organisation determines with internal monitoring the adequate functioning of the internal control measures.	4.04	1.02
	The organisation determines with internal monitoring the completeness of the internal control measures.	4.02	1.00
Working relationship	The organisation and the tax authority try to cooperate as much as possible	4.86	1.40
CR = .88	The tax authority invests in the relationship with the organisation	5.13	1.38
	The organisation invests in the relationship with the tax authority	4.69	1.47
	The relationship between the organisation and the tax authority leaves much to be desired RECODED	5.57	1.43
	The organisation and the tax authority respect each other	5.57	1.50
Transparency	*The organisation actively shares…*		
CR = .90	...its tax strategy with the tax authorities.	3.71	1.58
	...all relevant tax risks with the tax authorities.	3.77	1.57
	...the findings from its own monitoring of internal control.	3.36	1.55
Notes: *All items were measured on a seven-point scale (1=completely disagree to 7=completely agree)*			
All translations from Dutch by the authors			
CR=Composite Reliability, M=Mean, SD=Standard Deviation			

TRUST AND EFFICIENCY IN TAX ADMINISTRATION: THE SILENT ROLE OF POLICY-BASED LEGITIMATE EXPECTATION IN NIGERIA

Okanga Ogbu Okanga[1]

Abstract

The interaction between tax administration, discretion, and legitimate expectation has been widely explored. However, the subject has traditionally been approached from the perspective of legality and deeply focussed on how courts adjudicate cases bordering on the frustration of legitimate expectation by tax authorities. This is unsurprising, given that legitimate expectation evolved as a judicial remedy to check administrative unfairness and to provide certainty and trust in public administration. Cases show that this remedy is rarely accorded by the courts, which makes its efficiency questionable. Using Nigeria as a case study, this doctrinal paper explores the prospects of taking an alternative approach; one that focusses on what tax authorities, rather than the court, can and, perhaps should, do when confronted with claims of legitimate expectation, and how what they do potentially impacts public trust in the tax system. The concept of "trust" has played a useful role in shaping the jurisprudence of legitimate expectation. Some authors, likewise, advocate trust as the core underlying principle or justification for the protection of legitimate expectation. It is, however, the view of this author that, regarding taxation especially, adjudication is not a plausible way by which to engender trust between taxpayer and tax authority. Rather, only an approach that sees the tax authority leading positively on claims of legitimate expectation can engender trust. This approach will be more successful at making the taxpaying public trust the tax authority, since trust is more likely to derive from a symbiotic interaction between interested parties than through the actions of an intervener.

Keywords: Tax Policy, Tax Administration, Legitimate Expectation, Tax Certainty, Trust

1. INTRODUCTION

This paper examines whether there are policy reasons why the Nigerian tax authority should uphold, respect, or observe the legitimate expectations of taxpayers that arise in the course of tax administration, or that result from the exercise of discretion by the tax authority. Nigerian tax laws confer enormous discretion on the tax authority, which means the tax authority may choose, in particular circumstances, how to act or to exercise its powers. How the tax authority acts in a given case may give rise to expectations on the part of taxpayers. The taxpayer becomes disillusioned if the tax authority reverses its position on a matter. Not only does such resilement undermine the trust that should exist between the tax authority and the taxpayer, it can also expose the taxpayer to financial loss. Ordinarily, taxpayers are entitled to seek judicial review for the remedy of legitimate expectations where they feel that the tax authority has acted "unfairly." However, the legal doctrine of legitimate expectations does not provide significant assistance to taxpayers in such circumstances. The author proposes that tax authorities should, nevertheless, use their discretion to honour such expectations—not because there is a legal

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obligation to do so, but because it is conducive to increasing trust and fostering administrability. The ultimate virtue of the proposal is that taxpayers are given legal certainty as to when they can trust that their tax authority will respect previous commitments; this approach simultaneously results in administrative benefits for the tax authority.

2. DISCRETION IN NIGERIAN TAX ADMINISTRATION[2]

Like many socio-legal concepts, the term "discretion" perhaps defies precise definition. However, I attempt here to highlight a few authorities that bear out its use in this paper. Professor Hart observes that:

> it seems to me then that discretion occupies an intermediate place between choices dictated by purely personal or momentary whim and those which are made to give effect to clear methods of reaching clear aims or to conform to rules whose application to the particular case is obvious (Hart, 2013, p. 658).

He also asserts that:

> When we are considering the use of discretion in the Law, we are considering its use by officials who are holding a responsible public office. It is therefore understood that if what officials are to do is not rigidly determined by specific rules but a choice is left to them, they will choose responsibly having regard to their office and not indulge fancy or mere whim, though it may of course be that the system fails to provide a remedy if they do indulge their whim. The position may perhaps be clarified by distinguishing between the following pair of expressions: (1) the expression "a discretion," which means the authority to choose given on the understanding that the person so authorized will exercise discretion in his choice; and (2) the expression "discretion", which means a certain kind of wisdom or deliberation guiding choice (Hart, 2013, pp. 657-658).

The Nigerian Supreme Court has defined "discretion", in its general usage, as "that freedom or power to decide what should be done in a particular situation" (*Akinyemi v Odu'a Investment Co. Ltd*, 2012, 240). The same court has also defined it as the "equitable decision of what is just and proper under the circumstance or a liberty or privilege to decide and act in accordance with what is fair and equitable under the peculiar case guided by the principles of law" (*Artra Ind. Nig. Ltd v NBCI,* 1998, 35, paras B-D; *Ero v Ero,* 2018; *Sumaila v State*, 2012). It seems, from these statements, that the central element of discretion is "choice" (Rosenberg, 1971) which, in public law, entails the choice to exercise public authority one way or another, largely unhindered by external intervention or by the strictness of rules, yet characterised by wisdom and conscience (*Achie v Ebenighe,* 2013; *Iwuji v Federal Commissioner for Establishment,* 1985). Discretion is an endowment of Nigerian tax administration. Tax administration involves the assessment, collection, and accounting of all forms of taxes, as well as the implementation of tax laws and government policy guidelines on tax administration (Aniyie, 2012). Tax administration is one of the three components of the Nigerian tax system, the others being tax

[2] Throughout this paper, the author uses the term "discretion" broadly to refer to other terms such as promise, concession, guidance, ruling, and representation. I use these terms to reflect any advice, information, guideline, position statement, etc. issued or expressed by the tax authority to a taxpayer/taxpayers either to enable their understanding of and compliance with tax law or to convey how the tax authority would treat any matter of fact or law in relation to the payment of tax by the taxpayer. I also use the terms "tax authority" and "the Revenue" interchangeably to refer to the government body that administers tax law.

policy and tax legislation (Aniyie, 2012). Discretionary powers accorded by tax legislation enable tax authorities to make flexible decisions that advance the administration of tax laws. Discretion is an integral part of public administration globally. In Nigeria, many, if not all, public authorities are conferred discretion—express or implied, broad or narrow—in the performance of their functions. In the context of tax administration, significant residual power is vested in the Federal Inland Revenue Service (FIRS) to exercise its discretion in managing Nigeria's tax system (see Federal Inland Revenue Service (Establishment) Act 2007, s. 25(1) [FIRS Act]).

Paragraph 8(1)(t) of the FIRS Act provides that the FIRS shall, in addition to its express functions, "carry out such other activities as are necessary or expedient for the full discharge of all or any of the functions under this Act."[3] The scope of the discretion conferred in this provision is not easily determinable, especially in the context of the broad language used. Functions regularly performed by the FIRS, such as the issuance of tax rulings, information circulars, and explanatory notes to taxpayers, are not expressly prescribed by statute.[4] Yet, legal authority to perform such functions can be linked to omnibus provisions such as the above. There are various other provisions that impliedly empower the FIRS to exercise discretion (Okoro, 2019). These include: discretion to assess a taxpayer not by their actual assessable profit, but by a fair and reasonable percentage of that profit (Companies Income Tax Act 1961, s. 30(1), (CITA); discretion on the selection of transfer pricing method (Transfer Pricing Regulations 2018, reg 5); and discretion to extend time for tax compliance (CITA, s. 59; Petroleum Profits Tax Act 2004, s. 34). In the latter case, the author argues that the extension of time also implies a waiver of the penalty that would have applied if time was not extended (Okoro, 2019). The FIRS is also empowered, *inter alia*, with discretion to reopen assessment, raise additional assessment (CITA, s. 66), and to levy tax by distress of goods (CITA, s. 33(1) and s. 86). The tax laws contain provisions that allow the tax authority to make adjustments as it deems fit for the purpose of protecting the revenue base from erosion (CITA, s. 13(2)(d) and s. 22, for instance).

There are various reasons why tax laws confer discretion on the tax authority. The nature of tax administration is such that, once the tax legislation has been enacted, the tax authority assumes responsibility for administering it in order to meet its intended effect. The administrators foster the practicability of the law by ensuring compliance (Olokooba, 2019). The provision of tax guidance, for instance—an aspect of discretion—is an integral part of this function. Guidance provides taxpayers with insights into relevant developments in tax and offers the interpretive position on how the tax authority will apply tax legislation, especially where the provision is unclear or where the tax authority has discretion to act one way or another. A taxpayer who is eager to avoid confrontation will willingly comply.

The sheer size and complexity of the tax *corpus juris* also necessitates the exercise of discretion. In a given tax system, governments levy different forms of taxes under different names. In some instances, taxpayers do not know when to pay, which mode of payment to use, who to pay, or how to ascertain whether the payment is a tax or something else (Olokooba, 2019). In some cases of ambiguity, clearly worded and easy to understand representations by public authorities will serve to guide an individual's actions and decisions (Schønberg, 2000).

[3] Subsection 8(2) of the FIRS Act further provides that "the Service may, from time to time, specify the form of returns, claims, statements and notices necessary for the due administration of the powers conferred on it by this Act."

[4] See, generally, FIRS (2020). See also FIRS (1993); FIRS (1998); FIRS (2010a); FIRS (2010b); FIRS (2018a); FIRS (2018b); FIRS (2012); FIRS (2019b); FIRS (2019a) etc.

The words of the U.K. Court of Appeal, per Moses LJ, in *Gaines-Cooper* (2010), usefully explain the importance of tax guidance specifically:

> The importance of the extent to which thousands of taxpayers may rely upon guidance, of great significance as to how they will manage their lives, cannot be doubted. It goes to the heart of the relationship between the Revenue and taxpayer. It is trite to recall that it is for the Revenue to determine the best way of facilitating collection of the tax it is under a statutory obligation to collect. But it should not be forgotten that the Revenue itself has long acknowledged that the best way is by encouraging co-operation between the Revenue and the public… Co-operation requires fair dealing by the Revenue, and frank and open dealing by the public. Of course the Revenue may refuse to give guidance and re-create a situation in which the taxpayers and their advisers are left to trawl through the authorities to find a case analogous to their own, or, if they are fortunate, a statement of principle applicable to their circumstances (*Gaines-Cooper*, 2010, para 12).

It is clear from this quote that guidance, in addition to facilitating the collection of tax, strengthens the relationship between the taxpayer and the tax authority, provided that both sides are dealing fairly. Guidance also provides assurance to taxpayers who are making important investment decisions. As far back as 1962, this point was stressed by the former U.S. Commissioner of the Service, Mortimer Caplin, who noted that "with complex tax laws and high tax rates, it is understandable why taxpayers frequently hesitate to move on important business transactions without some official assurance of the tax consequences" (Givati, 2019, p. 147).

Again, it is important to reiterate that the exercise of discretion in tax administration is necessitated by the very fact that statutory provisions cannot contemplate all circumstances (Abdulrazaq, 2016). This situation leaves gaps that administrative discretion attempts to fill. One scholar forcefully asserts that it is impossible to have a government of laws and not of men to the extent that public officers, such as tax authorities, exercise vast discretionary power, and that we cannot change this reality—the exercise of discretion by public officers—because we simply cannot have a government or legal system without a large amount of discretionary power (Davis, 1970). Thus, according to him, discretion, even unguided discretion, is an absolute necessity for every legal system (Davis, 1970). Unless the Act of Parliament were made with supernatural prescience, the enduring relevance of the exercise of discretion in tax administration cannot be over-emphasised. Therefore, the justification for discretion is often the need for individualised justice (Adedokun, 2017).

A peculiar factor that makes discretion indispensable in the tax system is the self-assessment regime. Nigeria is one of many countries that operate a self-assessment system of tax compliance. Under self-assessment, the taxpayer is granted the right, by law, to accurately compute their own tax liability, pay the tax due, and produce evidence of tax paid at the time of filing their tax return at the tax office on the due date (Appah & Nkwazema, 2014; Silvani & Baer, 1997). On the other hand, the tax authority is responsible for ensuring taxpayers' compliance with the tax law and administration process through compliance and enforcement activities that may include the application of statutorily prescribed sanctions (Silvani & Baer, 1997).

Self-assessment tax compliance in Nigeria is governed by the Tax Administration (Self-Assessment) Regulations 2011. Overall, these regulations seek to provide some guidance and introduce some level of consistency in the filing of self-assessment tax returns (Oyedele, 2012). It is implicit that an understanding of the requirements of the substantive tax legislation is a precursor to this do-it-yourself method, since a taxpayer who does not understand their tax liabilities would most likely not know what to file. Given that the tax rules are not always as simple as breaking an eggshell, it is sacrosanct that the taxpayer receives some form of external assistance on how to efficiently make computations. While some taxpayers can afford the services of competent tax advisors, not all taxpayers can. Moreover, even expert tax advisors cannot always tell with certainty how the tax authority would apply a specific tax provision, especially one that is ambiguous. The absence of guidance may also circumvent the ability of the taxpayer to plan their affairs prudently, even in the most genuine of cases. These factors further underline the importance of tax guidance.[5]

Again, guidance enables taxpayers to better apply filing rules, which reduces the need for the Revenue to conduct intense tax audits. This allows the Revenue to channel limited resources to matters that require closer attention. Guidance can also help to ensure a uniform application of tax law to taxpayers, which engenders equity among similarly placed taxpayers. When guidance is publicly provided, all taxpayers can more readily ascertain the position of the tax authority on specific matters, which reduces the likelihood of similarly placed taxpayers being treated differently by individual tax officers.

Notwithstanding these positives, it is evident that the exercise of discretion by tax authorities also presents problems. Among these are the questions of whether and when the tax authority can or should change a position that it has conveyed to a taxpayer and which the taxpayer has acted on. Incidentally, in Nigeria, a taxpayer cannot confidently rely on FIRS guidance to determine their tax position because the FIRS may change its position after previously providing guidance or exercising it discretion one way or another. The current policy seems to be that the FIRS does not consider itself obligated to abide by guidance provided to taxpayers. In any case, no hard law compels the FIRS to do so. This may, at least in theory, pose problems for taxpayers who rely on such guidance to make business decisions or otherwise arrange their affairs (Onyenkpa & Ayoola, 2014). What then is the fate of a taxpayer whose interest stands to be undermined by an abrupt FIRS resilement?

3. LEGITIMATE EXPECTATION

Under Nigeria's court system, a person can, generally, seek judicial review of a decision or action of an administrative body if such decision or action is deemed to unfairly prejudice that person (see *ACB Plc. v Nwaigwe,* 2011; *Bakare v Lagos State Civil Service Commission,* 1992; Constitution of the Federal Republic of Nigeria 1999, paras 6(6)(a) & (b); Federal High Court Rules, 2019, Ord 34; High Court of Lagos State Rules, 2019, Ord 44; *Military Governor of Imo State v Nwauwa,* 1997; Ogbuabor, 2012). Legitimate expectation is one of the remedies improvised by the courts to deal with such situations. Legitimate expectation is a shorthand for the public law principles that will, in some circumstances, place limitations on a public authority's ability to act inconsistently with a person's expectation as to how the authority would exercise its powers in a particular situation or case, where the expectation is reasonably based on a representation by, or consistent past practice of, the authority (Bates, 2011). In the context of taxation, the concept of legitimate expectation provides that, where a tax authority gives an opinion or clarification on a tax issue (either on its own or in response to a specific

[5] The self-assessment system is not without cost. It provides greater opportunities for tax avoidance and evasion, undermining the tax base and reducing government revenues (Tanzi & Shome, 1993, cited in Ansari & Sossin, 2017).

request by a taxpayer, with full disclosure of the facts) and the taxpayer has relied on the clarification, the tax authority should not retrospectively reverse its position (Onyenkpa & Ayoola, 2014). Legitimate expectation creates a basis upon which taxpayers can adopt and rely on official representations and patterned tax practices with the assurance (which is indeed the legitimate expectation) that the relevant tax body would maintain its expressed position or promise; or at least that the courts would intervene if the tax authority reneges (Okoro, 2019). The concept can be traced to the modest pronouncements of Lord Denning in the English case of *Schmidt & ors v Secretary of State for Home Affairs* (1969).[6] Since that case, the concept has been assimilated into the legal systems of many countries (Abbas, 2008; Groves & Weeks, 2017) and has been applied in various areas of law, including immigration and taxation (see *AG Hon Kong v NG Yuen Shiu*, 1983; *Council of Civil Service Unions & Ors v Minister for the Civil Service*, 1984; *Ex p Asif Mahmood Khan*, 1984; *Ex p Ruddock*, 1987; *ex parte MFK Underwriting Agents Ltd*, 1990; *Ex p Walker*, 2000; *Oloniluyi v Secretary of State for the Home Department*, 1989; *R v Ministry of Defence, R (Reprotech (Pebsham) Ltd) v East Sussex County Council*, 2003). In a legitimate expectation claim, the ingredients that courts typically look at are: (1) prior disclosure by the claimant; (2) a clear and unqualified representation; (3) communication to the claimant (or "class"); and (4) detrimental reliance by the claimant (Fordham, 2001; See *R v North and East Devon Health Authority, Ex parte Coughlan* [2000] 3 All ER 850; *United Policyholders Group and others v Attorney General of Trinidad and Tobago* [2016] UKPC 17, [2016] 1WLR 3383). Sometimes, even if those factors exist, which means there is a valid expectation, the claimant's case can only succeed if there is no overriding public interest (*Aozora v HMRC*, 2019; *Ex parte Coughlan* 2000; *Hely-Hutchinson v HMRC*, 2017; *United Policyholders*, 2000).

Legitimate expectation became a part of Nigerian law through the case of *Stitch v AG Federation* (1986), where the Supreme Court of Nigeria bound the Nigerian government to representations made to the appellant in respect of the payment of import duty after the government reneged on its earlier position to the detriment of the appellant. Subsequent Nigerian cases relating to legitimate expectation have been tax cases (*Federal Board of Inland Revenue v Halliburton*, 2014; *Transocean v FIRS*, 2017; *VF Worldwide Holdings Ltd v FIRS*, 2016). Incidentally, each of those cases was decided against the taxpayer. In each case, the court found that the taxpayer failed to establish the existence of one or more of the relevant elements of legitimate expectation. This has led some to conclude that judicial attitude to legitimate expectation in tax matters in Nigeria is not very accommodating (Ndibe, 2018; Okoro, 2019; Olajide & Salu, 2015; *Saipem v FIRS*, 2018). This very limited success in legitimate expectation litigation is common to other jurisdictions. In the U.K., for instance, it is fairly difficult to find cases where substantive legitimate expectations arguments have succeeded and more difficult still to find cases where the courts have actually directed the public authority concerned to uphold the expectation (Tomlinson, 2017b). Empirical conclusions reached by Professor Robert Thomas, from England, support this view, highlighting that, in quantitative terms, the number of successful legitimate expectation cases is small; there are just five (*Coughlan*, 2000; *ex parte Khan*, 1984; Thomas, 2017, pp. 62-63; *R (HSMP Forum) v Secretary of State for the Home Department*, 2008; *R v (Luton Borough Council and others) v Secretary of State for Education*, 2011; *R (Bibi) v Newham London Borough Council*, 2002). Even more compellingly, in another common law jurisdiction, India, a survey of the Supreme Court decisions on substantive legitimate expectation shows that of 34 cases litigated between 1992 and 2012, none was successful (Chandrachud, 2017). Suffice

[6] The protection of legitimate expectations is, however, said to originate from the German public law principle of *Vertrauensschutz*, which seeks to ensure that "everyone who trusts the legality of a public administrative decision should be protected". See Schroeder (2005).

it to say that, in Nigeria, *Stitch v Attorney-General* remains the only successful case. The factors/arguments that usually militate against judicial protection of legitimate expectation—especially substantive legitimate expectation—include that the principle undermines the public interest (perhaps by risking a reduction of the tax base), contravenes the fundamental principles, such as the rule of law, statutory limitation or *ultra vires*,[7] as well as the cardinal principle of separation of powers (see Brooks, 2011; Forsyth, 2011; Jowell, 2000; Maluleke, 2011; Stewart, 2000; Tomlinson, 2017b; see the Nigerian cases of *AG Abia State v AG Federation*, 2003; *Ahmad v Sokoto State House of Assembly*, 2002), and fetters administrative discretion (Varuhas, 2017). Judicial attitude to legitimate expectation in Nigeria is, perhaps, summed up by the pronouncement of Saidu J of the Federal High Court in *Saipem v Federal Inland Revenue Service* (2014): "It is not the issue of resiling of earlier statement [sic] that is important now. What is important are the various provisions of law guiding payment of tax in Nigeria".

With what appears to be conscious judicial restraint towards the protection of legitimate expectation,[8] it seems that the fate of the taxpayer rests in the hands of the tax authority and that only a favourable administrative policy towards legitimate expectation can preserve the interests of the taxpayer when such claims arise. Short of a favourable policy of adherence to legitimate expectation, the tax authority has the carte blanche (subject to limits of legality) to waver as it deems fit in dealing with taxpayers. Put another way, the tax authority may dishonour its promises, provided that it does not appear to contravene the express provisions of the relevant tax statute in so doing. This may, of course, result in graver uncertainty, and in eroded public trust and confidence in tax administration.

4. JUSTIFYING THE PROTECTION OF TAX-BASED LEGITIMATE EXPECTATION

It seems evident from available English case law that the two most prominent explanations for why the courts protect legitimate expectation is the importance of ensuring "fairness" and to prevent decision-makers from "abusing their power" (Reynolds, 2010, p. 331). Thus, there are various cases where the courts' approaches to legitimate expectation were concerned with the "duty to act fairly" or where fairness has either expressly or implicitly been considered to be central to the doctrine (see, for instance, *Attorney-General of Hong Kong v NG Yuen Shiu*, 1983; *R v Inland Revenue Commissioners, ex parte MFK Underwriting Agents Ltd*, 1990, 1570; *R* v *Minister for the Civil Service ex parte CCSU,* 1985, 415; *Stitch,* 1986). Likewise, there are cases where the courts have grounded the protection of legitimate expectation on the need to

[7] See, for instance, *FBIR v Halliburton* (2016), where the court asserted the supremacy of the tax statute over FIRS discretion. *Ultra vires* and statutory supremacy are well recognised in Nigerian jurisprudence. See *Menakaya v Menakaya* (2001)*; Psychiatric Hospital Management Board v Ejitagha* (2000).

[8] While highlighting apparent judicial restraint and doctrinal obstacles as strong reasons for the limited success of legitimate expectation cases, it is also important to acknowledge that legitimate expectation cases do fail on their facts. That is to say that some legitimate expectation cases fail, not because the court is not willing, but because the facts established by the plaintiffs simply do not meet the criteria for successful outcomes. Cases are often unsuccessful because the plaintiff fails to demonstrate the existence of one or more of the ingredients of legitimate expectation: that the representation was clear and unambiguous (*Saipem v FIRS,* 2018); that the plaintiff relied on the representation (*Saipem v FIRS,* 2018); and that the plaintiff made necessary factual disclosures to the authority about the transactions that elicited the representation (*Halliburton, Transocean Drilling, VF Worldwide Holdings*). What is common to these cases—a source of optimism—is that the way in which the court went about dissecting the facts of each case suggests that the court was somewhat inclined to consider each on its merit rather than completely dismiss them on grounds of legality. From an administrative perspective, it is also possible—this is merely speculative—that some of the more meritorious legitimate expectation cases do get resolved amicably between taxpayer and tax authority. One cannot rule out this possibility.

prevent abuse of power by the public authority. In these cases, what the courts seem to be saying is that "we will intervene to protect an expectation in order to preclude public authorities from abusing their powers when dealing with members of the public" (see *R* v *Education Secretary ex parte Begbie,* 2000; *R (Bancoult) v Secretary of State for Foreign and Commonwealth Affairs* (2), 2008; *R* v *Education Secretary ex parte Begbie,* 2000; *R v IRC ex parte Preston,* 1985). There is also judicial support for the proposition that legitimate expectation is predicated on the rule of law (see *Rainbow Insurance Company Ltd v Financial Services Commission,* 2015, 51). Judicial concern for the dignity and autonomy of individuals in their dealings with administrative decision-makers evokes the rule of law, as "a principle of institutional morality" (Daly, 2017, p. 107; Jowell, 2015). In legitimate expectation cases where the rule of law is invoked, courts are typically concerned by the effect on individuals of promises being broken or settled expectations being disrupted (Daly, 2017).[9]

In Nigeria, the few decided cases (*Stitch,* for instance) evidence the Nigerian Supreme Court's endorsement of the principles of fairness and non-abuse of power, as well as good administration, as the "moral compass" of legitimate expectation. Instructively, the Nigerian Supreme Court has also endorsed confidence and trust as justifications for the protection of legitimate expectation.

