# COERCIVE AND PERSUASIVE METHODS AND THEIR POTENTIAL TO IMPROVE TAX COMPLIANCE BEHAVIOUR: A REVIEW OF THE 6<sup>TH</sup> ANNUAL TARC CONFERENCE PROCEEDINGS

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## **1. INTRODUCTION**

During the 6th Annual Tax Administration Research Centre (TARC) Conference, which took place at the University of Exeter on the 23<sup>rd</sup> and 24<sup>th</sup> of April 2018, a wide variety of studies at various stages of completion were presented and, hereunder, some of the studies are described.

The keynote address was delivered by Brian Erard, a Washington D.C.-based consultant specialising in advanced analytics, who has consulted on a broad range of tax policy and tax administration issues in the U.S., Canada and abroad. He gave a lively presentation entitled "Ghosts in the Tax Machinery"<sup>2</sup>, in which he explored various aspect of the manifestation of ghosts, i.e. individuals and businesses that fail to file required tax returns. Noting that ghosts usually leave a shadow, he revisits the standard utility model to include the decision to become a ghost. Possible approaches to ghostbusting including ghost hunting expeditions, comparing surveys with administrative data, and looking for discrepancies in aggregated financial statistics. Following a discussion of the examples of the U.S. "nanny tax", ghost towns and offshore evasion, Erard suggests several possible approaches to exorcising ghosts, including outreach and assistance, expanded third party withholding and information reporting, audits, and "soft" notices and amnesties.

Section 2 of this paper looks at the studies presented that discuss the incentives for tax compliance behaviour and Section 3 considers those relating to the determinants of tax non - compliance. Section 4 reviews the studies on challenges in tax administration and Section 5 presents the conclusion.

## 2. TAX COMPLIANCE BEHAVIOUR

Large corporations around the world are believed to have developed internal systems by which to support their tax compliance needs. In their study on corporate governance and taxation under co-operative compliance, Eberhartinger, Holland, Lavermicocca and Zieser (2018)<sup>3</sup> observe that large corporations now increasingly focus on the development and refinement of their risk management strategies as part of their management of tax risk. In this study, employing the principal-agent framework and extending it to the relationship between the state and management, the authors empirically test whether tax risk management differs between corporations which are in co-operative relationships with tax administrations and corporations which have traditional relations with the authorities, as well as assessing whether the perceived tax risks differ between these two groups. Eberhartinger et al. (2018) survey corporations in three countries operating co-operative compliance schemes, namely Australia, Austria and the

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<sup>&</sup>lt;sup>2</sup> Erard, B. (2018). *Ghosts in the Tax Machinery*.

<sup>&</sup>lt;sup>3</sup> Eberhartinger, E., Holland, K., Lavermicocca, C., and Zieser, M. (2018). *Corporate Governance and Taxation: The Case of Co-operative Compliance*.

UK. where a tax risk management system forms a vital part of governance structure of each corporation, for eligibility for a co-operative relationship.

The authors drew on prior studies on co-operative compliance (OECD, 2016; Beck & Lisowsky, 2014; Lavermicocca & McKerchar, 2013; Mulligan & Oats, 2009; Freedman, Loomer, & Vella, 2009) in which tax risk, tax risk management and uncertainty are discussed. Indeed, they believe that companies that adopt co-operative compliance strategies have better tax risk management and more certainty about their tax positions, which might encourage tax compliance behaviour. This study makes a contribution towards the analysis that identifies the relationship and interaction between tax administration behaviour and corporate governance. Tax authorities, policymakers and civil society are expected to benefit from the findings, which may be helpful when making judgements about the appropriateness of co-operative compliance as a basis for regulation.