> The rationale which I gather from these decided cases is that a Government in which the citizen is entitled to repose <u>confidence and trust</u>, is not expected to act in breach of the faith which it owes to the citizen, and if it does so act, the courts will intervene. The right of the appellant in this case to be issued an import licence, on terms prescribed by the Minister on compliance with those terms, had vested. It was the right of the citizen which could not be ignored (*Stitch v AG Federation,* 1985, 1029, A-B).

Among scholars, there seems to be a lack of consensus on what *the* underlying basis for the protection of legitimate expectation should be; or indeed, whether there is a need to deliberate on such a basis at all (Tomlinson, 2017b). Various theories have been advanced to justify the protection of legitimate expectation. Proponents often lean on theories such as fairness,[10] trust (Reynolds, 2010), social confidence (Watson, 2010), good administration (Daly, 2017), legal certainty (Romano, 2002), and the rule of law (Daly, 2017). In addition, utilitarian arguments on the protection of legitimate expectation focus on the gains of protection vis-à-vis the ills of non-protection (Barak-Erez, 2005).

5. THE CONCEPT OF TRUST

Of the various theories offered as justification for the protection of legitimate expectation, one—Paul Reynolds's (2010) theory of trust—merits particular attention. Reynolds starts by criticising other justifications. He criticises the principles of fairness and abuse of power as being inadequate—although not irrelevant—to explain and guide the application of legitimate expectation (Reynolds, 2010). Reynolds advocates for the concept of "public trust" as the principle that both fits well with the doctrine and can provide guidance for its application. He asserts that the reason why it is unfair to breach a legitimate expectation is because this would

[9] Some critics, however, argue that it is hardly evident that protecting substantive legitimate expectations forms an essential ingredient of promoting the rule of law. See Groves (2008), cited in Chandrachud (2017).

[10] This has been the predominant theme in judicial authorities. As a concept, fairness is traceable to general principles of natural justice as postulated by thinkers like Thomas Aquinas, Immanuel Kant, and John Rawls.

breach the claimant's trust in the public authority, and so would be an abuse of power and contrary to good administration (Reynolds, 2010).

Like Reynolds, Watson (2010) views legitimate expectation from a sociolegal standpoint. The author believes that promises exist not just as statements but also as social conventions that carry with them a number of socially programmed assumptions. The foremost element of this social convention is an invitation to an individual to place their confidence in the promise maker. Thus, the promise exists as a recognised social convention of trust that is vital to avoid a society dominated by self-interest and duplicity. To break a promise is to directly interfere with the liberty of the person or persons who have relied on that promise. Thus, for Watson (2010), the enforcement of a legitimate expectation is the judicial protection of a moral obligation that the public authority has freely solicited.[11] Likewise, Ahmed and Perry (2014) state that there is a moral rule that requires promises to be kept. If a public body promises to follow a procedure or make a decision, it triggers the application of the promise-keeping rule, and that public body is, therefore, required to fulfil that promise (Ahmed & Perry, 2014). These views align with the view that "good government depends upon trust between the governed and the governor. Unless that trust is sustained and protected, officials will not be believed, and government becomes a choice between chaos and coercion" (Wade & Forsyth, 2009, as cited in Watson, 2010, p. 641). These views also find judicial support in Nigeria in *Stitch*, where the Supreme Court remarked that "the citizen is entitled to repose confidence and trust" in the government (*Stitch v AG Federation,* 1986, 1029, A-B).

Reynolds's (2010) theoretical postulation of a general public trust as the basis of legitimate expectations,[12] which, as noted, aligns with the views of Watson and Forsyth (2009, as cited in Watson, 2010), is meritorious, especially when one views the relationship between the tax authority and the taxpayer as one between a service provider and consumer, and considers the importance of trust in such a mutual relationship. Trust might even be adjudged the principle that provides the most plausible justification for legitimate expectation from a tax perspective. Trust appears, in that sense, to be a low-hanging fruit as far as the interest of the taxpayer is concerned, especially when compared with more demanding concepts like a "high degree of unfairness" or "unfairness amounting to an abuse of power" sometimes advocated by the courts (see *Aozora,* 2019; *Ex p. Unilever Plc,* 1996, 695a; *Hely-Hutchinson,* 2017, para 72; *R (Dixons Retail plc) v HMRC,* 2018, 2556, para 62). This is especially so if abuse of power is to be measured on the scale of the egregious conduct of the public authority in *Stitch*. Suffice it to say that a taxpayer's claim would be more feasible if the court views it from the angle that the tax authority's repudiation of a promise amounts to a betrayal of trust reposed in the tax authority rather than an abuse of power.

The postulations of Reynolds (2010) and Watson (2010) also appear to be in tune with the tax policy objective of certainty. By anchoring legitimate expectation on trust, the court would invariably be helping to entrench a more certain tax system. Be that as it may, it is my view

[11] Watson's (2010) priority is similar to that of Reynolds (2010), in that it seeks the protection of a moral code. For Reynolds (2010), that code is a general trust, while for Watson (2010), it is a morally binding promise. For both authors, damage is done to both the society and the public institution if public authorities do not keep their promises.

[12] Reynolds (2010) elaborates that "an example of trust informing the standard of review might be that where a promise is made to a large group of people whilst the court will appreciate that this promise is less intimate and contract-like than had the group been very small, it will go on to note that the overall connection between general public trust and good administration must not be forgotten… and that failing to protect the relevant expectation could cause serious injury to general public trust given the number of people involved, such that something beyond a light-touch review is called for" (p. 348).

that there are reasons why the concept of trust cannot work from a judicial perspective of legitimate expectation.[13] The one reason that is relevant to this paper is forum-related. It is doubtful that the court is the appropriate forum in which to foster or fine-tune public trust in administrative bodies. While trust is undoubtedly an important value, it is, perhaps, counterintuitive to suppose that trust in the Revenue, as a distinct entity, can somehow be fostered by the court through its cohesive powers rather than by the Revenue itself acting in a manner that would elicit or maintain trust. To illustrate, can A (the taxpayer) maintain trust in B (the tax authority) because of the actions of C (the court), especially at a point where B has broken its promise to A? I think it is logically coherent that it is only the actions of B that can reinstate or maintain the trust of A. The court binding the tax authority to a broken promise made to a taxpayer will not make the taxpayer trust the tax authority or the tax system. It might make the taxpayer trust in the court as a viable forum by which to seek redress, but that trust is reposed in the court, not the tax authority.

Despite the misgivings expressed above, it must be said that legitimate expectation has the capacity to engender trust in public administration if approached from a different perspective: a non-adjudicatory perspective. Put differently, it is plausible to explain legitimate expectation as an engenderer of trust between the taxpaying public and the tax authority if legitimate expectation is upheld by the tax authority rather than being enforced by the court. It is pertinent to note that while the doctrine of legitimate expectation lawfully allows tax authorities to renege on previous commitments—provided that no substantial unfairness is present—it does not mean that tax authorities *should* renege. The tax authority must be able to discern when it is overall more beneficial to honour a commitment than not. That in itself underscores judicious use of discretion.

It is important to iterate at this point that discussions on the subject have mainly focussed on judicial protection of legitimate expectation (see, for instance, Ahmed & Perry, 2014; Chandrachud, 2017; Groves, 2008; McHarg, 2017; Murcott, 2015; Varuhas, 2017; Wright, 1997). These discussions have mainly examined the legal possibility and parameters of enforcing tax-based legitimate expectation in court. This paper, at this point, aims to shift the conversation from the traditional approach that focusses on judicial protection to an approach that focusses on administrative adherence; that is, an approach that focusses on how and why a public body, particularly the Revenue, can observe or uphold the legitimate expectations that it creates.[14] I consider this discussion pertinent because, while the court has an important role to play in ensuring that the Revenue's commitments to taxpayers are honoured, the Revenue itself has a managerial responsibility to the tax system to try to honour those commitments. Some writers have suggested that the current situation, where the FIRS has severally expressed a view on a tax issue and subsequently reversed itself, might see the tax authority find itself in a position where its views on tax matters are considered irrelevant (Onyenkpa & Ayoola, 2014).

[13] One reason is that, contrary to Reynolds's (2010) views, the fact that a trust is breached may not always amount to abuse of power; nor would it always be unfair. That conclusion would depend on the circumstances in which the trust was breached and not just the fact that trust was breached.

[14] It is important to bear in mind that legitimate expectation is a preliminary fact that arises when the taxpayer places reliance on representation, assurance, promise, guidance, etc. emanating from the tax authority, and not necessarily when a case is subsequently brought to court for enforcement. See Watson (2010). It is also important to note that every case of legitimate expectation that goes to court is premised on a conflict between the tax authority and the taxpayer from a withdrawal by the tax authority of a benefit that the taxpayer expected to enjoy.

I address these concerns in the context of the overall tax policy framework of Nigeria.[15] I examine the concept of tax policy and some evaluative criteria of tax policy, such as fairness, certainty, and administrability. With reference to relevant aspects of Nigeria's tax policy framework, I discuss how taking an accommodating administrative approach to legitimate expectation dovetails with Nigeria's tax policy, and may engender trust and better benefit Nigeria than taking a dismissive or repudiatory approach.[16]

6. POLICY AND TAX POLICY

A "policy" is a "set of ideas or a plan of what to do in particular situations that has been agreed officially by a group of people, a business organization, a government or a political party" (see Woodford, 2003, p. 958). In legal parlance, it is "[t]he general principles by which a government is guided in its management of public affairs" (see Garner, 2004, p. 3674; *Ogundipe v Minister of FCT & ors,* 2014, paras B–D). A policy speaks to what a public authority plans to do at a given time (Weeks, 2017, p. 149). Drawing from these definitions, tax policy may be viewed as the general principles which guide the management of the tax system in a given state towards the attainment of that state's tax objectives. It has been observed that a "good tax policy" does not change during times of large budget deficits or healthy surpluses. Good tax systems can fall woefully short of creating adequate revenue during recessions and poor tax systems can raise plenty of money (but are often unsustainable) (Minnesota Center for Fiscal Excellence, n.d.). In addition, a country's tax regime is a key policy instrument that may negatively or positively influence investment (Organisation for Economic Co-operation and Development [OECD], 2013).

6.1 Evaluative Criteria of Tax Policy

There have been various theoretical expositions of what constitutes a good tax system or the yardsticks for evaluating a good tax system, starting from Adam Smith (1776).[17] In modern times, some frequently discussed models include the traditional tax policy criteria (equity, neutrality, and administrability),[18] as well as other relevant offshoots: simplicity, certainty, convenience of payment, information security, economic growth and efficiency, transparency and visibility, minimum tax gap, accountability to taxpayers, and appropriate government revenues (see Association of International Certified Professional Accountants, 2017). For some, equity (or fairness), economic efficiency, and administrative capacity are identified as

[15] It is important to note that tax policy is not only made through legislation. Tax policy is driven through various vehicles including tax treaties, tax regulations, court opinions, Revenue internal guidance, and private and public guidance or rulings, as discussed here. See Solomon (2013). In addition, "the tax administration… does play an important part in the development and amendment of tax policies, by requiring its Legal Department to closely monitor, analyse, and report on the positive or negative impact of tax policy and legislation on the operations of the tax administration, as well as to recommend changes" (Jacobs, 2013, p. 7).

[16] The search for justification for policy-based legitimate expectation in tax administration is also predicated on the concept of administrative justice. The administrative justice view is that, in order to foster a good administrative system, public authorities should adopt policies that promote a broad range of values, such as clarity, confidentiality, transparency, secrecy, fairness, efficiency, accountability, consistency, participation, openness, rationality, equity, and equal treatment, user-friendliness, accuracy, rationality, coherence, accessibility, etc. See, generally, Tomlinson (2017a).

[17] The four canons of taxation identified by Adam Smith (1776) are the: Canon of Equality; Canon of Certainty; Canon of Convenience; and Canon of Economy. Both the term "canon" and some of the specific canons have been redesigned by other scholars as the years have gone by. See, for instance, Alley & Bentley (2005), cited in Memon (2010).

[18] See, for instance, Brooks (2004); Christians (2018). See also Stokes & Wright (2013), pointing to a consensus among scholars that, as a basic criterion, a good tax system should be fair, efficient, and simple.

the three key principles that most tax scholars adjudge as the right normative criteria to guide society in achieving the desired distribution of costs and benefits through taxation (Christians, 2018).[19]

Nigeria, like other countries, operates a tax system that is guided by a set of identifiable evaluative policy criteria. These evaluative criteria can be found in a consolidated document, the National Tax Policy (NTP or "the Policy") (NTP, 2017). The NTP sets the agenda for the formulation and implementation of tax laws in Nigeria. The NTP directs that tax policies, laws, and administration shall promote the attainment of, *inter alia*, the ability of all taxable persons to declare their income honestly to appropriate and lawful agencies, and pay their tax promptly; ensuring that the rights of all taxable persons are recognised and protected; and eradicating corrupt practices and abuse of authority in the tax system (NTP, paras 1.3 (a), (d), and (e)). In addition, the NTP identifies the following factors as the Guiding Principles of Nigeria's Tax System: equity and fairness;[20] simplicity, certainty and clarity;[21] convenience;[22] low compliance cost;[23] low cost of administration;[24] flexibility;[25] and sustainability.[26] Accordingly, all existing and future taxes are expected to align with these "fundamental features".[27]

The policy criteria contained in the NTP are consistent with both the traditional and modern categorisations of tax policy criteria. I do not consider a discussion of all categories necessary for the purpose of this paper. Instead, I discuss only those that I consider to directly impact or be impacted by the revenue's adherence to legitimate expectation. The tax policy criteria that I discuss are certainty (with simplicity and clarity) and administrability.

6.1.1 Simplicity, certainty, and clarity

The NTP outlines the triplet of simplicity, certainty, and clarity as part of the guiding principles of the Nigerian tax system. It mandates that tax laws and administrative processes should be simple, clear, and easy to understand (NTP, 2017, para 2.1). Legislative clarity is important because it enables businesses to comply more easily with their better understood tax liabilities, which should reduce costly and time-consuming conflicts with the tax authority. Tax compliance should not require an excessive amount of company resource, which would divert energy from more productive and profitable business activities (U.K. Parliament, 2011).

[19] Professor Christians (2018) contends that a main challenge of the above framework is that it ignores institutions and decision-making processes as if they are irrelevant to the normative quality of the tax policies themselves.
[20] "Nigeria tax system should be fair and equitable devoid of discrimination. Taxpayers should be required to pay according to their ability" (NTP, 2017, para 2.1).
[21] "Tax laws and administrative processes should be simple, clear and easy to understand" (NTP, 2017, para 2.1).
[22] "The time and manner for the fulfilment of tax obligations shall take into account the convenience of taxpayers and avoid undue difficulties" (NTP, 2017, para 2.1).
[23] "The financial and economic cost of compliance to the taxpayer should be kept to the barest minimum" (NTP, 2017, para 2.1).
[24] "Tax Administration in Nigeria should be efficient and cost-effective in line with international best practices" (NTP, 2017, para 2.1).
[25] "Taxation should be flexible and dynamic to respond to changing circumstances in the economy in a manner that does not retard economic activities" (NTP, 2017, para 2.1).
[26] "The tax system should promote sustainable revenue, economic growth and development. There should be a synergy between tax policies and other economic policies of government" (NTP, 2017, para 2.1).
[27] The 2012 National Tax Policy specified as its underlying agenda that: "taxpayers should understand and trust the tax system, and this can only be achieved if Nigerian tax policy keeps all taxes simple, creates certainty through considerable restrictions on the need for discretionary judgments, and produces clarity by educating the public on the application of relevant tax laws. It is therefore imperative that the Nigerian Tax system should be simple (easy to understand by all), certain (its laws and administration must be consistent) and clear (stakeholders must understand the basis of its imposition)." See NTP (2012, para 1.8.1).

Simplifying the tax system will thus lead to a reduction in the costs of complying with tax obligations for taxpayers (Silvani & Baer, 1997).

The lack of clarity in tax legislation leaves gaps that sometimes only the provision of administrative guidance to taxpayers can fill. This is one of the core discretionary functions performed by the FIRS. By inference, providing guidance to taxpayers is a part of the FIRS's policy responsibilities, especially as the NTP mandates the FIRS to undertake tax awareness and taxpayer education duties (NTP, 2017, 3.3v). It is arguable that, by not honouring the legitimate expectation arising from its guidance, the FIRS not only breaches the trust of the taxpayer but also deviates from one of its NTP responsibilities. This also stokes uncertainty in the tax system.

Uncertain tax consequences deter some taxpayers from carrying out contemplated transactions, while others who do carry out the transactions bear the risk of potential loss (Givati, 2009). Since investors are concerned with the certainty of the tax consequences of their proposed transactions and trades (Maluleke, 2011), unrevoked tax guidance provides the kind of certainty and consistency that is encouraging to investors. Where the tax authority is prone to withdrawing or modifying its tax rulings, or dishonouring them even to the detriment of the taxpayer, the air of certainty disappears (Maluleke, 2011).

Tax certainty has been defined as the creation and maintenance of stable and regulatory policy frameworks for tax administration, taxpayers, and tax compliance (Monkam et al., 2017). Certainty is one of the hallmarks of a good tax system as it helps to stabilise the expectations of both taxpayers and governments (Monkam et al., 2017). Indeed, the property and business interests involved in taxation lead some to suggest that certainty in tax law is of the utmost importance—perhaps even more so than in other areas of law (Freedman & Vella, 2011). Research shows the many causes of tax uncertainty to include unpredictable or inconsistent treatment by a tax authority, retroactive changes to legislation, frequent changes in the statutory tax system, complexity in the tax code, poor understanding of the tax code by the tax authority, unpredictable or inconsistent treatment by the courts, inability to achieve clarity proactively through rulings, poor general relationships with tax authorities, and corruption (Devereaux, 2016; Zangariet al., 2017). Uncertainty is also traceable to biased and inconsistent adjudication of tax cases by the court in favour of the Revenue (Tjenberg, 2016) and, in some cases, to deliberate legislative intendment.[28] Uncertainty arising from unpredictable or inconsistent

[28] This may be referred to as "uncertainty by design" or "structured uncertainty". Not all tax uncertainty is necessarily adverse, especially on the side of the state. Sometimes the legislature designs tax law to be uncertain either simply to allow for greater administrative discretion or to combat tax avoidance. This flows from the notion that, when tax laws are certain, they may open unintended opportunities for unwarranted tax planning and tax avoidance. See, generally, Pagone (2009). Moreover, it is arguable that rewards and penalties linked to unpredictable outcomes are an important part of ordinary economic behaviour in ordinary life. Accordingly, in some cases, keeping taxes uncertain may diminish the sense of control that a taxpayer may have in terms of contriving a tax avoidance scheme. See, generally, Straffin Jr. (2001), "The Prisoner's Dilemma", in Eric Rasmusen (Ed.), (2001), *Readings in Games and Information*, as cited in Pagone (2009); von Neumann & Morgenstern, (2004), *Theory of Games and Economic Behaviour* (60th anniversary ed.), as cited in Pagone (2009). To buttress these salient points, a study by Dyreng et al. (2019) reveals that:

treatment by the tax authority notoriously ranks as the second most important factor in determining uncertainty when encountered (Devereaux, 2016).

Empirical evidence of the effects of tax uncertainty at the firm level is still limited due to the difficulties in measuring tax uncertainty (Zangari et al., 2017) However, the existing studies consistently support the view that tax uncertainty has a negative impact on investment (Devereaux, 2016; Givati, 2009). Devereux's empirical research reveals that uncertainty about the effective tax rate on profit ranks as one of the top four considerations for investment and location decisions (Devereaux, 2016; International Monetary Fund [IMF] & OECD, 2017). A poorly designed tax system, where the rules and their application are non-transparent, overly complex, or unpredictable, may discourage investment, therefore adding to project costs and

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> First, tax avoiders appear to bear significantly more tax uncertainty, on average, than non-avoiders. For example, univariate comparisons show that the mean addition to the UTB [uncertain tax benefits] for a tax avoider over a typical five-year period is over 50 percent larger than the mean addition to the UTB for a tax non-avoider. The difference between the groups is statistically and economically significant. To put these differences into perspective, the mean tax avoider paid about $650 million of cash taxes, while the mean tax non-avoider paid $1,261 million of cash taxes over a typical five-year period.
>
> However, the mean tax avoider also faced more tax uncertainty, increasing its UTB account by $139 million, compared to an increase of only $68 million for the mean non-avoider over the five-year period…
>
> Second, firms with frequent patent filings face significantly higher tax uncertainty than do other firms, and the relation between tax avoidance and tax uncertainty is stronger among firms with frequent patent filings. These results are consistent with intangibles exposing firms to increased tax uncertainty, particularly among firms we classify as tax avoiders. Third, we find that tax haven usage and intangible intensity appear to have a joint effect on the relation between tax avoidance and tax uncertainty. This suggests that while intangible-related tax avoidance involving transfer pricing provides tax savings, it also forces firms to bear tax uncertainty. Fourth, we find limited evidence that tax avoidance using tax shelters leads to more tax uncertainty than does tax avoidance outside of tax shelters. The tax shelter results should be interpreted cautiously, however, because of the difficulty of distinguishing between likely tax shelter users and likely non-users in samples of large firms.
>
> Finally, we conduct a path analysis that confirms the presence of both direct and indirect effects of tax avoidance, patents, and havens on tax uncertainty. The results of this study also have implications for two puzzling empirical regularities. First, there is mounting evidence that multinational firms incur effective tax rates at least as large as domestic firms (Dyreng, Hanlon, Maydew, and Thornock 2017). This is a somewhat puzzling empirical regularity given that multinational firms have access to (arguably vast) opportunities for tax avoidance (i.e., shifting income to low-tax countries) that are simply not available to purely domestic firms. Our findings, however, show that income shifting involving tax havens and intangibles comes at a price, in the form of increased tax uncertainty (Dyreng et al., 2019, p.180).

This is an insightful contribution to the literature. It is difficult, however, to state emphatically how this perspective fares alongside the seemingly predominant pro-certainty views. A tiebreaker may be that the focus of this perspective rests only on the objective of tax avoidance, which may be deemed narrow when compared to the pro-certainty school that focusses on broader micro and macroeconomic considerations. It is also worth iterating that the preponderance of work in this area seems to lean towards certainty in the tax system rather than the opposite. While a trend may not speak conclusively to what is best, it does suggest that certainty is a greater goal to pursue than uncertainty, especially since the aim of the tax system is not only to collect tax. In terms of peculiar needs, can a capital importing country (like Nigeria) afford to prioritise uncertainty over certainty?

uncertainty (OECD, 2013).[29] Companies make long-term investment decisions over substantial time periods and need to do so in a tax system that is stable in order to receive the expected return on investment (which may then, for example, encourage further investment) (Reva, 2015). Prior to taking an investment decision, investors must forecast the prospective tax burden associated with the investment as it can be a significant cost factor (Diller & Vollert, 2011). Thus, to integrate taxes accurately into the decision calculus, the taxpayer has to estimate the prospective tax burdens of available investment options in advance (Diller & Vollert, 2011). Stability in the tax system gives companies certainty about their ongoing tax liabilities and when they fall due. A more predictable tax policy and administration will, thus, increase investment attractiveness (Reva, 2015).

Tax uncertainty is a concern in Nigeria. This is due to: the fact that Nigerian tax laws are fraught with intricate provisions, complexities, and ambiguities that greatly impede tax compliance (Okoro, 2019; Oyedele, 2015; PricewaterhouseCoopers, 2010; Simeon et al., 2017); the poor policies of successive governments (Effiok & Oti, 2017); and inconsistent legal frameworks (Effiok & Oti, 2017). Therefore, taxpayers, who are often willing to discharge their responsibilities, commonly find that they are stuck with uncertainties on what the law actually requires of them (Okoro, 2019). It is partly for these reasons that sound, consistent, and trustworthy use of discretion that respects legitimate expectation is important to businesses/taxpayers in Nigeria. The adoption of a policy of disregard for the legitimate expectation that guidance and other forms of discretion provide, sometimes with retroactive effect, does nothing to aid Nigeria's quest for an improved tax system and investment attraction, especially in the light of other socio-political and infrastructural challenges facing the country.[30]

The uncertainty that follows inconsistent use of tax discretion and non-observance of legitimate expectation must be regarded as a disincentive to investors. Nigeria has, for years, used tax incentives to attract investors while seemingly neglecting the impact of tax disincentives on investors (Oyedele, 2015). Ironically, the more embraced tax incentives are only likely to hurt Nigeria by either negatively influencing taxpayer behaviour or transferring much needed tax revenue from Nigeria to resident countries (Bird & Scott Wilkie, 2012; Brooks, 2009; Zolt, 2013). It is the view of this author that, rather than focussing on granting tax incentives, tax policy should be redirected to building trust and eradicating tax disincentives, such as inconsistent use of tax discretion.[31] Through such re-balancing, any apprehensions of lost investment due to the non-conferment of tax incentives may be offset by strategic elimination of tax disincentives and entrenchment of a trusted tax system.

[29] Diller and Vollert (2011) observe that, in order to reduce uncertainties due to complexity and interpretation, several countries allow for the possibility of an advance tax ruling. This enables investors to gain certainty on the tax consequences of a planned investment. In other words, an investor can then enjoy legal certainty when factoring the tax consequences of a possible investment into their calculus.

[30] Paragraph 3.0 of the 2012 National Tax Policy states that with the current challenges in the country's investment environment regarding its infrastructure, the government should ensure that the tax system is favourable enough to attract investment. This is a sort of omnibus provision to guide the government's tax policy. This provision recognised Nigeria's peculiar infrastructural challenges which ordinarily make the country a less attractive investment destination compared to countries with better infrastructures.

[31] It is arguable that, while infrastructurally more secure countries, like the U.K. and Canada, can afford to be more whimsical in their tax administration, a country like Nigeria, which faces deep infrastructural challenges, has far less room in which to play in this way.

6.1.2 Administrability

A trust-based approach to tax discretion will strengthen the administrability of Nigeria's tax system. The principle of administrability suggests that societies should be able to enforce the tax systems they create (Christians, 2018). Administrability also suggests that societies should impose tax obligations that taxpayers can comply with (Mason, 2016). This policy objective is not always achieved because it is often the case that there is a related disconnect between what lawmakers say they want the law to do and what it actually does (Mason, 2016). Moreover, regardless of how well tax laws are drafted, the role played by institutional players has a significant bearing on how they are implemented in reality. In the view of some, "tax administration *is* tax policy" (Casanegra de Jantscher, 1990, cited in Christians, 2018). Ultimately, tax administrators would want to ensure that the primary objective of taxation—revenue generation—is met as smoothly as possible. Theoretically, there are at least two ways that the tax authority's adherence to its promises and representations can facilitate administrability. First, adherence can engender public trust and confidence in the tax system which, in turn, facilitates self-assessment. Second, adherence can minimise the risks of dispute between the tax authority and taxpayers, which, in turn, saves valuable time and resources that the Revenue can use to pursue tax defaulters.

6.1.2.1 Public trust and voluntary compliance

Public confidence in the administration and enforcement of taxes is a cornerstone of self-assessing tax systems (Templeton, 2015). Although the primary responsibility of a tax administration is to collect the proper amount of tax due to the government, it is essential that the tax authority carries out its responsibilities in a manner that warrants the highest degree of public confidence in the organisation's efficiency, integrity, and fairness (Alink & van Kommer, 2016). The Revenue must understand its role as that of a service provider and be ready to treat the taxpayer as a customer.[32] As such, the tax authority should create a conducive tax atmosphere and environment that will engender taxpayer confidence at all levels of tax administration (*Shell v FIRS*, 2016).

Multi-jurisdictional research reveals that taxpayers' trust in the tax authority is an important enabler of both voluntary and efficient tax compliance, with trust often ranking higher than coercion/enforcement in actualising that important objective (see Faizal et al., 2017; Gobena & Van Dijke, 2016; Jimenez & Iyer, 2016; Kogler et al., 2013; Lisi, 2014). It has been established that the most cost-effective means of collecting taxes is through voluntary compliance of the public with the tax laws. The more enforcement activities that are necessary, the more expensive the administration of the tax system (Alink & van Kommer, 2016). Voluntary compliance goes hand in hand with a system of self-assessment (Silvani & Baer, 1997). Good taxpayer services, and well-designed and well-targeted publicity campaigns, are crucial elements in encouraging taxpayers to comply with the tax legislation (Silvani & Baer, 1997). Given clear information, proper education, simple procedures, and sufficient encouragement, there is a greater possibility that taxpayers will calculate and pay their tax

[32] See paragraph 3.3(i) of the NTP (2017), which expressly admonishes tax administration and collection agencies to treat the taxpayer as a customer. The taxpayer is deemed to be a consumer of the services provided by tax administrators and, as such, a client. The taxpayer is perceived to be a consumer as a user of the processes and structures that constitute the tax system. From this perspective, tax administrators are obliged to create a system that is characterised by ease of utilisation and manoeuvrability. Accordingly, tax authorities are urged to treat the interests of taxpayers with the maximum respect and to adopt policies that do not prejudice or jeopardise taxpayers. See Aniyie (2012).

liabilities on their own. In this way, the tax administration can concentrate its resources on identifying and dealing effectively with those taxpayers who fail to comply properly with their tax obligations. Extensive reliance on a self-assessment system combined with targeted enforcement would allow the tax administration to effectively administer the tax system. The two broad principles of voluntary compliance and self-assessment are the foundations of modern tax administration (Silvani & Baer, 1997). Among the core functions performed by tax administration is the provision of information, forms, publications, and tax education to taxpayers to help them to comply with their tax obligations, to demonstrate that they are considered valued customers of the tax administration, and to reduce the need for extensive enforcement, given limited resources (Jacobs, 2013). This can be done through various means of taxpayer assistance. It is, however, essential for the tax administration to establish procedures and processes for providing guidance to taxpayers (Alink & van Kommer, 2016). Taxpayers need to be able to apply guidance to their business without worrying that the FIRS might come after them in the future and seek to apply a different interpretation to the periods they had relied on the guidance. A FIRS that cannot be trusted will lose its credibility; and that will be a sad day for the country (Onyenkpa & Ayoola, 2014).

Critical to the concept of voluntary compliance is the belief on the part of the taxpaying public that the tax administration respects the rights of taxpayers and operates on the principles of integrity and honesty (Alink & van Kommer, 2016). Too much emphasis on raising revenue as against emphasis on customer service and taxpayers' rights can lead to a lack of confidence on the part of the public in a tax administration's ability to manage its responsibilities properly. Lack of confidence in the tax administration can also lead to reduced levels of voluntary compliance (Alink & van Kommer, 2016). When a taxpayer acts on a representation made by the tax authority, the taxpayer presumes that the tax authority has both the competence and the know-how to make that representation, as well as a legitimate expectation that the tax authority will stand by it. Thus, where the tax authority disappoints that legitimate expectation on the basis that it does not disclose the correct position, the confidence is broken. This is a recipe for distrust in the tax system, which may affect compliance, especially in a self-assessment system. Thus, as a matter of policy, refusal to honour promises should be the exception, not the general disposition, while the need for judicial review should only arise as a last resort.

6.1.2.2 Conflict management

There is a view that tax guidance delivered through the ruling system can reduce potential disputes between the taxpayer and tax authorities and the necessity for litigation (Maluleke, 2011). A well-managed tax guidance system should, therefore, enhance administrative efficiency by reducing conflict between taxpayers and the tax authority. Since taxpayers know what the law is—or, at least, what the tax authority deems the law to be—in respect of their activities, there is, presumably, a lower risk of conflict between the two sides. This limits the need for the tax authority to dissipate resources on litigation. The tax authority's nonadherence to legitimate expectations invariably takes both sides back to the roots of conflict which, of course, may limit the ability of the tax authority to concentrate its energy on the actual collection of taxes.[33]

[33] There is a symbiotic nexus between tax certainty and dispute management in tax administration. For instance, an IMF/OECD report (2019) states that a shifting focus from dispute resolution to dispute prevention, ensuring that disagreements between tax administrations can be resolved quickly to avoid double taxation, will always be a core element of tax certainty.

Finally, it is asserted that an official, well-tailored policy of adhering to legitimate expectation simply abides with the NTP. Of course, this is not to imply that the NTP should take pre-eminence over tax legislation. It is, nevertheless, important for a state to apply its tax laws in line with defined policy, since policy gives life to the law. The NTP should not become a redundant policy document or reference tool only for academics (Deloitte, 2015). The NTP should be the "bible" that guides the thinking, formulation, and execution of strategies relevant to taking tax administration at all levels (assessment, collection etc.) and the tax system at large to optimum heights (Deloitte, 2015).

7. CONCLUSION

In Nigeria, as in most countries, taxation is a matter of legislation. Legislation prescribes tax obligations on various sources and stipulates how taxes are collected. Regrettably, tax laws tend to be complex and uncertain, thus leaving taxpayers with the need to rely, in many instances, on the discretion of the tax authority to ascertain their tax obligations. Things become even more complicated when the tax authority departs from its previous position, especially in a manner that leaves the taxpayer with detrimental retroactive implications. Legitimate expectation is one of the remedies that the courts have advanced to protect the interest of taxpayers in such circumstances. However, for various tax policy reasons, it seems that it is better for taxpayer claims of legitimate expectation to be addressed on the administrative, rather than judicial, platform. This is bearing in mind the notion that the "non-justiciability" of a case, in court, does not mean that it totally lacks merit. There could be merit that benefits both the plaintiff (taxpayer) and the defendant (tax authority), as well as the tax system, overall. It is these policy issues that I address in this paper, in the context of Nigeria's tax policy framework. The proposal discussed here does not seek to supplant the role of the court in developing and applying legitimate expectation. It recognises that expectations arise at the administrative stage and seeks instead to supplement the judicial role by highlighting what the tax authority can do and why it may be more judicious for the tax authority to keep its promises than to break them.

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THE ARM'S LENGTH PRINCIPLE IN THE 21ST CENTURY – A LITERATURE OVERVIEW

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Abstract

The international tax system faces substantial challenges with respect to taxing the profits of multinational enterprises. Policymakers have put the focus on the taxation of the digital economy. The aim of this article is to provide a comprehensive overview of the arm's length principle (ALP) and the allocation of taxing rights of business profits, the concept of value creation, the impact of digitization on the allocation of taxing rights, and the current discussions regarding this topic. Finally, I make a connection between the value creation concept and the challenges of digitization, and ask if the ALP is fit for purpose. The paper is intended to refocus attention on the proper application of the ALP in the 21st century, as the rethinking exercise is more demanding and requires more work than the research which has been published so far. By doing this, I also provide food for thought about matters which could be further explored in order to enhance the current international tax system.

JEL Classification Codes: F00, H20, K34
Keywords: Arm's Length Principle, Digital Economy, Transfer Pricing, Value Creation; Business Profit Allocation

INTRODUCTION

At present, the international tax system faces substantial challenges with respect to taxing the profits of multinational enterprises (MNE groups)[2]. Policymakers have put the focus on the taxation of the digital economy, especially with its inclusion in the Organisation for Economic Co-operation and Development (OECD) and G20's project on base erosion and profit shifting (BEPS). In the academic community, the debate about taxing digitalized businesses is rooted in the belief that the existing tax system cannot meet the challenges imposed by the digital transformation of the economy in the 21st century (Devereux & Vella, 2017; Schön, 2018). The common intention of the current debate is to allocate more profits to market and source countries[3] in order to ensure that there is an "appropriate" level of taxation.

Since business profits within MNE groups are allocated by transfer prices under the existing international tax system, both policymakers and taxpayers consider the determination of intracompany transfer prices to be the most pressing issue. However, the determination of transfer prices and the ALP have been under pressure for years, as the ALP is difficult to administer, lacks a sound theoretical foundation, and offers possibilities for tax avoidance strategies. It seems that the discussions about taxing the digital economy could finally put an end to the ALP. Most digital goods and services can be provided via the Internet without the

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[2] Multinational enterprise represents a multinational enterprise group (MNE group) and not only a single entity (multinational entity – MNE).

[3] In the following, I distinguish between the market country as destination country, tapping the customers' side, and the role it plays as a source country when the taxpayer has established a presence there (see also Schön, 2018).

need for a business to have a physical presence in a specific country and the latter is commonly a precedent condition for taxing rights. An extension of the legal permanent establishment (PE) definition may address this problem. However, even in cases where a PE or a subsidiary exists in the source state, the ALP may allocate only small amounts of the overall profit to them. Therefore, there are strong feelings among both the general public and tax authorities that there could be a mismatch between where taxation of the profit takes place and where—speaking in the language of OECD—"value is created" for certain digital activities (see Greil et al., 2018, 2020, regarding fairness and the ALP). The main concern is that user value creation due to data gathering is located in a tax jurisdiction where the company carrying out a digital activity is not physically established and, thus, where its activities cannot be taxed.

The aim of this article is to provide a comprehensive overview over the ALP and the allocation of taxing rights of business profits, the concept of value creation, the impact of digitization on the allocation of taxing rights, and the current discussions regarding this topic. I am, at least to my knowledge, the first who combines management literature on value creation with the concept of value creation for the allocation of taxing rights. The key insights gained from this are particularly useful when it comes to the assessment of the impact of digitization on taxation. In this context, I finally make a connection between the value creation concept and the challenges of digitization, and ask whether the ALP is fit for purpose. In my opinion, and against the background of the value creation concept for allocating taxing rights, the ALP is fit for purpose. However, I do not ignore the idea that transfer pricing suffers from a conflict with the reality of the MNE groups and that it is challenged, particularly on the grounds of its complexity and the attendant costs of administration and compliance (Couzin, 2013). The answer to the question of whether the international tax regime has to be changed depends on the objective. I refocus on the proper application of the ALP in the 21st century against the background of the value creation concept and the digitization of the economy, as the rethinking exercise is more demanding and requires more work than the studies that have been published so far. In doing so, I provide policymakers and practitioners with valuable insights that may help to facilitate the ALP's future implementation.

The article is structured as follows. First, the ALP is described as part of the international tax system and its role in the allocation of taxing rights of business profits is discussed. The introduction of the value creation concept and its impact is presented comprehensively and concerns about the ALP are emphasized. Second, an overview of the impact of digitization, both in general and on transfer pricing in particular, is presented. I show that, while digitalization is not the root of the ALP's deficiencies, it may well exacerbate existing problems. In the third section, a summary of the current political discussions regarding this topic shows a different political view. This section is supplemented with suggestions from the literature. Finally, I show that the ALP is flexible enough to cope with current developments.

THE ARM'S LENGTH PRINCIPLE AND THE ALLOCATION OF TAXING RIGHTS

A Traditional Principle and the Allocation of Taxing Rights

A foreign enterprise's profit from business activities (business profits) are taxable by the country where the activities are performed only if the enterprise has a PE there (Article 5 and 7 of the "OECD-Model Tax Convention" [OECD-MTC]). This concept of a PE is also used for the same purpose in the tax laws of many countries. The profits that are attributable to the PE in each state are the profits that the enterprise might be expected to make, in particular, in its dealings with its other parts if they were separate and independent enterprises engaged in the same or similar activities under the same or similar conditions, taking into account the functions performed, assets used, and risks assumed by the enterprise through the PE and through the other parts of the enterprise (Article 7(2) of the OECD-MTC[4]). Therefore, the ALP is—at least for OECD countries—the cornerstone of the attribution of profits to the PE and the enterprise. The ALP also applies if two associated enterprises have commercial or financial relations (Article 9(1) of the OECD-MTC). In both cases, the same purpose should be pursued.

The ALP is legally codified in the tax laws of many countries and in double taxation agreements (see Langbein & Fuss, 2018, for a comprehensive overview of the history of the ALP). The purpose of the ALP is to allocate taxable profits to different enterprises of an MNE group[5] in accordance with the outcomes of market transactions between independent third parties. The ALP should ensure that profits are taxed where the business activity takes place, that is, where its resources are located and directed (e.g., Langbein & Fuss, 2018; Vann, 2010). According to the ALP, transfer prices within an MNE group must be comparable to prices which two independent parties would have agreed on. The profits that are treated as arising in each country are those that would arise if the various entities of the MNE group were independent and dealing with each other in the market on ordinary market terms. From the viewpoint of the "OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations" ([TPG]; OECD, 2017), the comparability analysis is at the heart of the application of the ALP (OECD, 2017, p.35, para. 1.6). In performing a comparability analysis, a comparison of a controlled transaction with an uncontrolled transaction or transactions has to be carried out. Comparability takes five factors into account: the characteristics of the property or services; contractual terms; the functions, assets, and risks performed by the parties; the economic conditions of the market; and any special circumstances, such as business strategies (see also Eden, 2015). Controlled and uncontrolled transactions are comparable if none of the differences between the transactions could materially affect the factor being examined in the methodology, or if reasonably accurate adjustments can be made to eliminate the material effects of any such differences. This requires a functional analysis. This functional analysis is necessary in delineating the controlled transaction, and determining comparability between controlled and uncontrolled transactions or entities. The functional analysis seeks to identify the economically significant activities and responsibilities undertaken, assets used or contributed, and risks assumed by the parties to the transactions (OECD, 2017, p. 51, para. 1.51). This process should be carried out in order to ascertain any relevant differences that will ultimately result in an adjustment.

Furthermore, when transfer pricing rules are incorporated in double taxation agreements, they provide a rule book for the principled resolution of cross-border disputes over the appropriate (inter-nation) allocation of income (see also Langbein & Fuss, 2018). Thus, tax authorities require transfer prices to be determined in order for them to allocate the taxable income

[4] The authorised OECD approach (AOA) stipulates that the profits to be attributed to a PE are the profits that the PE would have earned at arm's length, in particular, in its dealings with other parts of the enterprise, if it were a separate and independent enterprise engaged in the same or similar activities under the same or similar conditions, taking into account the functions performed, assets used, and risks assumed by the enterprise through the PE and through the other parts of the enterprise. Under the AOA, a two-step analysis is required. First, a functional and factual analysis must be performed in order to hypothesize the PE appropriately and the remainder of the enterprise (or a segment or segments thereof) *as if they were associated enterprises,* each undertaking functions, owning and/or using assets, assuming risks, and entering into dealings with each other and transactions with other related and unrelated enterprises. Second, the remuneration of any dealings between the hypothesized enterprises is determined by applying the Article 9 transfer pricing tools by reference to the functions performed, assets used, and risks assumed by the hypothesized enterprises (OECD, 2010).

[5] This expression shall also include the allocation of taxable profits to PEs.

between the different countries and ensure that appropriate taxation takes place. The determination of transfer prices within an MNE group is of significant concern to both taxpayers and tax administrations because the transfer pricing rules affect how profits and losses are allocated among associated enterprises in different jurisdictions (Mazur, 2016). That means that the ALP determines the arm's length amount of income from the foreign direct investment (FDI) in each country where FDI occurs (Vann, 2010). The ALP, therefore, plays a vital role in improving inter-nation equity (Navarro, 2018).

However, a number of well-known studies have criticized the ALP (e.g., Bauer & Langenmayr, 2013; Clausing, 2003; Devereux & Keuschnigg, 2008; Greil, 2017; Holmstrom & Tirole, 1991; Keuschnigg & Devereux 2013; Luckhaupt et al., 2012; Navarro, 2018; Samuelson, 1982; Vann, 2010), although they will not be discussed in detail here. Eden (2015) divides the criticisms of the ALP into two categories: First, those relating to abusive transfer pricing by MNE groups, and, second, those claiming that the current rules are difficult to implement in theory and in practice. Only one aspect, which seems to be especially important, will be emphasized: internalization theory. This is the dominant framework in the international business literature for explaining why MNE groups expand abroad in order to add value both for themselves and their host country locations (for instance, Buckley & Casson, 1976; Buckley & Casson, 2009). There are at least three benefits to the MNE group from internalization (Eden & Smith, 2011). First, internalization reduces transaction costs which hamper trade between unrelated enterprises. The main driver is the existence of transaction costs (Coase, 1937) caused by market imperfections in both goods and factor markets which force enterprises to create their own internal markets to escape the liability of foreignness (Jones et al., 2018). Second, MNE groups can transfer tacit resources, such as non-codifiable knowledge flows, more effectively within the MNE group than between unrelated enterprises. Third, we live in a world where there are still large differences between countries. Internalization provides MNE groups with the opportunity to benefit from integration and arbitrage in ways that domestic enterprises cannot. MNE groups can integrate, taking advantage of economies of scale and scope on a regional or global basis. The ALP disregards these benefits as it treats the members of an MNE group as operating as single entities rather than as inseparable parts of a unified business. Accordingly, Luckhaupt et al. (2012) state:

> The concept of comparability implies that another firm facing the same economic circumstances would use market coordination. However, given good economic reasons for internal coordination, all firms facing the same circumstances would reject market coordination. From a theoretical point of view, under these circumstances, market prices of comparable uncontrolled transactions do not exist. (p.100).

Navarro (2018), however, rightly points out that a reference of comparison is required in order to ascertain whether subjects in the same position are being treated equally, but only with elements that are suitable for comparison. Navarro (2018) ascertains the importance of the ALP within the ability-to-pay concept as a proxy by which to measure horizontal and vertical equity. Horizontal equity implies that those subjects displaying a similar ability to pay should face similar tax burdens. Vertical equity—i.e., subjects with higher incomes should pay more tax—may be considered as a direct consequence of it. These concepts have been largely accepted as benchmarks for tax justice. The importance of the ALP, therefore, is its role as a tool for leveling the ability to pay shown by an MNE group with that of independent parties that interact within the market in order to guarantee equality in tax treatment.

It is important to acknowledge that the OECD's approach does not require the two transactions to be identical, but does require that there are no differences between them that could materially affect the arm's length price or profit or, where such material differences exist, that reasonably accurate adjustments can be made to eliminate their effect. However, economies of scale and synergy effects resulting from the integration into a group are not considered in the allocation of the total profit (Avi-Yonah et al., 2009; Durst, 2012; Rectenwald, 2012). It can also be said that it is theoretically impossible to allocate synergy and network effects according to source.

On the other hand, the ALP is, notwithstanding its critics, a well-established principle which has been used in transfer pricing to allocate profits across different jurisdictions for years (Wittendorf, 2009). Countries all over the world agreed on this principle in their double tax treaties and it could be said that the ALP is a standard of profit allocation. As the ALP is subject to well-known criticisms, it is questionable why countries agree on this principle and what the benefits are for them besides the fact that transfer pricing is a strategic tax policy variable (see, *inter alia*, Bucovetsky & Haufler, 2008; de Mooij & Liu, 2018). However, the answer to this question must be left to further research.

The allocation of taxing rights of business profits is therefore based principally on two legal fictions[6]: the PE as a required business activity, and the ALP for the profit allocation between a PE and the enterprise as well as between associated enterprises. If the definition of a PE is changed, this does not necessarily mean that the ALP must also be changed. The ALP can still be applied as a fiction.[7] However, even when a PE exists in the source state, the ALP may allocate only small amounts of the overall profit to it. If the ALP is intended to contribute to the proper allocation of profits from investments, it could also determine the PE threshold. Since this is a quantitative threshold, the answer to the question of the PE threshold is primarily a political one. Therefore, I focus on the application of the ALP and not on the definition of a new PE.