In a related study on the taxpayer compliance behaviour of micro and small businesses in Nigeria, applying multi-stage mixed methods, Aniyie (2018)<sup>4</sup> highlights that, at the microlevel, taxation has been known to activate a variety of taxpayer decisions and behaviours which impact on compliance. Against this background, the author had a desire to understand how tax provisions influence taxpayers' decisions and behaviour in comparison with compliance driven by Allingham and Sandmo's (1972) model, which the author perceives has not facilitated improved taxpayer compliance behaviour. The author is partly right, as a number of studies have highlighted other factors that might have significant influence on tax compliance behaviour. Specifically, Aniyie's (2018) departure from this rests on the following points: first, the global campaign against tax avoidance is influential, albeit largely based on legal definitions; second, the call for taxpayers to pay their fair share of tax brings a moral aspect into taxation, which is likely to introduce a controversial subjective process in the determination of tax liability; and third, there is a shift of attention towards non-economic factors which are known to influence tax compliance behaviour. The study seeks to examine the relationships between corporate income tax incentives and taxpayer compliance behaviour in Nigeria and between the role of intermediaries (e.g. the members of the Nigeria Bar Association [NBA], the Chartered Institute of Accountants of Nigeria [ICAN] and the Chartered Institute of Taxation of Nigeria [CITN]) and taxpayer compliance behaviour within that context. The study confirms the existence of the relationships under study and offers recommendations which could improve tax compliance in Nigeria. The study might help to further empirical socio-legal research using mixed methods by providing an insight into the "taxpayer-tax intermediary-tax authority" relationship in Nigeria, and demonstrates that a onesize-fits-all approach may not always be productive.

In addition, tax compliance frequently requires technical assistance from professionals, especially for small and medium-sized enterprises (SMEs), who often turn to external experts to help them to navigate the tax system complexities. Schoonderbeek, Vliegen and van Rijswijk (2018)<sup>5</sup>, in their study, argue that in the process of working for SMEs, tax practitioners gain more influence over the relationship between the tax administration and their SME clients. In other words, the tax practitioners' experience with their clients may have an influence on the SMEs' tax compliance. Tax authorities' knowledge of this influence can guide them towards developing specific policies to influence tax professionals to encourage their clients towards

 <sup>&</sup>lt;sup>4</sup> Aniyie, A. I. (2018). Taxpayer Compliance Behaviour: Report of a Multi-stage Mixed Methods Investigation.
<sup>5</sup> Schoonderbeek, W.M., Vliegen, J., van Rijswijk, L. (2018). Reaching SMEs Through Their Tax Practitioner: A Survey Among Tax Practitioners by the Netherlands Tax and Customs Administration.

tax compliance. The authors posit that if tax practitioners maintain higher levels of motivation, knowledge and permission from their clients to be compliant, they will encourage the tax compliance of their clients. The results of a survey of 852 tax practitioners suggest that a relationship exists between tax practitioners' motivation to comply, their level of knowledge about tax legislation, procedures and permission, and their tax-compliance promoting behaviour. These findings reflect the importance of the existence of good relationships between tax authorities, tax practitioners and the taxpayers

Contrary to Aniyie's (2018) assertion that deterrence audits (Allingham & Sandmo, 1972; Alm, Jackson, & McKee, 2009; Kleven, Knudsen, Kreiner, Pedersen, & Saez, 2011) may not influence tax compliance behaviour among micro and small business corporations in Nigeria and other developing countries, Beer, Kasper, Kirchler and Erard (2018)<sup>6</sup> note that a study of the U.S. Taxpayer Advocate Service in 2015 demonstrates that operational tax audits are likely to effectively identify non-compliant individual taxpayers, hence enhance subsequent reporting compliance. However, the same study finds that if audited taxpayers do not experience additional assessment, unfavourable audit effects are likely to occur, thus complementing prior work carried out on the effects of random tax audits on subsequent reporting compliance (Gemmell & Ratto, 2012). Although it's acknowledged that the drivers of behavioural responses to audits remain unclear, Beer et al. (2018) indicate that different operational audit types (correspondence, office and field audits) and outcomes (positive, negative and no additional tax assessment) have diverse effects on attitudes towards paying taxes.

In investigating these issues, a survey of two random samples of 1,350 Schedule C (selfemployed) U.S. taxpayers, consisting of one group of taxpayers who had recently been audited and another group of taxpayers who had not, was conducted in order to try to estimate the psychological effects of audits. Using a propensity score matching analysis, the findings suggest that taxpayers' audit experiences have an impact on their attitudes towards tax compliance, which might explain their future tax compliance behaviour. The study thus argues that understanding how tax audits shape taxpayers' attitudes is a prerequisite for developing effective collection strategies that combine enforcement and the provision of high-quality taxpayer services to establish high levels of compliance.