Value Creation and the Arm's Length Principle

Taxing profits where economic activity takes place and value is created

Recently, policymakers at the supranational level emphasized the concept of value creation in relation to the allocation of profits within an MNE group. The Task Force on Digital Economy (TFDE) states that profits have to be taxed where economic activities take place and value is created (OECD, 2018a) and, therefore, transfer pricing outcomes should be aligned with value creation (OECD, 2015a). The TPG, which represent the international guidelines for the application of the ALP, state that it is important to understand how value is generated by the MNE group as a whole, the interdependencies of the functions performed by the associated enterprises with the rest of the group, and the contribution that the associated enterprises make to that value creation (OECD, 2017, p. 51, para. 1.51). Therefore, transfer pricing outcomes should be aligned with value creation and one must gain understanding about the value creation

[6] Article 12A UN Model Double Taxation Convention between Developed and Developing Countries (UN, 2017a) regarding fees for technical services, for example, is not taken into account. It permits limited taxation by the source state on the gross payments of fees for technical services paid to a non-resident services provider, without the requirement to meet any threshold in the source state and irrespective of where the services are provided or consumed (Malan, 2019)

[7] It should be borne in mind, however, that the current structure of the AOA for the allocation of profits to PEs is based, in particular, on the exercise of people functions. This means that no profit, or minimal profit, can be allocated to a PE that carries out any significant people functions (OECD, 2010).

process within a value system which is, for instance, composed of all primary and secondary activities necessary to transform raw materials into products for end users (Porter, 1985). As one consequence, the OECD highlights the importance of economic criteria over contractual agreements (substance over form).

However, the concept of value creation is not clearly defined in the TPG and has been the subject of controversial discussions (e.g., Hey, 2018; International Monetary Fund [IMF], 2019; Langbein & Fuss, 2018). Hey (2018) emphasizes that the locations of economic activity and of creation of value do not necessarily coincide. Value creation is, in her opinion, a source principle and can be a principle of origin as well as of destination. This depends on whether the market is conceived as a value adding factor with value being created by users and customers. Fuest (2020) emphasizes that taxation according to value creation is a political formula that broadens a scope for interpretation. It makes it possible to address the concerns of states with very different interests. The IMF (2019) emphasizes that if the place in which value is created can be changed, it leaves open the possibility of distortions arising from differences in tax treatment and of collectively damaging competition to attract the 'value-creating' activities. Richter (2019) even rejects the idea of value creation. He argues that the design and enforcement of international taxation require the legal cooperation of jurisdictions. There would be no international value creation of MNE groups if the countries in which the MNE groups are active did not cooperate on legal issues.

In the view of Langbein and Fuss (2018), the fundamental principle of the international system is that the right to tax income is allocated in the first instance to the state to which that income bears the greatest degree of economic allegiance. They see the value creation paradigm as effectuating and paralleling the economic allegiance idea. In this regard, Schön (2018) supplements that a person who is economically connected to a jurisdiction enjoys benefits arising in that jurisdiction. Therefore, the person is liable to tax. In a general sense, an individual taxpayer's residence is the country with which the taxpayer has the closest connection. The current international norm is that the residence country taxes the worldwide income of the taxpayer (Vann, 2010). Accordingly, Rixen (2018) focuses on the membership principle (*Mitgliedschaftsprinzip*). This principle serves to enforce the principle of equivalence. In the case of legal entities, a tax membership should be created in the places where they engage in real economic activity. Li et al. (2019) argue that the value creation principle is not a technical rule but a useful, if not profound, elaboration of the doctrine of economic allegiance. However, this concept does not tell us exactly how to share the tax base between jurisdictions (Skaar, 1991).

The ALP in the sense of the TPG is, as mentioned above, mainly based on the comparability analysis that requires a functional analysis. The triad of functions performed, assets used, and risks assumed can be seen as the basis of the value creation concept in the TPG (OECD, 2017). With regard to this, the TPG provide that an entity will be allocated risks and the underlying income associated therewith only to the extent that the entity controls the risks through its personnel and has the financial means, that is, the financial capacity, to assume those risks (OECD, 2017). This would typically be the case when an entity demonstrates that its personnel make key decisions with respect to the risks associated with that entity's activities and carry out its core income-generating functions, and the entity owns/leases the necessary office space and/or equipment to carry out its activities (Chand & Malek, 2019). With regard to this, Næss-Schmidt et al. (2019) emphasize that corporate income beyond what is allocated according to the cost-plus or return-on-asset basis is allocated to the entrepreneurial risk-taker(s) in the MNE group which, in practice, is often the headquarters of the MNE group. This is mainly in line with the origin of the ALP:

> If we recognize the fact that the real centre of management, especially if it is situated at the principal productive establishment, is the most vital part of the enterprise, the most practical approach to the problem is to give it the residuum of profit or loss after allocating to each outlying secondary establishment compensation for the services it has rendered to the enterprise in accordance with what would be paid to an independent enterprise rendering such services (Carroll, 1933, p.192; see also Vann, 2010).

It has to be emphasized that the ALP was especially developed to remunerate PEs (legal entities were treated like PEs in the past) for their services and to leave the residual economic profit in the state of residence of the MNE group (Koomen, 2015).

However, this approach may reward the headquarters too generously and the other locations where the MNE group has FDI too little (Vann, 2010). This is particularly true in view of the fact that current transfer pricing practices, driven by the TPG, are primarily based on a comparability analysis. This approach is the Achilles' heel of the ALP (see also Kobetsky, 2019). Proper third-party comparisons are not possible and, accordingly, synergy gains are never allocated to all business units, but primarily to the so-called entrepreneurs. Additionally, Langbein & Fuss (2018) emphasize that the methods originating in the U.S., like the cost-plus method and the resale price method, that were first incorporated in the OECD Transfer Pricing Guidelines 1979, particularly created the basis for concentrating the residual profit in a single component of the enterprise at will. The consequence is that profits are not allocated on the basis of value creation and the value creation process of the MNE group. Consequently, this approach favors the concern that headquarters will be rewarded too generously.

Value creation in management literature

Value creation and the ability-to-pay principle

A look into management literature reveals a deeper understanding of value creation. On an organizational level, the literature makes a distinction between use value and exchange value (Bowman & Ambrosini, 2000; Lepak et al., 2007; Priem, 2007; Urbinati et al., 2019). Use value refers to the specific quality of a product or service as perceived by users in relation to their needs. Such judgments are subjective and a subjective valuation of consumption benefits is needed. Exchange value can be defined as either the monetary amount realized at a certain point in time when the exchange of the good, service, or product takes place, or the amount paid by the user to the seller for the use value of the product or service. Put simply, exchange value is the amount the customer pays (Lepak et al., 2007; Priem, 2007).

Therefore, value creation depends on the relative amount of value that is subjectively realized by a target user or buyer, and this subjective value realization must at least translate into the user's willingness to exchange a monetary amount for the value received (Lepak et al., 2007; Leavy & Moitra, 2006). However, Internet users, in particular, do not charge a fee for the use of their data, the provision of web content, or web interaction. They use a service offered on the Internet, such as Google or a daily newspaper, in exchange for their personal information. As soon as a user accesses such a website, a third-party provider commissioned by the operator of the website analyses the user's cookies for his surfing behavior. On this basis, suitable advertisements are selected from an advertisement database within a fraction of a second and inserted. The payment is therefore made with data, which makes it difficult to determine the exchange value. At present, there is very limited information on how data is, or could be, valued (Aslam & Shah, 2020; for more on the subject of data transfer and the protection of privacy, see, for example, Acquisti et al., 2013; Buxmann, 2018; Elvy, 2017; Norberg et al., 2007).

However, sometimes Google, for instance, defines a price that the firm will pay for some resources obtained from Internet users itself. In particular, when videos uploaded onto the YouTube web platform attract a significant number of viewers, Google considers them to be valuable resources and pays for them. Another example in the B2B sector are providers of electronic cash register systems. If the customer agrees to the use of the cash register data, the cash register system is provided free of charge. If they do not, a rental fee must be paid.

Thus, value is created when two individuals/institutions with complementary resources are connected (Sheth & Uslay, 2007). The customers are the arbiters of value (Priem, 2007) and it is determined by customers' willingness to pay (Porter, 1985), which is influenced by various factors. Value creation encompasses the customer's needs, the resources and activities necessary to address those needs, and the ways to entice customers to pay for the entity's offerings.

Value capture is instead the appropriation and retention by the firm of payments made by customers (Priem, 2007). Put simply, value capture is defined as capturing exchange value (Bowman & Ambrosini, 2000); it is the business's ability to create profit from its transactions. Accordingly, value creation is a precondition for value capture and value capture seems to be a more appropriate measure for taxation due to the ability-to-pay principle, as it focuses on the outcome of the economic performance and not on the activity itself (Navarro, 2018).

Resource-based view vs. demand side

Some scholars advocate taking resource-focused approaches to management research (resource-based view; RBV). These approaches look inside the firm—which they consider as a bundle of resources—in attempting to value it (Barney, 1991). The RBV argues that valuable, rare, inimitable resources and organization (VRIO) lead to competitive advantage. The RBV argument is based on a two-firm, one-market model, where firms differ because of their resource heterogeneity but market demand is uniform and fixed (see Peteraf & Barney, 2003; Priem et al., 2012). As a result, value is most often considered from the firm's internal perspective rather than from the customer's perspective (Priem, 2007). Accordingly, Becker et al. (2018) state that it is the firm itself, not the customer, which creates value.

Some management scholars have begun to focus on the demand side of the value equation rather than on the resource side (Priem et al., 2012; Siqueira et al., 2015). This research looks downstream from the focal firm, toward product markets and customers, to explain and predict those managerial decisions that increase value. It is concerned with the economists' entrepreneurial profits instead of rents from resources. The basic assumption is market heterogeneity, which indicates that firms compete in a multidimensional marketplace (Adner, 2002; Priem, 2007; Priem et al., 2012). Priem (2007) emphasizes that one key role of the firm is to aid customers in maximizing the use value that is created and experienced during consumption, irrespective of the exchange value paid. Customers and firms can be viewed as partners in producing value during consumption.

Service-dominant logic (Vargo & Lusch, 2004) argues that value for both customers and suppliers can only be maximized when both parties interact as value co-creators in close long-term relationships. Customers participate in the value creation process by seeking and sharing relevant information about a product or service in personal interactions (Clauss et al., 2018; Clauss et al., 2019). In addition, by accepting cookies, Internet users consciously or unconsciously provide companies with insights into their private sphere and accept the associated possibility that this information will be used by the companies. These businesses may, for example, use the data provided to create detailed user profiles or to analyze web surfing behavior.

Customers also want to interact with the firms and thereby co-create value (Prahalad & Ramaswamy, 2004; see also Woiceshyn & Falkenberg, 2008). For instance, customers co-create value when they make online travel bookings, conduct banking tasks online, configure products (like notebooks, cars or machines), or buy self-assembly furniture from stores like IKEA. Co-created value both increases customer utility through greater convenience and reduces firms' costs. It also strengthens ties between the consumer and the firm, with this firm-customer integration resulting in the co-production of value-creating innovations (e.g., Franke & Shah, 2003; Gruber et al., 2008; Priem et al. 2012; Sheth & Uslay, 2007). Value co-creation can extend across the whole spectrum: co-conception, co-design, co-production, co-promotion, co-pricing, co-distribution, co-consumption, co-maintenance, co-disposal, and co-outsourcing (Sheth & Uslay, 2007). Bogers et al. (2010) and Priem et al. (2012) provide overviews of several studies which provide evidence that users innovate in the traditional economy, in sectors such as oil refining, the chemical industry, sports-related consumer goods, and other leisure time activities. They show how users play a dominant role in the invention process and how end users freely develop, share, and diffuse innovative ideas within their communities. Producers can profit from utilizing users as innovators by integrating them into the innovation process. Firms also seek to reduce uncertainty by interacting directly with customers to understand their needs and preferences. Accordingly, Baldwin & von Hippel (2011) conclude that innovation by individual users and open collaborative innovation increasingly compete with—and may displace—producer innovation in many parts of the economy. Priem et al. (2012) also show that successful innovations can be consumer-driven rather than resource or technology-driven, and consumer knowledge can play a key role in entrepreneurial idea discovery.

In a traditional value system model, enterprises like producers or manufacturers obtain inputs from suppliers in order to develop and produce goods or services. They then sell the produced goods or services to buyers. These buyers can be so-called intermediate users or customers, who use the products as inputs in their own production processes, or end-consumer users or consumers, who use the products to satisfy their personal needs (Bogers et al., 2010). These users can play an important role by providing producers with some inputs that they need to develop and market products that better meet customer's needs (Bogers et al., 2010; Rothwell, 1977). Users often tend to engage in collective creative activity within the social context provided by user communities and this results in the improvement of ideas (Shah & Tripsas, 2007). Meanwhile, users are recognized as potential sources of value and all value is created jointly (Sheth & Uslay, 2007). Therefore, the literature provides at least three perspectives on user participation as value creation for firms: first, due to user networking, updating, and content contribution; second, due to users contributing to development and innovation; and, third, because of value creation from the user's personal trail of information that can be sold to advertisers (Lepak et al., 2007).

Value creation logic

The subject of value creation is made complex by its subjective nature, multiple levels of analysis, and the theoretical discipline that scholars use to study it (Lepak et al., 2007). The issue of value creation also points to the importance of capturing value. At the organizational level of analysis, researchers have looked inside organizations to understand how value is captured (Barney, 1991; Lepak et al., 2007; Porter, 1985; Stabell & Fjeldstad, 1998). Once an organization is successful in creating amounts of value for its customers and realizes exchange value from this success, questions arise about the appropriate levels of value that should be allocated to each entity of an MNE group, especially from a taxation point of view. The value chain model is usually used to explain and analyze the value creation process of an organization (Porter, 1985). It is the best-known framework with which to analyze value creation. It describes value creation as a series of sequential steps that transform raw materials and components into products. Value shop and value network are additional models used to analyze the value creation process of an organization (Stabell & Fjeldstad 1998; see also Woiceshyn & Falkenberg, 2008). Stabell and Fjeldstad (1998) found that the value chain model was more suitable for the analysis of production and manufacturing firms than for service firms where the resulting chain does not fully capture the essence of the value creation mechanisms of the firm. Each of these models is based on a different value creation logic. The logic explains whether value is created by transforming input factors into products and services (value chain), by solving a customer problem (value shop), or by mediating people (value network).

Value creation and the allocation of taxing rights

Accordingly, value creation is not a rule that can be applied without discretion. Almost any location could be considered as having contributed to value creation (Becker et al., 2018; Hey, 2018). Furthermore, value creation is a precondition for value capture and value capture seems to be a more appropriate measure for taxation due to the ability-to-pay principle. However, the different value creation logics describe how organizations create value for their customers through the provision of goods or services. On the one hand, value creation logics can help MNE groups to understand and model their business processes in order to fully utilize their resources and achieve optimal performances. On the other hand, they can help tax administrations, in particular, to better understand where the economic activity of the MNE group takes place.

However, the OECD's value creation concept does not state exactly how to share the tax base between jurisdictions and leaves the tax assessment to a subjective assessment of the individual case. The allocation of taxing rights thus depends on the respective circumstances of the individual case, which does not only include the economic circumstances of the MNE group. It also includes, in particular, the entities involved, the administrative staff of the respective countries involved, and their expert knowledge, negotiating skills, and bargaining power. In this context, it must be emphasized that an MNE group's cross-border teams work together to create and capture value without having a clear location and they remain unstable (Schön, 2018). Value creation processes may change and move from country to country which, in turn, has an impact on exit taxation.

However, the concept of value creation, which according to Li et al. (2019) has always existed as a principle in the history of international taxation, also has three effects. First, it supports the substance over form approach used in transfer pricing. Written contractual agreements provide the starting point for delineating the real transaction. However, the actual conduct and the economic activity (i.e., functions performed, risks borne, and assets used) are the most decisive for profit allocation purposes. A value chain analysis is needed to detect real economic activity instead of relying on contractual arrangements and legal ownership to facilitate the allocation of income in line with value creation. Therefore, taxing rights are largely allocated to the home state from which the business chooses to operate and where important management decisions are taken (Næss-Schmidt et al., 2019). This can be understood as contributing to the reduction of *virtual* profit shifting opportunities based on artificial activities which only need a stroke of a pen. It does not, however, reduce tax planning activities which are based on real activities that are tax-favored (e.g., investing in a low-tax country or low-taxed asset). Therefore, real tax competition will be intensified (for a differentiation between virtual and real tax competition, see Rixen, 2018; see also Chand & Malek, 2019).

Second, value creation is a shift away from the perspective of mere business activity or the triad of functions performed, assets used, and risks assumed from a supply-side perspective only. An appropriate weighting of demand-side value drivers which allows (more) profit allocation to market and source countries as all value is created jointly could be considered (Sheth & Uslay, 2007). Successful innovations can be consumer-driven rather than resource or technology-driven, and consumer knowledge can play a key role in entrepreneurial idea discovery. Therefore, the demand-side view is concerned with the economists' entrepreneurial profits instead of rents from resources. This, in turn, calls into question the original purpose of the ALP, as profits should be taxed in the country where resources are located and directed (e.g., Langbein & Fuss, 2018; Vann, 2010). It is also interesting to see how such a view can be reconciled with the function of corporate taxation to ensure that companies contribute to the costs of providing public services (for instance, Fuest, 2020). The argument could be based on the provision of the digital infrastructure, particularly for Internet-based or digital business models.

Third, as the process of value creation and its assessment is dependent on the respective MNE group, the concept of comparability as one guiding principle in the TPG steps into the background. This can help to overcome the disadvantages of the ALP mentioned above. Finally, the question of why the OECD continues to focus on comparability and still interprets Article 9(1) of the OECD-MTC as according to how third parties have acted remains. However, market prices are irrelevant in an MNE group. Rather, it is about how third parties would have acted in an economically reasonable way. The specifics of the MNE group and its value creation process must be considered (see also Navarro, 2018). However, such an approach leads to an increase of disputes as the assessment is of a subjective nature in each case. Such an approach does not necessarily leave scope for applying rules of thumb or simplifications, as they would be incompatible with the concept of value creation. This, in turn, leads to the fact that the application of the ALP is very complex, requires well-trained personnel and high compliance efforts, and results in high administrative burdens for states.

The Impact of Digitization on Allocation of Taxing Rights

In general

In recent years, the structures of many businesses and value creation processes have changed significantly due to technological developments. These developments have facilitated the adoption and integration of digital products and transactions that have collectively digitalized the value chains of traditional businesses already in existence and laid the foundation for new digital businesses (Brynjolfsson & McAfee, 2015). Haucap (2019) emphasizes two key developments that have changed value chains and competitive processes in many industries and markets: digital platforms and data. A research project at Ludwig Maximilian University of Munich (LMU) in Germany (Becker et al., 2018) identified 17 major digitalization trends which have significantly influenced business models across a broad range of industry sectors. These are: robotics, the Internet, digital platforms, simulations, digital identifiers, digital products, big data (analytics), cloud computing, augmented reality, mobile computing, blockchain, sensors, robotic process automation, additive manufacturing (3D printing), artificial intelligence, cyber-physical systems, and autonomous driving. These digital trends all use software and interchange data, but also require a physical connection.

Amit and Zott (2001) provide an overview of theoretical frameworks, like value chain analysis, Schumpeterian innovation, resource-based view of a firm, strategic network, and transaction cost economics, and make valuable suggestions for possible sources of value creation in e-business. They suggest that the value creation potential of e-businesses hinges on four interdependent dimensions, namely: efficiency, complementarities, lock-in, and novelty. Reinartz et al. (2019) developed a framework that identifies five new sources of value creation: automation, individualization, ambient embeddedness, interaction, and transparency and control. These firm-level sources of value creation foster customer-level perceived benefits of convenience, relevance, experience, empowerment, and monetary and ecological savings. Goldfarb & Tucker (2019) identified that digitization has reduced a number of specific costs relating to, for example, search, reproduction, transportation, tracking, and verification. Additionally, several contributions to the tax literature analyze digital business models and illustrate the activities that contribute to value creation (Kofler et al., 2018; OECD, 2018a; Olbert & Spengel, 2017; Schön, 2018).

New information technologies

Information technology (IT), defined as computers as well as related digital communication technology, has the broad power to reduce the costs of coordination, communications, and information processing (Brynjolfsson & Hitt, 2000). New information technologies provide direct and timely information exchange through e-mail, the Internet, and direct connections (e.g. electronic data interchange [EDI]) between parties. These technologies support the data and information exchanges between parties and thereby enhance the development of value networks and communication between parties (Herrala et al., 2011). According to papers such as Mukhopadhyay et al. (1995), they are estimated to create cost savings. The unprecedented level of connectivity enables new touchpoints and interactions, such as customer-firm interactions over Internet of Things (IoT) devices or through open networks in an ecosystem, creating customer value (Verhoef et al., 2017). Accordingly, digital interaction also gives rise to the ability to analyze the demands of prospects and current customers (the opportunity to "listen in" on customers), and to offer them highly personalized goods and services (Gensler et al., 2016; Petruzzi & Buriak, 2018). Digital technologies enable new forms of market behaviors, interactions, or experiences (Lamberton & Stephen, 2016), and reshape customer relationships, internal processes, and value propositions, or the economic value creation process as a whole (Reddy & Reinartz, 2017). Nowadays, information technologies are integral parts of the value chain (Olbert & Spengel, 2019). A summary on the impact of information and communication technologies (ICTs) on firms is provided by Brynjolfsson and Hitt (2000). They report productivity impacts from ICT and emphasize the importance of considering complementary investments. They argue that a significant component of the value of IT is its ability to enable complementary organizational investments, such as business processes and work practices. These investments lead to productivity increases by reducing costs, and by enabling firms to increase output quality in the form of new products or by improving intangible aspects of their existing products, like convenience, timeliness, quality, and variety.

Application programming interfaces (APIs) are, for instance, of special interest. They are a newly popular type of ICT. An API is a set of subroutine definitions, communication protocols, and tools for building software. APIs make it easy for individuals to write programs that communicate with online services and shared databases, and are essential for making the power of systems such as Google Maps, eBay, Amazon, and Twitter available to independent developers. They mediate economic transactions (Benzell et al., 2017). As architecture, APIs provide infrastructure for building platforms: As regulators, APIs partition decision rights (architecture) and provide scalable mechanisms for governing behavior (governance) (Parker et al., 2016). Many web pioneers have used APIs as the cores of their businesses. The number of web APIs has increased from a few hundred in 2005 to more than ten thousand today (Benzell et al., 2017). Benzell et al. (2017) find that API adopters see large financial gains. Their results show that firms adopting APIs see increases in sales, net income, market capitalization, and intangibles. API use can also lead to decreases in operating costs in some specifications. APIs can perform the roles traditionally played by EDIs in a cost-effective manner. In addition, the effects of API use increase as more data passes through the API. Basing an ecosystem around an API makes it straightforward for a firm to scale and expand. Therefore, the potential for growth through complementary network effects is enormous.

Deployment of the Internet

The widespread deployment of the Internet as an open, cost-effective, and ubiquitous network is of particular interest (Afuha, 2003). It has enhanced the ability of firms to engage with customers in the product innovation process (Brynjolfsson & Hitt, 2000; Dahan & Hauser, 2002; Sawhney et al., 2005). The rise of the Internet and the emergence of new digital channels (e.g., mobile, social media, apps) required the historical channel view to be broadened (Verhoef et al., 2015). Internet-based virtual environments allow the firms to engage with a much larger number of customers without making significant compromises on the richness of the interactions. In particular, the rise of social media and virtual communities facilitated customer-to-firm communications and customer-to-customer interactions (Hagel III & Armstrong, 1997; Lamberton & Stephen, 2016), a development that affected traditional structures and relationships. These environments also enhance a firm's capacity to tap into the social dimension of customer knowledge. Consumer-generated content is also now used to collect data and research demonstrates that it provides managers with valuable information. Using consumer-generated content to elicit brand management is comparatively low in cost, so it could be applied on a regular basis, something that has been infeasible in the past when using traditional forms of market research that have significant costs attached (Gensler et al., 2016). In addition, the Internet increases the flexibility of customer interactions. Customers can vary their level of involvement over time and across sessions (Sawhney et al., 2005). For example, they can become more actively engaged in value creation by promoting brands via social networks or by generating content (Leeflang et al., 2014). However, they can also contribute in a negative way: one customer complaint can have a snowball effect, causing numerous customers to complain as well (online firestorms; Pfeffer et al., 2014). For instance, Baccarella et al. (2018) illustrate the multidimensionality of the dark side of social media and describe the various related undesirable outcomes. Schulze Horn et al. (2015) point out that the major threat for businesses is to "ignore social media and allow conversations to happen without awareness or participation".

Sawhney et al. (2005) focus on how the Internet has impacted the process of collaborative innovation—a key process in value co-creation. They outline the distinctive capabilities of the Internet as a platform for customer engagement and suggest that firms can use these capabilities to engage customers in collaborative product innovation through a variety of Internet-based mechanisms. Interestingly, Lakhani and von Hippel (2003) emphasize that the general lessons for user-based innovation systems include the clear willingness of users to openly reveal their proprietary information. This is rational behavior if the information has low competitive value and/or if information providers think that other users know the same thing they do and would reveal the information if they did not.

Digital platforms

The development of the Internet has laid the groundwork for the emergence of one of the most important digital trends: digital platforms.

> A business platform […] is a nexus of rules and infrastructure that facilitate interactions among network users […] Platforms provide building blocks that serve as the foundation for complementary products and services. They also match buyers with suppliers, who transact directly with each other using system resources and are generally subject to network effects (Parker & Van Alstyne, 2014, p. 1).

Platform-based business models have become essential pillars of today's economy (Clauss et al., 2019). Digital platforms are built using cloud technology and serve as intermediaries that enable exchanges between other players. They facilitate multisided exchanges between multiple groups, such as customers and producers. Platforms exist to enable positive interactions between users. To achieve this, it is particularly important to develop efficient tools that attract users, enable interactions, bring vendors and customers together, and that can be used to build efficient curating strategies (Parker et al., 2016). Examples are search engines, social platforms, or sharing industry platforms (Becker et al., 2018; Goldfarb & Tucker, 2019). However, platform business models have existed for centuries (Bal, 2018; Haucap, 2019). Traditional platforms include bazaars and shopping malls that enable trade by bringing customers and producers together. Stabell and Fjeldstad (1998) identified network platforms as one of three elemental configurations through which firms generate value. IT has moved platforms to the online world, made platform operation cheaper, and enhanced a platform's ability to capture and analyze huge amounts of data that increase its value to all participants. Bal (2018) emphasizes that the rise of platforms has been driven by two transformative technologies: cloud and mobile. The cloud permits the creation of content and applications for a global audience. Mobile technology allows connection to this global infrastructure anytime and anywhere. The result is a globally accessible network of entrepreneurs, workers, and customers who are available to create business opportunities, contribute content, and purchase goods and services (Bal, 2018). Accordingly, Haucap (2019) emphasizes that the "death of distance" and the decline of transaction costs have led to tremendous platform growth.

In addition, recent research suggests that multisided platforms have to provide users with much more than just price-based benefits. Those benefits can be broadly summarized to apply to the areas of quality and emotional value (Clauss et al., 2019). The emotional value that customers gain from participating on platforms is the strongest indicator of loyalty and customer loyalty has been identified as a metric that predicts business performance (Morgan & Rego, 2006). As they are deriving enjoyment and positive feelings from the platform, customers are stimulated by interacting with others and by positive experiences. Consequently, this means that customers who use these platforms are actively seeking the social aspects of these platforms that go beyond the typical business-to-consumer (B2C) offerings. Platforms provide a form of social interaction that has been missing from the online B2C relationship that eliminated most of the human interaction that shapes the offline shopping experience (Clauss et al., 2018; Clauss et al., 2019). Platforms take advantage of user participation. Therefore, the number of members that a platform has is only a limited indicator of success. The decisive indicator is the amount of activity taking place, i.e., the number of satisfactory interactions that a user experiences (Parker et al., 2016).

Accordingly, Haile and Altmann (2015) emphasize that two-sided platforms have been studied and one of the main issues brought up in literature is the impact of network effects (see also, for instance, Parker & Van Alstyne, 2005). The role played by network effects is described as an important value driver because the platform's overall value to sellers and buyers increases with a growing user base on either side (Haucap, 2019; Katz & Shapiro, 1985; Valente, 2018). According to Haile and Altmann (2015), for instance, the main value generator in a software service ecosystem is the number of application users. Direct network effects create value for customers generated from the number of existing users of a service, i.e., using a technology that many other customers also use. Indirect network effects enhance value built by the availability and interoperability of complementary products. Customers value a hardware technology for which there is a wide variety of software available, and more software firms associate with a hardware technology if more customers use it (Clements, 2004). Therefore, indirect network effects arise if the increase in the number of users on one side of the market attracts more users on the other market side (Haucap, 2019). These effects—also known as cross-side network effects—are of high importance for platform business models as the value of the service increases for one user group when a new user from a different user group joins the network (see, for instance, Voigt & Hinz, 2015).

A central problem facing platforms subject to network effects is how to drive user adoption enough to reach critical mass (Evans & Schmalensee, 2010). Parker and Van Alstyne (2014), for instance, provide an overview of the chicken-and-egg problem of launch and adoption, and discuss a number of strategies which can be used to overcome this issue (see also Parker et al., 2016). Accordingly, companies need to develop well-considered strategies and investments in order to enable value-adding interaction. To succeed, platforms must get both sides of the market on board (Rochet & Tirole, 2003). However, network effects can also be negative. To avoid this, smooth access must be accompanied by effective curating (Parker et al., 2016).

Grinberg (2018) uses the example of the fax machine network in order to discuss the difference between traditional platform businesses and social media platform businesses: As with the fax machine network, the value of a social media network to users comes from communicating with one another via machines. The key difference between the fax machine business and the social media platform business is that sending faxes did not itself create additional profits for the fax machine maker. In contrast, a social media platform is able to analyze the data sent through its platform and create an additional source of value from that data by monetizing it via advertising (see also Valente, 2018). Moreover, Parker et al. (2016) provide an overview of different monetization methods and point out that the largest part of the added value of a platform is provided by the user community, which is why users, resources, and functionalities that are located outside the company are in the foreground for strategic planning or IT. Finally, Plekhanova (2020) analyzes the process of value creation within a platform firm. She emphasizes that, in platform firms, the production of products and the associated value creating process cannot be explained through the concept of the value chain. They generally reflect a value network model of value creation. The profitability of a platform firm is a result of an overall cycle of exchanges of resources and products that take place between the firm and its customers on all sides.

Collection and use of data

New technologies have been layered on top of the basic Transmission Control Protocol/Internet Protocol-based Internet, including browsers, search engines, social networks, mobile communications, and so on. These technologies have enabled increased collection and use of data (Goldfarb & Tucker, 2019; Olbert & Spengel, 2019; Spiekermann, 2019). Accordingly, digitization allows new as well as existing business models to gather, connect, and analyze data to create new information-based products or services. The collection, analysis, use, and monetization of data is the foundation for the creation of many intelligent business models and revenue streams based on artificial intelligence, machine learning, and deep learning. Companies usually have concrete goals when collecting data on the Internet. Different interests may be at the forefront depending on the business models used. Online services enable the collection of data and the tracking of Internet users within and outside their own services, and thus allow a comprehensive analysis of user behavior. Businesses can use this knowledge to constantly optimize and personalize their products and services. In addition, companies can identify potential trends from the data collected and use this information to develop new products and services with particular relevance to users. Typical examples besides platform economies include algorithm-driven business models and digitalized technologies that link technical machines (Industry 4.0).

In particular, user data is considered to be an important element necessary for value creation for digital business models that focus on B2C services (HM Treasury, 2018). Customers contribute to the value of these firms by providing them with information, and giving them permission to process this information and even to sell it (Petruzzi & Buriak, 2018). Data is considered as an asset and is a product itself (Aslam & Shah, 2020; Spiekermann, 2019; see also Schmalenbach-Gesellschaft, 2020). However, the mere raw data is not sufficient to gain a competitive advantage. It has to be transformed into information (valuable knowledge – Smart Data); the mere collection of data does not constitute something new or unique (Kofler et al., 2018) and "the products aren't about the data; they're about enabling their users to do whatever they want, which most often has little to do with data" (Loukides, 2011a, p.3). Data provided by the firm's customers often adds value only when used in conjunction with other resources (see also Plekhanova, 2020). Therefore, the receiver of the data may use data analytics and artificial intelligence to find and exploit valuable information in the sheer mass of collected data (Valente, 2018). This intelligent use in different business models makes data valuable (see also Christians & Magalhaes, 2019). However, it must be acknowledged that raw data has some inherent value (Aslam & Shah, 2020; see also Schmalenbach-Gesellschaft, 2020).

Accordingly, Parker et al. (2016) emphasize that data analysis can significantly enhance the capabilities of the platform company as well as the partners in the ecosystem. Digital platform services mostly use huge amounts of structured and unstructured data from different sources as input factors, which arise and are processed (almost) in real time (big data). Urbinati et al. (2019) highlight the peculiarities of big data and explore the question of how provider companies create and capture value from it. Big data refers to datasets that are large in volume, diverse in data sources and types, and quickly created, resulting in greater challenges in terms of harvesting, managing, and processing the data using traditional systems and capabilities. Companies need to find methods by which to gain advantage from possessing this amount of information and this enables the implementation of new key value activities (Brynjolfsson & McAfee, 2017; Urbinati et al., 2019). One method is data mining, which refers to the techniques, methods, and algorithms used to analyze large amounts of data with the goal of transforming that data into knowledge (Larose & Larose, 2014; Witten et al., 2017). Thus, data mining can be considered as the part of a business model that creates value out of data. Olbert and Spengel (2019) provide an overview of value creation through data mining and show that the value of data increases during the data mining process (see also Varian, 2018, who uses the concept of a data pyramid to depict the relationship between data, information, and knowledge).

Since big data technologies lead to the use of new data information practices, they create novel decision-making possibilities, which are widely believed to support firms' innovation processes. Applying German firm-level data within a knowledge production function framework, Niebel et al. (2017) find suggestive evidence that big data analytics is a relevant determinant for the likelihood of a firm becoming a product innovator as well as for the market success of product innovations. Accordingly, Petruzzi and Buriak (2018) emphasize that marketing strategies rely on big data. Esteves and Resende (2019) show that customers are expected to pay higher average prices under a personalized advertising/pricing strategy. They also show that using targeted advertising with price discrimination rather than mass advertising and uniform prices might boost firms' profits. Accordingly, it is not the mere quantity of (user) data obtained but, in particular, the way in which it is used to generate network effects that is crucial for value creation (Schrage, 2016). Thus, information is very important in the value chain, and value activities might include the collection, systematization, selection, composition, and distribution of information (Khosrow-Pour, 2015). Accordingly, data and several activities to transform data into information are value-driving. In addition, research and macroeconomic statistics confirm that data is an increasingly important value driver.

With increasing computing power and advanced memory technologies, intelligent algorithms are increasingly taking control, with the result that, in many occupations, decisions are already routinely being taken by software systems rather than by people. Possible development paths are that humans keep control over computer systems or that computer systems become independent. An example for the latter is the development of algo trading, where intelligent algorithms produce stock market reports which, in turn, are analyzed by other algorithms. Braun et al. (2016) describe how, in future, computers will be so powerful that they will probably be able to take over tasks from knowledge workers. They emphasize that one key driver of this development is that a large part of human knowledge will be stored digitally in the future and be accessible to computers via cloud computing. With the help of big data, cognitive computer systems can detect hidden patterns and have become capable of learning like humans. As a result, work processes can be made more efficient and therefore more profitable.

Finally, it has to be emphasized that data often has a complementary character and so more (heterogeneous) data tends to provide more useful information. Therefore, the learning curve of a data-based business model, supported by various algorithms, also shows a significantly stronger increase than that of conventional business models. In combination with an economically strong network and feedback effects, this can result in monopolization tendencies, as has been the case with a few large Internet companies (Hildebrandt, 2018; Hildebrandt & Arnold, 2016).

Cloud computing

Accordingly, the emergence of cloud computing—the provision of IT resources in a virtual environment—also represents a fundamental change in the way IT services are invented, developed, deployed, scaled, updated, maintained, and paid for. Cloud computing offers different advantages (Marston et al., 2011). It lowers the cost of entry for smaller firms trying to benefit from compute-intensive business analytics; it can provide almost immediate access to hardware resources with no upfront capital investments for users; and it can lower IT barriers to innovation and make it easier for enterprises to scale their services according to client demand. Cloud computing also makes new classes of applications possible and delivers services that could not be delivered before.

Impact on allocation of taxing rights

One can conclude that the digital transformation of the economy does not affect all companies alike. However, "ring-fencing" the digital economy for taxation purposes is not an option (de Wilde, 2015). First, Klein et al. (2019) show that expectations about ring-fencing digital tax measures negatively impact firm values. Second, the overall economy is increasingly becoming digital. Traditional business models are increasingly being transformed by the use of ICT (Kofler et al., 2018; OECD, 2018a; Olbert & Spengel, 2017). Thus, digitization and technological developments will influence value chains, leading to a shift in classic value chains. Value chains will be based, in particular, on IT network processes, network externalities will be of special interest, some transactions will be performed virtually, customers will be (more) included in the value chain process, individualized production will be improved, intangibles will become more and more important, the use of multisided business models will increase, and some oligopolistic and monopolistic structures will be formed (Langerak, 2015; Olbert & Spengel, 2017; Pellefigue, 2015; Petruzzi & Buriak, 2018).

In most so-called digital businesses' models, the collection, use, and exploitation of personal data is the core method used to generate revenues (Amit & Zott, 2001; Kofler et al., 2018; Loukides, 2011b; Petruzzi & Buriak, 2018). However, data has always been used by businesses to design products and to organize their value creation processes. The core change is that the costs of collecting, storing, processing, and analyzing data have decreased tremendously, so more and more data is being, and will be, used (Haucap, 2019). The "death of distance" and the decline of transaction costs have also led to tremendous digital platform growth (Haucap, 2019). Businesses can now build large global user bases, providing them with the opportunity to collect far more user data, without having a physical presence in these countries.

In addition, from a traditional point of view, value creation and innovation are seen as firm-centric activities. In a world of virtual environments, this view changes to customer-centric. Customers are partners in the innovation process (Sawhney et al., 2005) and, in platform companies, for example, added value is largely generated by the user communities (Parker et al., 2016). Leading economists point out that it has become necessary to reconsider the interaction between learning machines and humans in the value creation process since the roles of user participation, user data, and their synergies with intangibles are not explicitly taken into consideration in the current framework of thinking about value creation (Brynjolfsson & McAfee, 2017).

At the same time, it seems to be becoming increasingly harder for the existing international tax system to allocate taxable profits in a manner that is coherent and agreed upon by multiple tax authorities across the globe. The issue has triggered controversial debates about the appropriate allocation mechanism, i.e., transfer pricing. The transfer pricing framework might be further challenged, especially by intelligent algorithms which will make more and more decisions and collect user information autonomously (Braun et al., 2016), such that the contribution of local personnel in the value creation process might decrease (Schön, 2018). These developments could mean that the current transfer pricing framework, which is mainly based on physical production factors and people functions (functions performed, assets used, and risks assumed), is sidelined. The current set of international tax rules that cover cross-border business activities originated from principles devised in the 1920s, a time when factors contributing to the value created by MNE groups were relatively immobile and required intensive use of labor and tangible assets. Whether the existing transfer pricing system complies with new value chain principles or even represents them in an appropriate manner is, therefore, questionable. Greil, Müller et al. (2019) provide some initial insights into transfer pricing challenges that practitioners face in the context of digitalized transactions. Their results indicate that existing transfer pricing rules approximate economic activity to a greater extent than a formulary apportionment of corporate profits would, despite the conceptual shortcomings of the ALP. However, the increased automation of business activities makes it harder to justify the allocation of profits based on physical allocation factors. With regard to the relevance of transfer pricing in the digitalized economy, they document that many firms already determine transfer prices for digital transactions on a regular basis.

However, if MNE groups become increasingly integrated and intangible-intensive, the inherent problems of the ALP become more urgent and apparent (see also Kobetsky, 2019). It is, for instance, a challenge to identify the part of the data mining process in which a legal entity is engaged and the value of the specific activities relative to the overall value created through data mining. As the ALP, in the sense of the TPG, relies on the comparability of controlled transactions with third-party transactions, it is almost impossible to find third market comparables, and this problem is obviously inherent to data-driven business models (see also Olbert & Spengel, 2019). Moreover, for many MNE groups, intangibles are becoming increasingly important. The existence of unique intangibles makes comparability a challenge in transfer pricing (see also Kobetsky, 2019).

The allocation of profits generated by an MNE group to the individual entity within the group is connected with arbitrariness, as it is, for instance, theoretically impossible to allocate synergy effects generated within an MNE group according to its source (Avi-Yonah et al., 2009; Durst, 2012; Luckhaupt et al., 2012). The same holds true for efficiency gains and cost savings within the MNE group due to technological developments. Efficiency gains, in particular, can be achieved through faster and more informed decision-making, the simplification of transactions, and the reduction of distribution, marketing, sales, transaction-processing, or communication costs (Steinhauser, 2019).

An allocation due to functions performed, risks assumed, and assets used, which is suggested by the OECD, will not lead to arbitrariness-free results (Luckhaupt et al., 2012), especially in a highly integrated value chain process, ensuring that the income made by an enterprise group's individual companies cannot be properly classified (Olbert & Spengel, 2017). The problem is intensified with platform companies in particular, due to the importance of network effects. The mere number of users that a platform has does not necessarily reflect its value. The enabled interactions must generate considerable added value that can be captured by the platform (Parker et al., 2016). The value of the network effects, however, can hardly be clearly assigned to specific companies of an MNE group or states. Thus, while digitalization is not the root of the ALP's deficiencies, it might well exacerbate existing problems.

So far, taxing rights are largely allocated to the home state from which the business chooses to operate and where its important management decisions are taken (Næss-Schmidt et al., 2019), and they increase as the multinational's business activities and footprint in that country become more extensive. This is especially the case for returns from intangibles. The challenge with intangibles has always been that they cannot be localized. Taxation of profits where resources are located and directed is correspondingly problematic and arbitrary. Accordingly, the OECD introduced the concept of "development, enhancement, maintenance, protection, exploitation" (DEMPE) functions to localize the functions performed in relation to intangibles that have to be remunerated. This reduces the importance of the intangible itself. These DEMPE functions related to intangibles but are mainly performed by significant people functions in the home state from which the business controls its worldwide operations. Therefore, the returns attributable to the intangibles are also allocated to that one state. By doing so, the fact that the contributions of data and user participations in the various users' jurisdictions without any physical presence also enhance and develop the intangibles, and thus are value co-creators, is ignored. One would have to rethink the international convention in order to assume that users are value co-creators. Such a step would affect all business models and not just those within the digital economy (Greil, Müller, et al., 2019). As shown above, the OECD's concept of value creation could be understood as a shift away from the perspective of mere business activity. Therefore, it is not unreasonable to include the demand-side in transfer pricing, which allows (more) profit allocation to market and source countries, as all value is created jointly. The cornerstone for rethinking has been laid.

At the same time, IT could increase centralization due to low-cost digital information flow (Goldfarb & Tucker, 2019). This, in turn, could also increase the profits in the home state from which the business chooses to operate. In addition, and according to the OECD (2018a), digital companies can provide services and sell goods in jurisdictions in which they are not physically present through the use of Internet. Moreover, the availability of digital products and services is not bound to the location of the underlying intangible, which facilitates the access to global markets for highly digitalized businesses ("scale without mass", OECD, 2018a). The investments in the market countries mostly relate to some basic hardware components and the establishment of local IT infrastructures. Additionally, local marketing and sales staff customize the digital services for the needs of local users or clients. The core activities of the MNE group (i.e., the development and maintenance of the software and algorithms by highly skilled staff and the key assets) are usually centralized at the parent company, as evidenced by several case studies (Olbert & Spengel, 2017). As a result, the location for the core activities and assets can be separated from the location for sales and the generation of user data. This separation is not unique to the digital economy but is supported by the diffusion of information and communications technology (Devereux & Vella, 2017).

Such developments can lead to a perceived unfairness about the allocation of taxing rights. Greil et al. (2020) used a survey to shed light on questions about whether tax experts, such as tax advisors and auditors, and non-experts differ in their sense of fairness about a more even distribution of profits across countries. Their findings indicate that tax experts do differ from non-experts in this respect. This may explain why politicians, who are usually non-experts, view technical issues differently from tax experts. Their sense of fairness and, therefore, recommendations for action, particularly seem to differ in the context of discussions regarding the taxation of the digital economy.

However, it is not obvious that the digitization of the economy and the use of new business models automatically calls for a revision of the international rules, especially in relation to how to allocate taxing rights (Andersson, 2018). In the same way, understanding the effects of digital technology does not require the development of fundamentally new economic theory (Goldfarb & Tucker, 2019). This is without prejudice to the question of whether a new nexus should be created for the allocation of taxing rights or whether the threshold for PEs should be lowered.

CURRENT POLITICAL DISCUSSION AND PROPOSALS IN LITERATURE – IS THE ALP FIT FOR PURPOSE?

Current Political Discussions and Developments in International Taxation

In general

At the same time, tax challenges arising from digitalization of the economy have been identified as one of the focus areas of the OECD/G20 BEPS project, leading to the BEPS Action 1 Final Report (OECD, 2015b). The BEPS initiative illustrated that the allocation of the tax base across jurisdictions is very difficult based on the current internationally accepted taxation principles, and is often perceived as unfair by both the local tax authorities and the public in general. However, the current discussion is fourfold. First, the current measures do not yet provide an adequate response to the risks that continue to arise from structures that shift profits to entities subject to no or very low taxation. Second, there is a strong feeling that the current allocation of taxing rights is inappropriate because there is assumed to be a mismatch between where the taxation of the profits takes place and where value is created for certain digital activities. The main concern is that the input "user value creation" is located in a tax jurisdiction where the company carrying out a digital activity is not physically established and, thus, where its activities cannot be taxed.[8] This concern is widespread in Europe as, in 2018, seven out of the ten most valuable firms worldwide made their money with digital business. They either resided in the U.S. or in China (Richter, 2019). Third, some countries are of the opinion that the allocation of taxing rights is unfairly distributed regardless of the discussion on the taxation of the digital economy and are taking advantage of the current opportunity to receive more taxing rights. This view harmonizes with the view that too much profit is allocated to enterprises' headquarters. Fourth, the ALP is too complex and burdensome for many countries to apply in practice. Emerging and developing countries, in particular, have practical enforcement problems. Their voices are heard in the OECD/G20 Inclusive Framework on

[8] In this context, one should not forget the rise of consumption taxes (Schön, 2018).

BEPS[9], as the OECD needs their support to enhance its importance and financial resources. This, in turn, calls the role being played by United Nations (UN) Tax Committee into question.

Current political discussions on European Union (EU), OECD, and UN level

EU proposal for a Council Directive

The OECD and the EU are elaborating possible ways forward. On 21 March 2018, the European Commission (EC) published a "Proposal for a Council Directive on the common system of a digital services tax ("DST") on revenues resulting from the provision of certain digital services" (EC, 2018b) and a "Proposal for a Council Directive laying down rules relating to the corporate taxation of a significant digital presence" (EC, 2018a). From a transfer pricing point of view, the latter one is of high relevance, as its introduction would have a tremendous impact on conventional profit allocation rules. First, the concept of a significant digital presence (SDP; or digital PE) intends to establish a taxable nexus in a jurisdiction and significantly expands the existing PE concept. The EC proposes rules based on revenues from supplying digital services, the number of users of digital services, or the number of contracts for a digital service. The proposed rules for allocating profits to an SDP leave the current framework applicable to PEs. The EC thus asserts that the AOA remains the underlying principle for attributing profits to an SDP. Under the AOA, significant people functions must be identified and allocated to the head office or the PE based on the functions performed, assets owned or used, and opportunities and risks assumed. Accordingly, the determination of the significant people functions performed by a PE and its head office would remain fundamental for the attribution of assets, liabilities, and capital (i.e., profits). An SDP, however, does not need people. Therefore, the AOA would have to rely on significant functions without people. Second, the EC claims that the profit split method (OECD, 2018b) would be considered the most appropriate method for attributing profits to the SDP. Therefore, the EU leaves the conventional hierarchy of selecting a transfer pricing method: The selection of a transfer pricing method always aims at finding the most appropriate method for the particular case (OECD, 2017, p. 97, para. 2.2).

OECD and the Inclusive Framework

On 16 March 2018, the "Tax challenges arising from digitalisation – Interim report 2018: Inclusive Framework on BEPS" (OECD 2018a) prepared by the TFDE was released. It surveys the increasing adoption of unilateral measures to tax digitalized businesses across countries. Furthermore, it sets out a theoretical framework for analyzing the value creation processes in digitalized business models in order to underpin the revision of international tax rules. However, there is currently no consensus among countries with respect to a revision of international tax rules. The Inclusive Framework on BEPS will seek to arrive at a new global consensus by 2020/2021.