Other studies relating to tax compliance emphasise the need for taxpayers to trust the existing tax system so as to encourage them to comply. For instance, Berenson (2018)<sup>7</sup> suggested, in his work, "Transitioning to Greater Trust and Tax Compliance", that State and society interact with each other through trust. In his study, Berenson (2018) focusses on Poland and Russia, which represent competing models of post-communist development, and on Ukraine, which seems to lie between the two, and argues that building and accumulating trust serves as the foremost driver for supporting the transition from a coercive tax state to a modern, legal and legitimate one. He therefore suggests that, for states failing to gain public trust, reforming street-level bureaucratic operations would go a long way towards building better governments which were capable of executing their long-term goals. The author emphasises that trust is a two-way thing, requiring the citizens to trust in the state and the state to trust its citizens to comply with state regulations without it needing to overuse coercion, and that this interaction through trust is believed to enable policy implementation. The study also suggests that the state

<sup>&</sup>lt;sup>6</sup> Beer, S., Kasper, M., Kirchler, E., & Erard, E. (2018). Audits, Attitudes and Tax Compliance: Evidence from Self-Employed U.S. Taxpayers.

<sup>&</sup>lt;sup>7</sup> Berenson, M.P. (2018). *Taxes and Trust: From Coercion to Compliance in Poland, Russia and Ukraine* (pp.253-270). Cambridge: Cambridge University Press.

is likely to build up trust by treating citizens in a procedurally fair way (e.g. by delivering good customer service), as well as by providing them with requisite goods and services. This would go a long way in encouraging citizens to comply with state regulations. Furthermore, a tax administration policy can be beneficial if it reorients the tax system to focus entirely on compliance and the reform of the whole tax bureaucratic system, engages in taxpayer outreach programmes and acknowledges employees' contribution. Once these programmes have been undertaken appropriately, they have the capacity to build taxpayers' trust in the government and the tax system, which might result in the receipt of increased tax revenue by which to fund public expenditure.

Induced voluntary tax compliance behaviour and the intrinsic motivation to comply with the tax regulation have also been increasingly investigated in recent years. Existing literature indicates that voluntary compliance reflects the taxpayers' inner-most motivation to pay their fair share of taxes without the application of enforcement mechanisms (Kirchler, Hoelzl, & Wahl, 2008; Kirchler, Kogler, & Muehlbacher, 2014). One example of induced voluntary compliance is that presented by Michael Masiya (2018)<sup>8</sup> in his paper, "Lessons from Voluntary Compliance Window (VCW): Malawi's Tax Amnesty Programme". The Malawi Revenue Authority (MRA) called upon non-compliant taxpayers in the fiscal year 2013/2014 to voluntarily declare and pay their tax liabilities within a period of 92 days to avoid penalties. According to the study, the VCW programme was a success, as it enabled the MRA to register new taxpayers as well as increase tax revenues for the country, generating a total of MK 4.25 billion in tax revenue from 949 taxpayers, of which MK 122.80 million was from new taxpayers. Additionally, it was discovered that existing taxpayers were not fully compliant, as the balance of the revenue generated was from them. These results signal that amnesties of this type are likely to be beneficial to developing nations that experience non-compliance, as they encourage tax compliance while reducing tax authorities' administrative costs. However, frequent implementation of amnesties may discourage the intrinsic motivation to comply.

Another study of voluntary tax compliance, by Marina Bornman (2018)<sup>9</sup>, introduces a variant of reward systems for tax compliance behaviour stemming from a psychological tax contract, which is believed to illuminate tax morale as an interaction that brings together taxpayers and the governments in a fiscal exchange. In this work, the author argues that reward management can add to a positive psychological contract. However, drawing on Feld and Frey's (2007) scholarship, from the perspective of the crowding out theory, some rewards might weaken taxpayers' intrinsic motivation to pay taxes, although the rewards given to recognise a taxpayer for being compliant might strengthen and increase tax morale. Using the Cognitive Evaluation Theory (CET), the study finds that great care should be exercised when tax authorities are motivated to provide tangible rewards for tax compliant behaviour. Bornman (2018) advises that rewards ought to express a message of appreciation and competence – a reward reflective of the information provided would support the taxpayer and affirm feelings of competence as well as satisfy the need for autonomy. This means, therefore, that taxpayers who make the right choices ought to be appreciated.