In 2019, the OECD (2019b) was discussing three different approaches: The "user participation" approach suggested by the U.K. (HM Treasury, 2018), the "marketing intangible" approach suggested by the U.S. and a proposal made by 24 countries (G24) regarding a significant economic presence ("digital PE"). The discussion led to the "Programme of work to develop a

[9] Working together within OECD/G20 Inclusive Framework on BEPS, more than 130 countries and jurisdictions are collaborating to tackle tax avoidance, improve the coherence of international tax rules and ensure a more transparent tax environment (OECD, 2019a).

consensus solution to the tax challenges arising from the digitalisation of the economy" (OECD, 2019c). This report addresses the three approaches in order to present a way forward in terms of finding a common solution and agreeing on it (for a comprehensive case study, see Greil & Wargowske, 2019).

The first approach purports to give appropriate credit to user participation in value creation in the digital economy (see also Christians & Magalhaes, 2019; Kobetsky, 2019; van den Hurk, 2020). User participation is understood as the process by which users can create value for certain types of digital businesses through their engagement and active contribution. The U.K. also emphasizes that the users of certain digital platforms are distinguishable from customers. The channels by which user participation creates value for a business seem to be most relevant to online networks, such as social media platforms, search engines, file-sharing platforms, and online marketplaces. This idea originated from HM Treasury and was used by the EC in its Directive proposals. Both approaches assert that value creation is different in the digital economy, but it seems to be unclear how one would determine when, and to what degree, users contribute to value creation (Grinberg, 2018). As users are already recognized as potential sources of value in the traditional economy, it is not clear why there should be a limitation to explicitly named business models. Grinberg (2018) cites the pharmaceutical and biologics industries as examples. In these medical economies, value is often created from a combination of scientific research, patient data, sales functions, and knowledge. Most notably, patients contribute to value creation by sharing their medical data via clinical studies. Therefore, a decision is needed about when, and to what extent, users contribute to value creation in these industries if the OECD takes its statements that transfer pricing should be aligned with value creation, and that the digital economy cannot and should not be ring-fenced as the U.K. assumes, seriously. Schön (2018) emphasizes that the use of a separate tax framework would drive an inefficient wedge between the digital and non-digital sectors (see also Andersson, 2018). In addition, digitization is increasingly impacting all sectors of the economy. It could make sense to develop specific rules, but one has to identify factors which might make it necessary to establish new international rules. As stated above, user participation is not such a factor. The demand-side could be recognized in the ALP in general. The result of the U.K.'s approach is that some, but not all, of the excess profits should be allocated to the destination jurisdiction. It seems that this approach is particularly aimed at business models which do not usually have their MNE group's headquarters in the U.K and the EU.

The second approach on "marketing intangibles" constitutes a compromise between the current transfer pricing system and a destination-basis income tax (hybrid approach; Avi-Yonah & Benshalom, 2011; Christians & Magalhaes, 2019; Grinberg, 2018; Kobetsky, 2019; Oosterhuis & Parsons, 2018; van den Hurk, 2020). One advantage from the point of view of tax certainty is that this approach does not distinguish between the "old" and "digital" economies. This approach would broadly affect all industries that are focused internationally and have international customer bases (Næss-Schmidt et al., 2019), and particularly tries to tackle tax avoidance schemes using low-risk distributors.

The profits of an MNE group should be allocated in two steps. As a first step, the routine functions have to be remunerated. However, there is no clear definition of what constitutes a routine or "normal" return (Næss-Schmidt et al., 2019). As a second step, the residual profit has to be divided between marketing and technology IP. It could be said that the jurisdiction where the base of customers or a network exists is a natural source for goodwill and customer-based intangibles (Oosterhuis & Parsons, 2018). Accordingly, residual returns deemed attributable to customer-based or marketing intangibles would be allocated to the market—the jurisdictions where the customers reside. Residual returns deemed to be attributable to other intangibles would be allocated based on the current transfer pricing rules. With regard to the link between marketing intangibles and the market jurisdiction, the approach would modify the current transfer pricing and treaty rules to require marketing intangibles and risks associated with such intangibles to be allocated to the market jurisdiction. This proposal also intends to create new nexus rules but does not describe how. Næss-Schmidt et al. (2019) note that this approach could have three drawbacks: First, it reduces national incentives to support innovation; second, the key parameters have no solid empirical foundation; and third, it involves high compliance costs and there is a requirement for unrealistic levels of international co-operation.

The G24 proposal is motivated by the view that the digitization of the economy has enabled business enterprises to be heavily involved in the economic life of a jurisdiction without having a significant physical presence there (see also Christians & Magalhaes, 2019; van den Hurk, 2020). A non-resident enterprise would have a taxable presence in a jurisdiction when it was deemed to have a significant economic presence on the basis of factors that evidence that it had a purposeful and sustained interaction with the jurisdiction via digital technology and other automated means. Accordingly, one or more factors could be considered. First, the existence of a user base and the associated data input. Second, the volume of digital content derived from the jurisdiction. Third, billing and collection in the local currency or with a local means of payment. Fourth, the maintenance of a website in a local language. Fifth, responsibility for the final delivery of goods to customers or the provision by the enterprise of other support services, such as after-sales service or repairs and maintenance. Sixth, sustained marketing and sales promotion activities, either online or otherwise, to attract customers. The allocation of profits to such a presence could be based on a fractional apportionment method. With regard to this, it is necessary to define the tax base which has to be divided, to determine the allocation keys to divide that tax base, and to weight these allocation keys. This approach also aims to identify more taxable income regardless of the underlying business model used.

All three concepts would involve changing, or at least amending, the current profit allocation rules, and would aim to achieve a global profit distribution for a "new taxing right"—which would exist alongside the current profit allocation mechanisms.

Apparently, the OECD's members could not find a compromise in the three previous mentioned alternatives (see also van den Hurk, 2020), as the discussion led to the so-called unified approach (UA) (Christians & Magalhaes, 2019; Förster et al., 2020; OECD, 2019d). The UA is intended to complement the existing system of corporate taxation. At the time of writing, the essence of the UA is to grant market countries the right to tax a portion of the profits of companies, regardless of whether those companies have physical presences in the market countries in the form of affiliated companies or PEs. To this end, the profits of enterprises are to be divided between their countries of residence and sales on the basis of the revenues generated. The UA consists of three "amounts":

- Amount A allocates a part of the taxation rights on the company's profits to market countries, regardless of whether the company has a physical presence in the market country. Amount A, however, merely defines taxation rights on so-called residual profits.
- Amount B is to intervene in the current system to allocate the profits of a group of companies to distribution companies with so-called baseline marketing and distribution activities. The regulation is thus aimed, in particular, at distribution

companies with low levels of functionality and risk. The UA provides that such companies are entitled to a minimum income or a safe harbor income for the exercise of this function.

- Amount C is also intended to provide effective procedures for the avoidance and resolution of disputes over the allocation of taxing rights, for the allocation of profits beyond Amount B on the basis of the arm's length principle, and for the application of Amount A.

The UA does not offer a conclusive overall concept, but rather a mélange of the different approaches currently under discussion in science and tax policy, leading to overcomplexity (Christians & Magalhaes, 2019; Förster et al., 2020; Plekhanova, 2020; Schön, 2020). However, on January 31, 2020, the OECD reported that it had made steps in advancing the UA. At its January 29th and 30th meetings, the OECD Inclusive Framework had endorsed the UA and approved a way forward for negotiating the final UA principles by the end of 2020 (OECD, 2020). Christians and Magalhaes (2019) predicted that, on its current trajectory, the program of work on digitalization is likely to produce a new global tax deal that looks much like the old global tax deal, with a relatively modest redistribution of taxing rights among a few key states, thus missing an opportunity for meaningful reform.

UN model tax treaty

In the meantime, and maybe also rather surprisingly, the UN Committee of Experts on International Cooperation in Tax Matters released a proposed optional UN model tax treaty article that would grant additional taxing rights to countries where an automated digital services provider's customers are located (UN, 2020). The draft proposal would add a new Article 12B to the UN Model Double Taxation Convention between Developed and Developing Countries (UN, 2017a), requiring an MNE group to pay taxes on payments for automated digital services.

Objective of the current political discussion

Currently, it is not really clear which problem should be solved and it seems that different objectives are mixed up. The political proposals are directed at counteracting a perceived unfairness in the taxation of digital business models, and are intended to allocate more taxing rights to the market and source states. However, the discussion is not limited to the digital economy or digital business models. Schön (2018) emphasizes that we are witnessing a political debate on the division of taxing right between production and market countries far beyond the digital world. It is a result of changing balances of political power in this world (Fuest, 2020). If the current allocation of taxing rights were to be perceived as unfair overall, the international tax system would either have to be called into question in its entirety or, via the existing mechanisms, have to ensure that more taxing rights are allocated to the market and source states. At the very least, principles like tax neutrality, efficiency, or inter-nation equity do not oppose such a re-allocation (Pinto, 2006; Vogel, 1988).

The current debate also shows that the ALP should continue to apply, so all relevant problems (of digitization) will continue to exist. The introduction of a new system of profit allocation will create further issues. Only countries that have sufficient personnel and knowledge will be able to manage these challenges. The challenges in international taxation will increase, particularly for emerging and developing countries. With regard to this, Ndajiwo (2020) suggests that the best way forward for African countries would be to build on the G24 proposal and press for simple formulaic methods which would allocate profits fairly between countries based on the real activities taking place in them. Similarly, Rukundo (2020) argues that African countries should participate in the multilateral discussions on the reform of international taxation needed to deal with the challenges of the digital economy. However, they must also acknowledge that their challenges are different from those faced by developed countries and that their solutions will, therefore, have to be uniquely African.

Other developments

Finally, some countries are obviously unsatisfied with current system and have implemented innovative tax tools (special levies). For example, India introduced an equalization levy, the U.K. and Australia introduced diverted profits taxes (see, for instance, Burchner, 2019), the U.K., Austria, and France announced that they would introduce DSTs, and the U.S. introduced the base erosion and anti-abuse tax (BEAT). Cockfield (2020), Cui (2019a), and Hadzhieva (2019) provide good overviews of the various developments in this area. The common intention of the current debate is to allocate more profits (and taxes) to the market or source countries in order to ensure that an "appropriate" level of taxation is applied.

Accordingly, the UN Model Double Taxation Convention between Developed and Developing Countries (UN, 2017) included a new article 12A regarding fees for technical services. Malan (2019) describes how Article 12A of the UN Model takes a step away from the existing principles for the allocation of taxing rights of business profits from the provision of services (UN, 2020). Article 12A permits limited taxation by the source state on the gross payments of fees for technical services paid to a non-resident service provider, without the requirement to meet any threshold in the source state and irrespective of where the services are provided or consumed (UN, 2020). Malan (2019) emphasizes that the rise in global trade in services, coupled with the advancements in technology that have made it increasingly possible for services to be provided remotely, has resulted in service providers being more readily able to avoid the creation of a PE in the state in which their customers are based. Therefore, some of the underlying challenges arising from digitalization are the same as those that prompted the introduction of Article 12A.

In addition, China and India, for instance, expressed their different views on transfer pricing in the UN Manual on Transfer Pricing (2017b), and emphasized the importance of their markets, marketing intangibles, and location-specific advantages, all of which have to be considered when applying the ALP (see, for instance, Li & Ji, 2017; Wagh, 2015). Furthermore, tax administrations worldwide are now equipped with more information about the group structures and worldwide economic activities of MNE groups due to the existence of country-by-country reports, which could awaken desires to capture more profits. Tax audits worldwide intensify transfer pricing audits and exert pressure on MNE groups in order to grasp additional income, leading to international double taxation (Andersson, 2018).

These unilateral measures create an environment which is based on noncooperation amongst countries, which can increase double taxation, threaten cross-border trade, and have a negative impact on real investment by MNE groups (see Cockfield, 2020, who uses the term "tax wars"). Against this background, it's important to note that Mansori and Weichenrieder (2001) show that when two revenue-maximizing governments compete for an MNE group's tax base, the noncooperative equilibrium will be characterized by different required transfer prices for the same firm in each country, leading to double taxation and to a depressed level of intra-firm trade. Accordingly, in their model, Raimondos-Möller and Scharf (2002) show that strategic transfer pricing regulation leads to a race to the top in transfer pricing, with the MNE group reducing output and intra-firm trade. In relation to this noncooperative transfer pricing rule game between governments, the arm‘s length standard of transfer pricing may not be within the set of Pareto-improving, harmonizing reforms. However, harmonization of transfer pricing rules can lead to Pareto-efficient gains. Keen and Konrad (2013) argue that coordination between countries would improve the citizens' overall welfare. Nonetheless, coordination between countries is not incentive-compatible and, therefore, has proved very difficult to achieve. Smaller jurisdictions have an incentive to undercut larger countries so as to attract investment and profits (Collier & Maffini, 2017). Therefore, it is not surprising that transfer pricing is considered to be a major source of tax risk for businesses (Ernst & Young Global Limited, 2016; Klassen et al., 2017). Against this background, it is obvious that the current system fragments, albeit the ALP is repeatedly emphasized as the worldwide standard of profit allocation (OECD, 2017, p.18).

However, the current political debate does not address any of these unilateral developments apart from the development of DSTs. In turn, even if there is an agreement on an international level, there is nothing that will prevent countries from introducing unilateral rules or unilateral interpretations of the ALP in order to allocate (more) taxing rights to their jurisdictions. In conclusion, the concept of value creation, unilateral developments, and a probable agreement on an international level are uncoordinated, and they allocate more and more taxing rights to source states. Whether this development will be recognized in public is doubtful. Therefore, the objective to reduce the perceived unfairness about the allocation of taxing rights will probably not be achieved. As a result, the challenge of the fourfold discussion of the taxation of the digital economy will not be solved.

Proposals in Literature

General proposals – A short overview

At first glance, the literature discusses proposals that help to reduce tax avoidance strategies. The underlying reason is that the current transfer pricing system can be used to structure the tax burden of an MNE group. It even provides the incentive to structure the tax burden, can have negative welfare effects, and is identified as primary channel for profit shifting (Aliber, 1993; Autrey & Bova, 2012; Avi-Yonah et al., 2009; Clausing, 2003; Devereux & Keuschnigg, 2008; Durst, 2012; Heckemeyer & Overesch, 2017; Heckemeyer et al., 2018; Liu et al., 2017; Luckhaupt et al., 2012; Morse, 2013; Rectenwald, 2012; Vann, 2010). In order to reduce profit shifting and to minimize tax-induced investment shifts, only one tax base is suitable—one which is immobile: the customer or the location of the customer of the MNE group. In this respect, external sales are exogenous and cannot be modified (Andersson, 2018; Avi-Yonah et al. 2009). If such an approach was taken, it would also reduce tax competition for investments between countries (Andersson, 2018) and emphasize other aspects of a country's infrastructure in order to attract investment. However, the taxpayer could be trapped in a race toward maximum tax rates if countries impose special (higher) tax rates on sales (see also Devereux et al., 2019), which could be equivalent to an additional customs and protectionist measure.

The current transfer pricing system is highly complex and requires countless highly skilled taxpayers, tax advisors, and tax auditors, but it neither leads to tax certainty nor avoids double taxation. Transfer pricing suffers from a conflict with the reality of the MNE group. In practical terms, it is challenged, in particular, on the grounds of complexity and the attendant costs of administration and compliance (Couzin, 2013). These problems could be minimized by taking a standardized formulaic transfer pricing approach and employing formulary apportionment.

The difficulty with taking such an approach is that it involves one round of negotiations amongst countries about the formula or the parameters for the application of a standardized transfer pricing approach. If a country "loses" this round, it is likely that its national policymakers will not support the formula or will want to renegotiate when recognizing the loss of their tax base. There is always a great temptation for countries to change the formula when that seems to be in their favor (unstable equilibrium). As transfer pricing is a strategic tax policy variable (Bucovetsky & Haufler, 2008; *inter alia*, de Mooij & Liu, 2018; Bucovetsky & Haufler, 2008), it is unlikely that a consensus about a clearly defined formula will be reached (Bird, 2018).

One example is the attempt of the EU to implement the Common Consolidated Corporate Tax Base (CCCTB). The CCCTB is a single set of rules for calculating companies' taxable profits in the EU. With the CCCTB, cross-border companies will only have to comply with a single EU system when computing their taxable income, rather than many different national rulebooks. The consolidated taxable profits will be shared between the member states in which the group is active, using an apportionment formula. Each member state will then tax its share of the profits at its own national tax rate. This would change the international tax landscape, moving away from a single entity approach, at least for the EU (for a critical assessment of formulary apportionment, see, *inter alia*, Altshuler & Grubert, 2010; Röder, 2012). However, it is worth emphasizing that the consolidation scope and, therefore, the entities of an MNE group which would be included in the CCCTB, is different to the definition of associated enterprises in Article 9 of the OECD-MTC. Even if the CCCTB were to be implemented, one could not abandon the ALP within the EU, as the definition of associated enterprises is very broad and has the potential to include more enterprises than the CCCTB would include. Furthermore, under formula apportionment, tax planning would be still possible, and could cause distortions and profit misallocations (Hundsdoerfer & Wagner, 2020; Riedel, 2010), albeit proponents emphasize that formula apportionment would greatly reduce the scope for profit shifting (IMF, 2019).

In addition, there are different proposals in literature which would move away from the ALP and focus on different objectives, like economic efficiency, fairness, robustness to avoidance, ease of implementation, and incentive compatibility. Some recommend destination-based taxation of MNE groups' cash flows (destination-based cash flow tax, [DBCFT]; Auerbach et al., 2017). Such a DBCFT moves the tax system away from income taxation toward consumption taxation. Under a pure destination-basis income tax, all excess profits associated with sales in a given jurisdiction would be allocated to that jurisdiction without taking into account the number of users that received services, whether data was provided, how users interacted with the platform, or whether any goods or services were provided free of charge. None of these factors would matter at all.

A recent alternative apportions residual profit by destination-based sales less the third-party costs (inclusive of the routine return) associated with them (Devereux et al., 2019; Grinberg, 2018). This so-called residual profit allocation by income (RPA-I) allocates the right to tax routine profit to the country where functions and activities take place by common transfer pricing techniques. It then allocates the right to tax residual profit to the market or destination country where sales are made to third parties. However, the apportionment of residual profit is based on the location of residual gross income (RGI), rather than sales. This is measured as the value of sales to third parties in that jurisdiction, less the costs of goods sold, including expenses incurred in that country plus the transfer value of goods and services purchased from other parts of the MNE group (Devereux et al., 2019). Devereux et al. (2019) argue that RPA-I has attractive properties and matches the criteria by which they aim to evaluate proposals for tax reform (economic efficiency, fairness, robustness to avoidance, ease of implementation, and incentive compatibility) well. However, this approach needs worldwide tax administrative procedures to be harmonized.

Another type of residual profit allocation (RPA) proposal is the sales-based formulary apportionment of profits proposed by Avi-Yonah et al. (2009). Under this approach, one calculates routine profit by applying an agreed markup on costs and apportions residual profit to the market or destination country entirely by sales. The key difference between a destination-based RPA and sales-based formulary apportionment is that a destination-based RPA would modify transfer pricing methodologies so as to allocate only "excess" or "supranormal" profits to the jurisdiction of sale (Grinberg, 2018).

Furthermore, Schreiber (2018), and Schreiber and Fell (2017), propose a sales-based apportionment of profits. This proposal allocates the overall profit associated with the relevant transactions of an MNE group to both the origin and market countries. Specifically, it has three elements. First, all jurisdictions would levy an origin-type tax by application of conventional transfer pricing methods. Second, each market country would tax a certain share of the overall profit of the enterprise. Third, the market country would give a tax credit for the conventional origin taxes paid elsewhere. This arrangement effectively makes the tax in the market country a minimum tax. Greil (2017) introduces a formula-based transactional profit split which comprises four steps considering the profitability of the MNE group. The aim of this approach is to establish an international consistent application of profit allocation rules in order to minimize profit shifting, to enhance tax certainty for taxpayers, and to reduce tax compliance and administration costs. At the same time, this approach uses current developments, does not entirely leave established procedures behind, and does not lead to an immediate change in the existing system. Opponents to standardization or the usage of formulas emphasize that each formula is arbitrary and is not based on any accurate assessment of the relative contributions to profit for firms. However, the same holds true with regard to the ALP, as it is based on the concept of value creation.

Li (2002) even proposes a global profit split. The global profit split would allocate the global profit of an integrated business to each country in accordance with the economic contributions made by the components of the business located in that country (see also Li et al., 2019).

Richter (2019) emphasizes that the current system of international corporate taxation is not compatible with a Shapley allocation of tax bases. He argues that if profit taxation is to be aligned with value creation, the tax base should ideally be allocated according to standards commonly accepted as fair and equitable when distributing the surplus of cooperation. He emphasizes that the Shapley value has been designed with the aim of determining an equitable distribution of the surplus generated by cooperation. Accordingly, Pellefigue (2015) argues that the Shapley value could be used to determine the fair amount of profits attributable to each party. This method, according to Pellefigue (2015), would take into account the digital economy's value co-creation features by using a specific set of formulae, which would allow the allocation of a consistent portion of profits between the headquarters and its local entities involved in digital activities, such as data collection.

Finally, Rixen (2018) proposes a republican conception of fiscal self-determination, and develops two principles of international tax policy and their institutionalization in an International Tax Organization (ITO). All states should, as far as possible, be represented in the ITO, which should act as a forum for the negotiation of concrete rules for international tax policy. The ITO should also have sufficient powers to enforce these rules. Rixen (2018) emphasizes that, in the area of corporate taxation, the membership principle means that profits have to be taxed where the real economic activity takes place. The introduction of a common consolidated tax base with formula allocation, which should be based, as far as possible, on real economic factors, could make this practicable.

Specific proposals in relation to digitization

Becker et al. (2019) propose a sustained user relationship (SURE) concept. A SURE may be a digital platform of users that is used to collect vast amounts of data and for advertising. A SURE may also be identified when data is constantly collected through interconnected devices' sensors, when the users of those devices have agreed to that form of sustained data collection. They propose the use of this concept for both the nexus and for the allocation of profits. They suggest that it could create a fourth factor to be considered along with functions performed, assets used, and risks assumed. However, both this concept and the political discussion mentioned above are too focused on customers and their value contribution. Digital technology adoption and usage enhances productivity, increases firm performance, and reduces a number of specific economic costs (Goldfarb & Tucker, 2019), as well as affecting all levels of value creation.

Aslam and Shah (2020) argue that a plausible conceptual case can be made for taxing the value generated by users under the corporate income tax. However, a number of issues need to be tackled in order for user-based tax measures to become a reality, which include obtaining an agreement among countries on whether user value justifies a reallocation of taxing rights, establishing the legal right to tax income derived from user value, and selecting an appropriate metric for valuing user-generated data if it is ever to be used as a tax base.

Olbert and Spengel (2017) propose a pragmatic way to develop specific guidance on transfer pricing for digital business models. Such guidance could be implemented not only as a revision of intangibles but in the form of a specific chapter on digital business models in the TPG. In particular, they argue that human capital, in its specific form of knowledge-based capital, is becoming a predominant value driver and that such capital should have substantial weight in the functional analysis for purposes of profit allocation. They also argue that a value chain analysis is needed to detect real economic activity, instead of relying on contractual arrangements and legal ownership to facilitate the allocation of income in line with value creation for digital businesses. As stated above, the OECD has already taken this path as it refers to the concept of value creation. Olbert and Spengel (2019) argue that transfer pricing solutions can be developed for data-driven businesses in a similar way as they can be for traditional business models. They propose that the common functional analysis techniques should be able to identify the significant people functions involved, as well as the investments made and risks assumed within the data mining process.

Petruzzi and Buriak (2018) proposed ways of using the existing transfer pricing rules to cope with the digitalization of the economy. They stress the role of value creation analysis, which sees data as a valuable asset, especially for the highly digitalized business. In such context, they argue that the functional analysis should consider various activities, including the transfer, the purchasing and selling, and the further processing or transformation of data, all of which have significant value for highly digitalized businesses. Accordingly, Postler (2019) works out that data-related value creation is the center of the current developments. The main stages within this value creation process are data collection, data analytics, and data exploitation. Postler refers to RBV and VRIO to analyze this process and to allocate profits within the MNE group.

Schön (2018) reminds us that the corporate income tax is a tax on return on capital and not a tax on the proceeds from sales and services to customers, like a turnover tax (see also Andersson, 2018). Therefore, one should ask for the location of tangible and intangible investments. If one starts from the assumption that profit allocation within an MNE group should reflect the use of assets, performance of functions, and assumptions of risk, this largely refers to the size and character of an MNE group's investment. It does not refer to the existence of a market, the accessibility or visibility of an MNE group in that market, or the contributions made by customers. Therefore, sufficient digital investment is needed. It should then be possible to apply the methodologies developed by the OECD (Schön, 2018). The PE definition is critical in this respect, because it sets the boundary of the firm in the sense that it determines to what extent the MNE group has FDI in a country when an entity which is (part of) the MNE group is not resident there (Vann, 2010). As mentioned at the beginning of this article, the ALP could also determine the PE threshold. This also seems to be the more sensible approach, as to determine a PE in order to be able to assign no profit to it on the basis of the ALP only causes unnecessary compliance and bureaucracy costs. The discussions revealed the same with regard to the so-called dependent agent PE (see, for instance, Drobnik, 2018). When it is then assumed that mere data collection via the Internet is not a particular value driver, but can rather be regarded as a routine function, the question of a taxable nexus is not of primary importance. For instance, Lakhani and von Hippel (2003) emphasize that the general lessons for user-based innovation systems include the clear willingness of users to openly reveal their proprietary information. This is rational behavior if the information has low competitive value and/or information providers think that other users know the same thing they do and would reveal the information if they did not. By contrast, many firms with digital business models invest in (digital) assets and employ people in locations where they have a significant market (see also Olbert & Spengel, 2019).

The inclusion of customers (or users) could be achieved through different ways. For instance, one could take into account the number of active users which serve as a function of attributable profits, or one could use the investments in the respective markets or in the (virtual) environments in which the users engage (see also Schön, 2018). Accordingly, Olbert and Spengel (2017) propose that the ALP should acknowledge that digital business models are becoming more customer-centric and should determine how this characteristic influences the analysis of assets, functions, and risks. Activities performed by local staff, such as customer support or the technical adaption of digital products and services to suit the particularities of local markets (e.g., language features, legal requirements, customer characteristics etc.), might not be best interpreted as routine tasks from a tax perspective.

However, if the Internet remains a global network and marketplace, the taxation of profits could reflect the virtual nature of economic activities conducted within the Internet's infrastructure. Accordingly, there could be a nexus for taxation wherever companies offer their services on the Internet. For example, in September 2017, the U.S. state of Massachusetts adopted a cookie nexus law, under which out-of-state sellers are deemed to have a physical presence in the state simply by placing a cookie on the computer or device of an in-state purchaser (Aslam & Shah, 2020). However, in order to cover only significant and sustainable activities, rather than every cross-border activity, a combination with a quantitative threshold would seem to be appropriate. In this sense, Cockfield (2020) proposes a PE fiction within model tax treaties called a quantitative economic presence permanent establishment (QEPPE) that would permit source countries to tax significant cross-border economic activity. A quantitative threshold, such as gross sales of U.S. $10 million, would ensure that source countries can subject non-resident companies to their tax jurisdictions only if those non-resident companies conduct significant business activities within their borders. Nevertheless, the challenge of allocating a profit remains; The ALP can be used to price the activities for this market. Cockfield (2020) also proposes, in this context, to modify an existing transfer pricing rule—the residual profit split method—to apportion taxable profits to a source country (for example, using a formula based on destination-based sales).

With regard to the attribution of the value created by network effects, Roques (2018) argues that this issue cannot be solved by functional analyses as typically performed in transfer pricing analysis. The value is created by users, outside the scope of activity of the platform and, therefore, the entity. It is proposed that value created by network effects should be located where these effects are created, and this could be achieved by treating network effects in a similar manner to group synergies. However, it is theoretically impossible to allocate synergy effects generated within an MNE group according to its source (Avi-Yonah et al., 2009; Durst, 2012; Luckhaupt et al., 2012). In the context of cloud computing, Mazur (2016) proposes the use of profit split methods. They would minimize an MNE group's ability to engage in tax planning. Fjord Kjærsgaard (2019) analyses the options available to user jurisdictions for taxing the value generated by cloud computing service providers. She recommends that policymakers wait to see the full effects of the implementation of the BEPS package before adopting measures that might jeopardize the potential of the digitalization of the economy.

Grinberg (2019) examines the capital expenditure method and the operating margin method against the background of the political discussion. The capital expenditure method separates excess returns from routine returns. It provides a normal rate of return to productive economic functions and uses arm's length methods to determine this return. In order to allocate the remaining excess returns, the method, in effect, deems the country in which customer sales take place to be an entrepreneurial affiliate with respect to local market sales. The operating margins method would specify a minimum taxable income due from an MNE group in a given jurisdiction. The main variable that determines this minimum market jurisdiction taxable amount globally is a measure of global operating margin. A fixed return on sales would then be allocated to market jurisdictions in general. Chadwick (2019) presents a proposal for the implementation of the "marketing intangible approach", based on five steps, and Greil and Wargowske (2019) illustrate its possible implementation by means of a case study.

Báez Moreno and Brauner (2019) argue that a conservative approach could not work and that fundamental reform is inevitable. They propose a withholding tax solution. In principle, levying a stand-alone gross-basis final withholding tax on services of highly digitalized businesses makes economic sense because these businesses often have low marginal costs, which makes gross income a reliable proxy for net income in many circumstances (Plekhanova, 2020).

Finally, Cui and Hashimzade (2019) offer a rationalization of the DST as a tax on location-specific rent (LSR). They provide stylized illustrations of how platform rent can be assigned to specific locations, even when users from multiple jurisdictions participate. Such a proposal seems convincing, as it links taxation in the market states to the achievement of rents and quasi-rents from local monopolies and to their advantages (see Cui, 2019a; Cui, 2019b; Cui and Hashimzade, 2019; Schön, 2019; Shaviro, 2019). Such taxation seems efficient because it does not change economic behavior as long as the taxpayer aims to achieve more from his investment than the minimum return achievable worldwide (see also Schön, 2020). However, when markets tend toward natural monopoly, taxation is not typically the optimal policy response; regulation is typically the best option (Aslam and Shah, 2020).

Proper application of the ALP – A rethinking exercise

One could refocus on the proper application of the ALP. Navarro (2018) rightly points out that if one matches the outcome of controlled and uncontrolled transactions, the outcome would be against the principle of equality, as the equalization of incomparable scenarios is against this principle. Therefore, he proposes that differences in the outcome derived from the achievement of greater efficiency on the side of MNE groups should also be reflected. He distinguishes between two approaches, the "full ALS fiction" and the "limited ALS fiction". The first requires adjustments to be made, to the maximum extent possible, of the features of the comparable transaction to reflect those present in the controlled transaction. The latter requires a fiction bound to only adjusting the conditions of the transaction according to what independent entities would have agreed on, but under given circumstances. Conditions could be understood as those elements that are subject to agreement between parties and circumstance as those elements that parties are not able to control. This limited fiction does not completely level related and unrelated transactions. Instead, it only levels those elements that should be considered as suitable for comparison, i.e., conditions not circumstances. This interpretation fits within the wording of Article 9(1) of the OECD-MTC, as the article refers to "conditions".

Assume that there is an MNE group consisting of two entities (A and B) in countries A and B. Entity A is the group's headquarters, in which nearly all functions are performed, assets used, and risks assumed. Entity B is a low-risk distributor and, therefore, only distributes the products (for instance, technical equipment produced by a well-known and customer-friendly brand) in country B. The gross margin of the MNE group shall be 38%. In order to determine the arm's length profit for the functions performed, assets used, and risks assumed by entity B, a comparability analysis and a benchmark study are performed. To search for external comparables, it is typical to search computerized databases of firms in order to determine whether there are comparable open-market transactions between unrelated parties (see also Eden, 2015). In this case, the benchmark study identifies that entities C and D are independent distributors in country B. They have similar functional and risk profiles to entity B. They earn gross margins of 2% and 7% respectively. Therefore, one would suggest that B should earn a gross margin of between 2% and 7%.

Article 9(1) of the OECD-MTC states that a transfer pricing adjustment may be carried out when "conditions are made or imposed between the two enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises". A benchmark study or a comparability analysis, especially in the sense of a "full ALS fiction", is not necessary, as Article 9(1) of the OECD-MTC does not use the phrase "relations which have been made" between independent enterprises. The use of a standard for profits earned on market transactions to allocate value seems to contradict the theory of the firm, which is generally premised on the use of the firm to earn more profits than are available from market transactions. Accordingly, the OECD emphasizes that it is important to understand how value is generated by the MNE group as a whole. Therefore, one would have to shift away from the so-called one-sided methods (see also Eden, 2015) that are based on examining data from only one component of the MNE group. As such, the MNE group, as such, and its value chain process would have to be considered and analyzed (value chain analysis) in every case.

Therefore, one should use accepted economic theories and managerial thinking to determine what third parties would have done. The outcome should reflect the conditions that independent parties would have agreed on, but under the same circumstances in which controlled entities operate. For example, the German legislator introduced the hypothetical arm's length method[10] and the Federal Fiscal Court in Germany repeatedly focuses on economic reflection.

In this simplistic example, the MNE group seems to have a competitive advantage, for instance, due to the existence of a well-known and customer-friendly brand. There will be in-house knowledge coordination activities so that entity B's personnel will act in the spirit of the MNE group in order to ensure a consistent market image. For instance, Google would not be as successful at problem solving if it merely recruited people and left them to their own devices (Woiceshyn & Falkenberg, 2008). The corporate value of knowledge sharing, active nurturing of network resources, and supportive managerial and technical systems that the company has established should not be neglected. Being an entity of an MNE group, rather than a domestic firm, has a variety of advantages. These benefits derive partly from internalization (Buckley & Casson, 1976, 2009; Eden, 2015). As Eden (2015) rightly points out, the real problem with the ALP is the lack of comparables. It suffers both from a theoretical perspective and a practical perspective. Market prices of comparable uncontrolled transactions do not exist. The more that intangibles are involved or unique functions are performed, the more complicated the practical task to find ostensibly comparable transactions is and, for many types of intra-firm transactions and locations, it is simply impossible. This calls the OECD's concept of comparability analysis into question. At the beginning of the 19th century, Schmalenbach (1909) was already dedicated to the field of transfer pricing. One of his insights seems to be of particular importance. He pointed out that the market price as a transfer price can be perfect in every respect. However, he notes that it is important to take into account that "sales expenses" (*Verkaufs-Unkosten*; transaction costs) should be taken into account in order to reduce transfer prices, because these expenses do not arise in one's own company as they do in the market. He also stresses that the use of the market price can even be counterproductive. This is always the case where a sub-company, because it belongs to a larger whole, is compelled to adopt a way of working that it would not use if it were independent ("wo ein Unterbetrieb durch seine Zugehörigkeit zu einem größeren Ganzen zu einer bestimmten Arbeitsweise genötigt wird, die er, wenn er selbständig wäre, nicht benutzen würde", Schmalenbach, 1909, p. 176). The use of market prices may therefore be inappropriate for MNE groups. In this context, and against the background of the MNE group, as such, having a gross margin of 38%, the remuneration of entity B could be higher than 7% without violating the ALP, as it could be economically reasonable in the specific context of this MNE group.

However, the use of such an approach requires a deep knowledge of economic and management theory, and a profound knowledge about the MNE group as a whole. As value creation is not a rule that can be applied without judgment, such an approach cannot be applied without discretion. There is no single solution in theory nor in practice. Carrying out a benchmark study is much easier and leads to a race to the mean, as the specific context of the MNE group is, in practice, often neglected. The benchmark study takes over the function of a mental anchor, as human beings use such mental anchors (Chapman & Johnson, 2002; Kahneman, 2003; Tversky & Kahneman, 1974) in their decision-making processes.

[10] External Tax Relations Act, Section 1 para. 3 sentence 9. https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Taxation/Articles/External-Tax-Relations-Act.pdf?__blob=publicationFile&v=1

Petruzzi and Buriak (2018) emphasize that value chain analysis can be a useful tool and will become increasingly relevant. In my opinion, it is the main tool if the OECD is referring to value creation as a concept. If the concept of value creation is taken seriously, the facts and circumstances of each case have to be analyzed and profit attribution must be carried out independently of entities, as they will never have comparable value creation processes. Otherwise, one would violate economic principles and create tax avoidance possibilities within the ALP (Bauer & Langenmayr, 2013; Coase, 1937).

With that in mind, the use of the ALP may still be justified. However, its application or the international consensus on how to apply it would have to be further developed and adjusted to the evolving business models. In my opinion, the further development of the profit split method could be one way forward. The profit split method (see Kobetsky, 2019) may be applied by considering the relative contributions of each party (contribution analysis). Under a contribution analysis, the relevant profits, which are the total profits from the controlled transactions under examination, are divided between the associated enterprises in order to arrive at a reasonable approximation of the division that independent enterprises would have achieved from engaging in comparable transactions. It can be based on the relative value of the contributions by each of the associated enterprises participating in the controlled transactions, determined using information internal to the MNE group, as a proxy for the division (OECD, 2017, p. 144, paras 2.149 and 2.150).

To perform a contribution analysis, one requires an in-depth understanding of the business and the business model. Therefore, one needs to understand value, value creation, value capture, and the model that encapsulates these concepts. Businesses create value along their entire value chain and information technologies are integral parts of the value chain (Amit & Zott, 2011; Porter, 1985). Big data and data mining are becoming increasingly relevant and must be considered in a proper transfer pricing analysis. Data needs to be transformed into information (valuable knowledge) by businesses and entities invest in data mining with the purpose of increasing their returns on investment (Boire, 2014; see also Varian, 2018, who emphasizes the concept of a data pyramid in order to depict the relationship between data, information, and knowledge), which are then taxable in the countries of their FDIs. Therefore, one must identify the specific investments that have been made, the part of the data mining process in which an entity of an MNE group is engaged, and the value of the specific activities relative to the value created through data mining (Olbert & Spengel, 2019). In addition, according to Schön (2018), one could use the investments in the respective markets or in the (virtual) environments in which the users engage in order to incorporate the customer-centric view. Therefore, one should ask for the location of tangible and intangible investments, such as investments to avoid online firestorms or negative network effects, to empower positive experiences of customers, in Internet-based virtual environments, in information technologies, in APIs, in digital platforms, in strategies designed to attract users in order to reach and hold critical mass, in strategies designed to establish how data is used to generate network effects, and in complementary organizational investments, such as business processes and work practices. For this purpose, one has also to consider the significant functions which are responsible for the investments. As, for example, the location of intangibles is nothing more than a stroke of a pen, one has to determine the investments and functions performed with respect to intangibles which are entitled to remuneration within the ALP.

In addition, as shown above, the OECD's concept of value creation could be seen as a shift away from the perspective of mere business activity. Therefore, it seems reasonable to include the demand-side in the contribution analysis, which allows (more) profit allocation to market and source countries as all value is created jointly. In the case of platform business models in particular, user participations in the various users' jurisdictions (without any physical presence) also enhance and develop the intangibles and thus are value co-creators. One would have to rethink the international convention in order to assume that users are value co-creators, as the original purpose of the ALP was to tax profits in the country where resources are located and directed. The cornerstone for rethinking has been laid due to the value creation concept, although one could agree with the view of Plekhanova (2020) that the current international corporate tax system has no specific rules addressing issues of value creation within a multinational platform firm.

The contribution analysis is highly complex, as it is solely based on a thorough economic analysis in every single case and may not lead to corresponding views of different tax administrations and taxpayers. The application of the profit split method, in particular, will increase the complexity of the ALP and could lead to heterogeneous results, which may result in double taxation and double non-taxation. However, the ALP is currently the worldwide standard for profit allocation in double tax treaties for all business models even if impacted by digitization and, if it is applied properly, there is no need for the international tax system to be changed. Digitization only exacerbates the ALP's existing problems.

In order to avoid the increasing number of double taxation issues, consideration could be given to taking a more objective and standardized approach. There are numerous possibilities here (see above; Förster et al., 2020; Greil, 2017). At the same time, it should be recognized that any standardization requires an international agreement and that standardization is a departure from the case-by-case approach to value creation. Instead, (value-added) factors would be used to reflect value creation in general. This, in turn, would result in the simplification of the whole profit allocation system rather than its abandonment.

CONCLUSION

At present, the international tax system faces substantial challenges with respect to taxing profits of MNE groups. Policymakers have put the focus on the taxation of the digital economy. The debate about taxing digitalized businesses is rooted in the belief that the existing tax system does not suit the challenges imposed by the digital transformation of the economy in the 21st century. The complex transfer pricing guidelines and rules, in particular, would often not provide a satisfactory solution for tax authorities. There is currently a strong feeling among the general public and tax authorities that there could be a mismatch between where taxation of the profit takes place and where value is created for certain digital activities.

The aim of this article is to provide a comprehensive literature overview of the ALP and the allocation of taxing rights of business profits, the concept of value creation, the impact of digitization on the allocation of taxing rights, and the current discussions regarding this topic. Finally, I make a connection between the value creation concept and the challenges of digitization, and ask whether the ALP is fit for purpose. In my opinion, and against the background of the value creation concept for allocating taxing rights, the ALP is fit for purpose when it is applied in a "rethought" way. I emphasize the application of the transactional profit split method, especially the contribution analysis, as an approach to the application of the transactional profit split. This approach is highly complex, as it is based on a thorough economic analysis in every case and may not lead to corresponding views of different tax administrations and taxpayers.

The proposed approach does not meet the objectives of simplification or the reduction of tax avoidance possibilities. However, the ALP at least fits when we consider that one of the principles that should shape the rules for taxing electronic commerce, according to the OECD's 1998 Ottawa Taxation Framework (OECD, 1998), is flexibility. Therefore, countries should continue to try to assess and agree on where, and to what extent, value is created and should not change the overall international tax structure (Andersson, 2018; Förster et al., 2020).

However, at the present, it is obvious that the current international tax system fragments and a new kind of tax competition and protectionism arises. Unilateral measures result in an environment which is based on non-cooperation amongst countries, which can increase double taxation, threaten cross-border trade, and have a negative impact on real investment by MNE groups. Before finding a solution in 2020/2021 at OECD-level, one should frankly ask what policymakers want to achieve and which issue should be resolved. As shown above, digitization seems to be a rather superficial issue as, *inter alia*, revealed by the international policy discussions. Only if the aim for an international tax reform is clear could options for reform be discussed on a solid foundation. At the same time, the questions of why a multilateral solution with a multilateral system must be found, or whether it would not be more advantageous and purposeful to agree on bilateral solutions that are multilaterally coordinated that could incorporate the specific economic circumstances between the contracting states, must be answered. Any solution should, at least, be based on broad and strongly accepted principles. The OECD's 1998 Ottawa Taxation Framework identified neutrality, efficiency, certainty and simplicity, effectiveness and fairness, and flexibility as the broad principles that should shape the rules for taxing electronic commerce (OECD, 1998). Those principles are still good ones, even if achieving them all simultaneously might not be possible (Förster et al., 2020; OECD, 1998; Sapirie, 2018).

DISCLOSURE

The author has no financial arrangements that might give rise to conflicts of interest with respect to the research reported in this paper.

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SHOULD CITIZEN-ORIENTED ELECTRONIC PUBLIC SERVICES BE TAXED? PERSPECTIVES FROM THE INDIAN STATE OF ANDHRA PRADESH[1]

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Abstract

The citizen-oriented electronic services delivery project implemented by the office of ESD-Meeseva is one of the prestigious and successful e-Government initiatives in the Indian state of Andhra Pradesh. The project is implemented by the government while the operations and maintenance of the service centers in the state are outsourced to the private sector. The project is sustained by user charges which are collected by the private sector and so attract levies of service tax and goods and services tax. This study analyzes the impact of the tax on the revenue flow to the service providers and village level entrepreneurs in the project. Using data from the office of the ESD-Meeseva, the study finds that the tax squeezes the margins for the service providers and the village level entrepreneurs which affects its commercial viability, and creates deadweight loss, which adversely impacts societal welfare. While making a case for eliminating the tax levies, the study suggests alternative options for improving the efficiency of the citizen-oriented electronic services.

Keywords: Andhra Pradesh, Citizen-Oriented, Electronic Services Delivery, Goods and Services Tax

1. INTRODUCTION

In recent times, the central and the state governments in India have increasingly embraced information technology (IT) in order to revamp government and business processes so that they can deliver efficient administration and civic amenities to the citizens with transparency, speed, and agility. The state of Andhra Pradesh (AP) has been in the forefront of the move to assimilate and adopt IT in government processes.

One of the first and most ambitious electronic-Government (e-Government) citizen-oriented initiatives in AP was the “Government electronic services delivery” project, which sought to move the government’s processes across all state departments online (from the receipt of a citizen's request to the delivery of the requested service to the citizen, with a robust audit trail to ensure transparency). The goal was to ensure the fast and efficient delivery of public services to every citizen in a corruption-free environment.

The bureaucracy in this Indian state, like other state governments in India and elsewhere, had a formidable reputation for extracting rents from hapless citizens for routine public services. By moving the governmental and business processes online, the electronic services delivery project sought to reduce and eliminate discretionary power and, thereby, rent-seeking opportunities for the bureaucracy. The “Government electronic services delivery” project thus

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[1] An earlier version of this paper was presented at the 11th International Conference on Theory and Practice of Electronic Governance, April 2018. https://dl.acm.org/doi/10.1145/3209415.3209497

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represented a bold move by the state to combat the rent-seeking proclivities of the bureaucracy, to ensure that public services reached the underprivileged sections of the society in an efficient and transparent manner, and to thereby ensure that every citizen, rich or poor and in urban or rural communities, could benefit from the use of IT in an equitable manner (Balakrishna, 2018).

1.1 The Citizen-Oriented Electronic Services Delivery Project

The citizen-oriented electronic services delivery project was initiated as a pilot in 1998 in AP (where electricity and telephone bill payment services were offered online) and is popular because it reduces corruption, enhances transparency, and improves citizens' satisfaction levels. Today, this project incorporates the provision of 397 government-related services (including the electronic delivery of records relating to land registration, driving license applications, birth, death, and marriage registrations, and food ration card applications), which are referred to as government-to-citizen (G2C) services, and about 250 business-related services (including cell phone top-ups, movie ticket purchases, bus and train bookings, and basic banking services), which are referred to as business-to-citizen (B2C) services.

The project has won a number of notable national and international awards, including the Skoch e-Governance award 2013, the Computer Society of India Nihilent e-Governance Award 2015, the Skoch Order of Merit Award 2015, the Skoch Order of Merit Award 2016, and the Digital Trailblazers Award 2016 (Balakrishna & Venkataramanaiah, 2016).

The citizen-oriented electronic services delivery project is implemented by the Office of the Director, Electronic Services Delivery-Meeseva (ESD-Meeseva), Department of Information Technology, Electronics and Communication of the Government, through a public private partnership (PPP) model, where the operations and maintenance are outsourced to the private sector partner. The citizen-oriented electronic services, through simultaneous engagements with 37 state departments, are delivered through a network of about 6900 common service centers (CSCs) spread across the urban and rural hinterland in the thirteen districts of AP. The CSCs are managed by the private sector partner through VLEs.

The private sector partners (also referred to as the service providers in this study) levy a user charge on each electronic transaction from the availing citizens. The average revenue collection per day by ESD-Meeseva for the financial years (FYs) 2014-15, 2015-16, and 2016-17 was 64.8 million, 78.4 million rupees, and 79.5 million rupees respectively, which indicates the pervasiveness and popularity of government electronic services amongst the citizens from both AP's urban and rural areas. These services touch on every life cycle event of each citizen, so there is considerable demand for them and this has narrowed the digital divide (Balakrishna, 2018)[3].

1.2 Aims of the Study

The user charge is inclusive of statutory taxes prescribed by the government. In accordance with the conditions of a legal contract, the ESD-Meeseva shares the user charges collected with the service providers in pre-fixed proportions, and the service providers' shares are inclusive of the applicable taxes. The service providers, in turn, share the received user charges with the

[3] Please see Balakrishna (2018), and Balakrishna and Venkataramanaiah (2016), for more details on ESD-Meeseva.

VLEs in fixed proportions after remitting the applicable taxes to the government. The tax incidence is thus borne by the citizen using the electronic services provided by the government.

Should citizens and service providers be taxed for using essential electronic services provided by the government? What are the implications of such taxation on the commercial viability of the citizen-oriented electronic services delivery project? How do the externalities generated through this taxation impact societal welfare? This paper aims to provide some answers to these vexing questions about electronic-Government (e-Government) policy-making. In doing so, it explores the interface of taxation issues in public finance as applied to citizen-oriented e-Government services, and herein lies its contribution to the literature about the subject.

Section 2 briefly examines the basis of taxation and the e-Government framework in relation to the existent literature. In Section 3, the tax structure and the recent national migration to the unified goods and services tax (GST), as applicable to the citizen-oriented ESD-Meeseva project, is analyzed using data from the office of ESD-Meeseva. Section 4 examines the impact of this taxation on the commercial sustainability of the ESD-Meeseva project and explores the implications of taxing citizen-oriented e-Government services. Section 5 concludes with some managerial implications for e-Government practice.

2. RELATIONSHIP WITH CURRENT LITERATURE

The evolving literature on e-Government practice focuses on several dimensions of public governance, including IT infrastructure, service delivery quality, citizens' satisfaction levels, and engagement with contemporary technologies. For example, Tan et al. (2013) highlight the importance of e-Government service quality, for which standardized service content and delivery, and a robustly designed citizen-oriented e-Government website, are essential precursors. They found that IT-mediated citizen service content and service delivery through a web interface were strong predictors for e-Government service quality.

e-Government may not make much headway without a strong IT infrastructure. This is spelled out by Asogwa (2013), who lauds the possible benefits of e-Government citizen-oriented services delivery in a developing economy like Nigeria in fueling economic growth, productivity, and competitiveness, but notes that issues with the provision of essential IT infrastructure, like a lack of internet penetration and limited bandwidth, a lack of technical staff, and frequent power outages, threaten the realization of e-Government benefits.

Reddick and Turner (2012) approach e-Government service quality from a citizen's point of view, and find that the government must provide citizens with multiple interfaces, ranging from traditional phone services to standardized web content, and ensure that they provide consistent service responses to enhance citizen's satisfaction levels in their engagement with e-Government. Similarly, Saha et al. (2010) found that responsiveness, the provision of online assistance, and respect to privacy positively impacted the quality of citizen-oriented e-services .

While IT infrastructure and standardized content remain strong predictors of e-Government success, engagements with contemporary technologies, like social media, cloud computing, and mobile apps, could enable governments to integrate all of their public services seamlessly at the back end and provide citizens with a single-window interface. This paradigm shift in e-Government has ushered in a "second wave of digital era" in several developed economies (Dunleavy & Margetts, 2010).

There seem to be very few studies that focus on issues relating to the taxation of essential e-Government services. Taxes may provide public agencies with the much needed resources to fund e-Government projects. On the other hand, high taxes can discourage principal stakeholders from participating in e-Government projects and may foster perverse incentives, resulting in failures. As mentioned earlier, this study attempts to explore the impact of taxes on citizen-oriented e-Government in AP and may make a valuable contribution to the existing literature.

3. ESD-MEESEVA AND TAXES

3.1 Operations and Maintenance at ESD-Meeseva

As implied in Section 1, the ESD-Meeseva Directorate selects private sector partners) to operate and maintain the CSCs through an open competitive bidding process. These service providers, in turn, recruit VLEs, who are mainly youths from local rural and semi-urban areas, through an open competition and examination-based process. The VLEs manage the CSC operations on a commission basis or through a franchisee model, and must initially invest in computers, internet connectivity, alternative power sources, scanners, printers, and biometric devices. The ESD-Meeseva Directorate provides the VLEs with buildings (by coordinating with local government bodies) and essential furniture. The top three G2C services which the citizens in the urban areas demanded and used were: (i) land registration applications and corrections; (ii) income certificate applications; and (iii) food ration card applications. Similarly, the top three B2C services used by citizens in urban areas used were: (i) electricity bill payments; (ii) vehicle tax payments; and (iii) property tax payments. The patterns of demand for G2C and B2C services for citizens in rural areas was similar, although the volumes involved were low (Balakrishna, 2018).

While ESD-Meeseva mandates that service providers must make all the G2C services as decided by the Government in the CSCs available, the service providers are given full freedom to offer a plethora of B2C services to supplement the income of the VLEs. Over the years, service providers have utilized this flexibility and have vied with each other in a positive, competitive spirit to offer a wide variety of B2C services in the CSCs. Balakrishna (2018) lists these B2C services, which include insurance premium payment, mobile phone top-up, utility payment, air, train, and bus ticket booking, movie ticket booking, fund transfer, and photocopying services.

Service providers thus link up with firms selling point-of-sale (POS) machines, and e-wallet firms like Paytm, FreeCharge, and MobiKwik which, in turn, offer attractive incentives to citizens who use their services. Thus, the CSCs foster an ecosystem that is conducive to the rapid development of businesses in the transport, leisure and tourism, entertainment, electronics and telecommunication, and financial technology spaces. Balakrishna (2018) shows that the entrepreneurial spirit and competency of service providers in AP is a significant driver of citizen-centric public services.

3.2 User Charges in ESD-Meeseva

At the time of writing this paper, the ESD-Meeseva had completed about 82.44 million G2C and B2C to citizen transactions (an indicator of the volume of electronic services). A citizen has to pay a user charge of 25 rupees per transaction for category “A” electronic services that can be delivered across the counter (such as the provision of a copy of an individual’s birth certificate) and 35 rupees per transaction for category "B" electronic services that require departmental verification and other processes (such as the provision of land registration documents and title deeds). These monies are shared between the ESD-Meeseva Directorate, the government department concerned, the service provider, and the VLE, all of whom are legally entrenched through a set of contracts, as mentioned in Section 1.2.

The ESD-Meeseva Directorate has entered into separate contracts with five different service providers in respect of the management of the CSCs in the state. The state is divided into four zones for the purpose, and the districts within the zone have been divided into rural and urban areas. Bids were invited for each zone, and separately for the rural and urban areas, and each winning bid differed in terms of the revenue sharing arrangements between the ESD-Meeseva Directorate and the service providers.

Table 1: Sharing pattern of user charges collected by the Electronic Services Delivery (ESD-Meeseva) Directorate, Government of Andhra Pradesh

Panel A: Sharing pattern of user charges for Category "A" citizen service in rupees						
Service provider details	User charge per txn*	Inf**cost	Department share	Stationery cost	ESD-Meeseva share	Service provider share
Service-provider-rural-1 (20:80)	25	3	7	1.25	2.75	11.00
Service-provider-rural-2 (5:95)	25	3	7	1.25	0.69	13.06
Service-provider-rural-3 (15:85)	25	3	7	1.25	2.07	11.68
Service-provider-urban-1 (28.1:71.9)	25	3	7	1.25	3.87	9.98
Service-provider-urban-2 (32:68)	25	3	7	1.25	4.4	9.35
Panel B: Sharing pattern of user charges for Category "B" citizen service in rupees						
Service-provider-rural-1 (20:80)	35	5	7	1.25	4.35	17.40
Service-provider-rural-2 (5:95)	35	5	7	1.25	1.09	20.66
Service-provider-rural-3 (15:85)	35	5	7	1.25	3.27	18.48
Service-provider-urban-1 (28.1:71.9)	35	5	7	1.25	6.11	15.64
Service-provider-urban-2 (32:68)	35	5	7	1.25	6.96	14.79

Source: Office of the Director, Electronic Services Delivery, Government of Andhra Pradesh
Note: The figures in parentheses in the first column indicate the ratio in which the user charge is shared between the ESD-Meeseva Directorate and the service provider; *txn = transaction; **Inf = infrastructure

Table 1 reflects this heterogeneous arrangement. For example, the revenue share of the ESD-Meeseva Directorate varies between 5 percent and 32 percent. Likewise, each VLE is entitled to a share in the range of 35 to 47 percent of the revenues, depending on the zone and whether they are operating in an urban or a rural area. For category "A" services, where the user charge is 25 rupees per electronic transaction, 3 rupees are retained by the ESD-Meeseva as contribution to infrastructure costs, 7 rupees are apportioned to the government department which hosts the data and service, and 1.25 rupees are reimbursed to the service provider for the use of secured stationery for printing receipts. The remaining 13.75 rupees are shared between the service provider and the ESD-Meeseva Directorate in an agreed ratio. For example, the ESD-Meeseva Directorate retains 2.75 rupees and assigns 11 rupees to Service Provider 1 in the rural area (Service-provider-rural-1 in Panel A of Table 1) in the ratio of 20:80. Panel B shows the user charge sharing arrangement for category "B" services.

3.3 Taxation of User Charges

The government levies a service tax on the user fees collected by the service providers in the PPP-modeled ESD-Meeseva project. The citizen-oriented electronic services delivered by the ESD-Meeseva Directorate fall within the ambit of "Business Auxiliary Services", which are defined in section 65(19) of the Finance Act, 1994, Government of India, and include services provided by commission agents in respect of the collection of the sale price of goods and services and related services. Business Auxiliary Services attract a levy of service tax.

The service tax, which was nominal at 5 percent a decade ago, effectively increased to 15 percent as of June 2017, with the inclusion of compulsory levies of Swachh Bharat Cess (SBC) of 0.5 percent and Krishi Kalyan Cess (KKC) of 0.5 percent. When the ESD-Meeseva Directorate invited open bids for the operation and maintenance of CSCs in 2008-09, the service providers would have factored in the payment of a service tax of 5 percent, which was in force at the time, from their revenues when computing their respective bids. These contracts are still in force in the ESD-Meeseva Directorate now and are due to be overhauled.

The ESD-Meeseva Directorate insulated itself from unpredictable increases in service tax regimes by making the proportion of user charges assigned to each service provider inclusive of applicable taxes and cesses through a legally binding contract. As a result, the service providers in this project were required to remit the applicable service tax to the government from the share of the user charges received from the ESD-Meeseva Directorate. In terms of Table 1, the service providers were required to remit 15 percent of the share shown in the last column as service tax liability in 2016-17.

On the 1st of July 2017, after a decade of protracted debate and consultations with the industry, the Government of India introduced the GST. The GST was conceived as a single tax on all goods and services produced and consumed within India. It was expected to replace a slew of indirect taxes and levies, including central excise duty, service tax, additional customs duty, octroi[4], and value added tax. In real effects, the goods and services throughout the country were taxed under the following rates - 0%, 5%, 12%, 18%, and 28%. In addition, a cess[5] of 15% over and above the GST was levied on goods like luxury cars, aerated drinks, and some tobacco products. The introduction of GST resulted in increases in the costs of several commonly consumed goods and services, including food consumption in hotels, insurance, and cinema tickets, resulting in serious protests from the business community (Mittal, 2017).

With reference to the ESD-Meeseva Directorate, the introduction of GST resulted in the increase of tax liability of the service providers from 15 percent to 18 percent for the use of government electronic services. Table 2 shows the service tax liability for service providers for the financial year 2016-17.

[4] Octroi is a tax levied by some Indian states when goods are brought into a district for consumption (Stiglitz & Rosengard, 2015).
[5] A cess is a tax on tax, levied by the government for a specific purpose (Stiglitz & Rosengard, 2015).

The average monthly share of the revenues to the service providers during the financial year 2016-17 was 290.78 lakh rupees, which resulted in a monthly levy of 43.61 lakh rupees as service tax. Under GST, the expected monthly burden is expected to increase by 8.71 lakh rupees, as indicated in Table 2.

Table 2: Monthly service tax liability borne by the service providers during FY 2016-17, and the expected additional burden due to the introduction of the Goods and Services Tax (GST) (all amounts shown in lakh rupees)

Service provider (SP) details	SP mean share per month	Monthly service tax at 15 percent	Monthly GST at 18 percent*	Expected burden due to GST
Service-provider-rural-1 (20:80)	143.22	21.48	25.77	4.29
Service-provider-rural-2 (5:95)	14.6	2.19	2.63	0.44
Service-provider-rural-3 (15:85)	74.6	11.19	13.42	2.23
Service-provider-urban-1 (28.1:71.9)	22.54	3.38	4.06	0.67
Service-provider-urban-2 (32:68)	35.82	5.37	6.45	1.08
Total	290.78	43.61	52.33	8.71

Source: Office of the Director, Electronic Services Delivery, Government of Andhra Pradesh
Note: * GST = Goods and service tax was levied from 1st July 2017 by the Government

Table 3 provides a hypothetical walkthrough of the mechanics of the sharing of the user charges between the ESD-Meeseva Directorate and a service provider in the ratio 10:90, and between a VLE and a service provider in the ratio 90:10 under (i) the hitherto existing service tax, where the tax rate was 15 percent, and (ii) the GST, where the tax rate is 18 percent. The user charges collected from the citizens were net of infrastructure costs, departmental shares, and stationery costs (see Table 1), but inclusive of applicable taxes. The amount available for distribution between the ESD-Meeseva Directorate and the service provider is assumed to be 1,00,000 rupees. While highlighting the mechanics of sharing of the user charges between the principal stakeholders, Table 3 also pinpoints how increasing taxes, in general, can squeeze the profit margins of service providers and VLEs.

Table 4 shows the average monthly earnings of the VLE for the financial years 2011-12 to 2016-17 (and from 1-4-2017 to 31-8-2017), and indicates a measurable contribution of the ESD-Meeseva initiative to the state's gross domestic product (GDP). The ESD-Meeseva project has created a class of grass root entrepreneurs (the VLEs), and invested them with social status and earning potential. Each VLE, on average, earned 8457 rupees per month in the financial year 2016-17. The ESD-Meeseva project employed 5091 VLEs in 2016-17, which implies that the VLEs in the state earned 430.54 lakh rupees, on average, every month. Documentary evidence and the author's enquiries reveal that, on average, the VLEs spend 90 percent of their income on food, clothing, and other basic necessities. This consumption of goods and services by VLEs contributes to the GDP.

Table 3: Mechanics of sharing user charges of Rs. 1,00,000 between ESD-Meeseva Directorate, a service provider, and VLE under sales tax of 15 percent and Goods and Services Tax (GST) of 18 percent

Sl	Transaction instance	Under service tax at 15 percent (Rs.)	Under GST at 18 percent (Rs.)	Remarks
1.	User charges inclusive of applicable taxes available for sharing between ESD-Meeseva and service provider = Rupees (Rs.) 1,00,000	-	-	User charges includes applicable tax and cesses
2.	Share of ESD-Meeseva = Rs. 10000	-	-	10% of 1,00,000
3.	Share of service provider = Rs. 90000	-	-	90% of 1,00,000
4.	Tax remitted by the service provider to Government	11739	13729	(90000*15)/115 as service provider's share includes service tax
5.	Available user charges with service provider after tax remittance	78261	76271	90,000 - 11739
6.	Share of VLE	70435	68644	90% of 78261
7.	Share of service provider	7826	7627	10% of 78261

Source: Office of the Director, Electronic Services Delivery, Government of Andhra Pradesh

The mean monthly income of the VLEs for the 2017-2018 financial year was 23.3 percent lower (falling from 8457 to 6486 rupees), which could be attributed to the higher incidence of taxation under the GST. Thus, the increased taxation of electronic public services delivery could adversely impact the state GDP by reducing VLEs' private consumption. One limitation in arriving at this conclusion is that the GST had only recently been introduced (less than a year before), which may mean that deeper analysis of its impact on the efficiency of the electronic services provided and the associated revenue flows cannot take place.

4. TAXES AND COMMERCIAL SUSTAINABILITY OF ESD-MEESEVA

The message from Tables 2, 3, and 4 is loud and clear: the levy of service tax and thereafter, the GST, on the sale of government electronic services squeezed the margins of the service providers, who passed this pressure on to the VLEs in the form of reduced shares of user charges. The reduction of the VLEs' mean monthly income in the first and second quarters of the 2017-2018 financial year, perhaps due to the higher incidence of taxation under the GST, does not bode well for the future prospects of the citizen-oriented electronic services delivery project. The service providers and VLEs may find that it is commercially unviable for them to participate and this resonates with their fervent appeals to the government for relief from the GST.

Evidence shows that the digitalization of citizen-centric public services in AP and other Indian states has benefited the citizen, fostered local entrepreneurship, and narrowed the digital divide (Balakrishna, 2018; Balakrishna & Venkataramanaiah, 2016). However, levying a tax on these services seems to adversely affect the commercial viability and self-sustenance of the electronic services delivery PPP project, as revealed in this study. The government may have to do away with the GST on citizen-centric electronic services delivery to reverse the precariously reducing monthly income streams of the VLEs and service providers, and reduce the tax burden. Such a policy would serve the larger purpose of boosting the entrepreneurial abilities of the service providers and VLEs in the ESD-Meeseva ecosystem. As mentioned earlier, the entrepreneurial abilities of the service providers, as manifested in the healthy proliferation of B2C services, is a strong driver and attracts citizens to the CSC. Thus, the continued imposition of the GST on the service providers in the citizen-centric electronic services delivery ecosystem could choke their income streams, stifle entrepreneurship and, ultimately, result in the failure of the project.

Table 4: Average monthly earnings of VLEs in Andhra Pradesh State for the FYs 2011-12 to 2016-17

Financial Year	Average monthly income from G2C services (Rs.)	Average monthly income from B2C services (Rs.)	Mean monthly income from G2C and B2C services (Rs.)	Number of VLEs	Income contribution to State GDP (Rs. lakhs, monthly)
2011-12	2562	1061	3623	1834	66.4
2012-13	2371	3578	5949	2844	169.2
2013-14	4144	2991	7135	4852	346.2
2014-15	5324	3138	8462	4565	386.3
2015-16	5102	2970	8072	4460	360
2016-17	5061	3396	8457	5091	430.54
4-2017 to 8-2017	3964	2522	6486	5705	370

Source: Office of the Director, Electronic Services Delivery, Government of Andhra Pradesh

An alternative option for the government would be to take over the citizen-oriented electronic services delivery as owners and operate it without the participation of the private sector. The CSCs would be managed by salaried government staff. However, this may result in inefficient and low-quality service delivery. Furthermore, removing the incentives for the private sector to engage in best practices may also lead to inefficiencies. Several Indian states have experimented with some form of government-owned, citizen-oriented, online services delivery projects. However, these projects failed, and the states involved switched to the hugely successful PPP model, as presently practiced at the ESD-Meeseva Directorate.

These considerations naturally lead one to question why governments tax citizens in the first place. Governments levy taxes to raise revenue, which is used for governance, building social and physical infrastructure (roads, sanitation, judiciary, and health care, sometimes referred to as merit goods), servicing debts and interest payments, and providing public utilities (like energy and water). Taxation effectively changes the prices of products and goods, and influences demand for them. Governments also levy taxes to redistribute income and wealth amongst citizens. In order to do this, governments levy different types of taxes (e.g., direct taxes on income that are progressive in nature; indirect taxes on consumption, like GST on a variety of goods and services; and non-distortionary taxes, like the head tax, which must be paid irrespective of income status). Most taxes, like income tax and GST, are distortionary and hence inefficient (Stiglitz & Rosengard, 2015).

Taxation is also used to correct negative externalities (as in the case of taxing a cotton mill for polluting the atmosphere) and to provide public goods (such as national defense and lighthouses, which are non-rivalrous in terms of consumption and non-excludable through the pricing mechanism). Sometimes, the government seeks to influence macroeconomic performance by taxing certain sectors excessively (for example, levying a high tax on higher education may fuel unemployment) or providing tax exemption to certain sectors for attracting investments (Burgess & Stern, 1993; Parkin, 2011).

With reference to the citizen-oriented electronic services delivery, the philosophical basis for initially imposing a service tax and now imposing a GST at 18 percent appears quixotic, especially when the same public services are not taxed when provided manually by the same government departments.

The imposition of the GST creates a deadweight loss in the societal welfare (Stiglitz & Rosengard, 2015). Citizens who are unable to pay the relatively high charges for using electronic government services are unable to enjoy the benefits of e-Government. Similarly, the VLEs and service providers lose revenue due to squeezed margins on their operational revenues, as discussed in Section 3.3. In addition, the government may not be able to employ the collected GST revenues on specific IT projects due to hypothecation. Hypothecation militates against the fungible nature of money. Furthermore, the complex nature of the service tax and, subsequently, the GST levy on electronic transactions, as discussed in Section 3, creates opportunities for tax evasion and avoidance, as is evident from a plethora of tax litigation cases at the ESD-Meeseva Directorate involving revenues of about 380 million rupees. The lost revenue and the legal compliance costs create perverse incentives, which represent yet another source of deadweight loss.

5. CONCLUSIONS AND MANGERIAL IMPLICATIONS

From a commercial sustainability perspective, this study shows that there is a good case for rescinding the taxes on the provision of citizen-oriented electronic services implemented by the ESD-Meeseva Directorate. The deadweight losses to society attributable to this tax imposition merit serious attention.

Removing the tax on the provision of electronic services may enable service providers and VLEs to generate higher income streams, which would positively contribute to the state GDP through the higher consumption of goods and services. In addition, higher revenue streams may reduce instances of corruption, as the most common form of complaint seems to be overcharging by the VLEs.

If taxation is inevitable, the tax revenues could be utilized for capacity-building activities to sharpen the soft skills of the VLEs, who are the face of the ESD-Meeseva project, as this may improve citizen satisfaction levels. About 10 percent of the VLEs in AP are women. which implies that there is a crying need to address issues relating to gender inclusivity in the ESD-Meeseva project. It has been observed that CSCs managed by women tend to deliver services of higher quality, and receive minimal complaints about overcharging and other forms of deviant staff behavior. The satisfaction levels of the citizens visiting these centers also appear to be higher than those of citizens visiting CSCs managed by men. It may be worthwhile to consider the provision of subsidies to CSCs managed by women in order to attract more female VLEs.

Tax revenues may also be utilized to improve the quality of service delivery by strengthening the IT infrastructure in the VLE-managed CSCs. Commercial sustainability considerations and the desire to maximize profits may not incentivize VLEs to consistently upgrade the IT infrastructure in the CSCs. For example, about 25 percent of VLEs avoid using licensed antivirus software in the CSCs in order to reduce costs. The VLEs are more inclined to use open-source versions of online document management tools as these are available free of charge. From the information available from the office records of the ESD-Meeseva Directorate, the majority of the VLEs currently employ Windows 7, two gigabyte (GB) random access memory (RAM), Pentium 4-based operating systems with 14-inch monitors in the CSCs for dispensing citizen-centric public services, which were in vogue fifteen years ago. Similarly, many of the VLEs still use dot matrix printers, which can only print on one side of a page, to produce receipts and other documents. Employing such low speed and moderately outdated IT equipment in CSCs may result in slower delivery of public services and increased waiting times for the public, especially during peak office hours. As suggested earlier, tax revenues could be utilized to purchase more contemporary and efficient IT equipment for the CSCs (for example: Windows 10, 4GB RAM, i5-based operating systems with 17-inch monitors; printers and scanners that can print on both sides of the paper; modems that support high speed internet; switches that support 8 or 16 ports instead of the present 4 ports; and high definition cameras), which may improve the delivery and quality of citizen-centric public services.

In addition, the government could invest tax revenues in software development so that citizens can access citizen-oriented public services via tablets and smartphones. The government could also procure self-service kiosks and appropriate software for use in them. This could mean that they could do away with the VLEs altogether and usher in a new business model.

Since the incidence of tax on the provision of citizen-oriented electronic services is borne by the citizen, the government could, as a social measure, offset this tax burden by reducing the user charges collected by the service providers and the ESD-Meeseva Directorate.

In view of the high visibility enjoyed by the ESD-Meeseva Directorate (as a result of the Directorate winning several national awards and honors, and making presentations at prestigious industry and academic conferences), several states in India have emulated the best practices that have evolved there in recent times, with varying success rates. The lessons from this study may be of relevance to these states.

Citizen-oriented electronic transactions could be taxed in other developed and developing economies too, although the service or the unified GST in these countries relatively low. For instance, the GST rates in Australia, Canada, and Singapore are 10 percent, 5 percent, and 7 percent respectively. Low rates of GST may reduce perverse incentives as compliance rates are higher, but many of the deadweight losses discussed here may not disappear altogether. Here too, there appears to be a case for removing the tax on governmental citizen-oriented electronic transactions.

As mentioned earlier in this study, GST was recently introduced by the Government of India to rationalize the existing tax structure on a variety of goods and services. However, the taxation of citizen-oriented electronic services deserves closer analysis as it may adversely impact the commercial sustainability of the service providers. Future research could focus on the full impact of the GST on the quality and efficiency of citizen-oriented electronic services, and its implications for public policy.

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