Verberne and Arendsen (2018)<sup>10</sup> introduced another dimension in their exploratory socio-legal work titled "Taxation and the informal business sector in Uganda", suggesting that sustainable

 <sup>&</sup>lt;sup>8</sup> Masiya, M. (2018). Lessons from Voluntary Compliance Window (VCW): Malawi's Tax Amnesty Programme.
<sup>9</sup> Bornman, M. (2018). Principles of Rewarding Voluntary Tax Compliance.

<sup>&</sup>lt;sup>10</sup> Verberne, J., & Arendsen, R. (2018) in their exploratory socio-legal work titled "Taxation and the Informal Business Sector in Uganda".

taxation could be of significance to the Global South. The authors suggest that if taxation is carried out in a sustainable way, countries that lie in the Global South could develop the capacity to contribute to the realisation of the 2030 Sustainable Development Goals (2030 SDGs). According to the authors, bringing the informal sector into the tax net could be of help in supporting revenue mobilisation support the 2030 SDGs. However, they recognise the challenges involved in taxing this category of businesses and note that taking a bottom-up approach would provide an understanding of taxation in the informal sector as well as tax compliance. Their focus was, primarily, on SMEs in Kampala, Uganda. Using a qualitative methodology, the authors found that tax morale among SMEs in Kampala was low, as their attitudes towards compliance are affected by a number of constructs, viz. their trust, tax knowledge, perceptions about the delivery of public goods and services, perception of tax fairness, and awareness of the level of enforcement. Indeed, the existing literature supports their findings, as it argues that socio-psychological factors are powerful in influencing tax compliance behaviour, more so when they are favourable, or tax non-compliance would dominate taxpayers' behaviour. The results of the study also reveal that the existing presumptive tax system does not have the capacity to effectively encourage the informal sector to comply with the tax regulations, reflecting unfavourable socio-psychological factors as well as a weak enforcement mechanism. The findings also imply that it is better to develop the informal economy to match the level of taxation required (while remembering to tackle the mischief within the tax system), as building the capacity of a society to pay taxes might be more beneficial than only having strong enforcement mechanisms.

In their study on tax administration and firm performance, Dabla-Norris, Misch, Cleary and Khwaja (2017)<sup>11</sup> argue that small and young businesses tend to incur excessively higher tax compliance costs than their larger and older counterparts. The authors therefore propose that high-quality tax administration is likely to lower tax compliance costs. In this study, Dabla-Norris et al. (2017) use a large sample of firms in emerging markets and developing economies to examine how the quality of tax administration affects a firm's performance. Using information from the Tax Administration Diagnostic Assessment Tool (TADAT), the authors construct a multidimensional index of tax administration quality that is novel and comparable internationally. As posited, the study demonstrates that better tax administration improves the efficiency of small and young firms, rather than of larger and older firms. The results remain robust when controlling for other constructs of tax policy and economic governance, alternative definitions of small and young firms, and measures of the quality of tax administration. From a policy standpoint, this evidence shows that different countries could benefit from growth and productivity dividends as a result of enhanced tax administration, as it ultimately lowers taxpayers' compliance costs.

Cabral and Gemmell's (2018)<sup>12</sup> study estimated self-employed taxpayers' income gaps. This estimation is based on registration and survey data from New Zealand's Integrated Data Infrastructure (IDI), since it synchronises data on the income and expenditure of individual self-employed taxpayers, which reduces the income measurement error and provides the capacity to measure evasion according to the different incentives for misreporting. The study considers a self-employed taxpayer's income gap to be the proportion of undeclared to true

<sup>&</sup>lt;sup>11</sup> Dabla-Norris, E., Misch, F., Cleary, D., & Khwaja, M. (2017). *Tax Administration and Firm performance: New Data and Evidence for Emerging Market and Developing Economies.* 

<sup>&</sup>lt;sup>12</sup> Cabral, A. C. G., & Gemmell, N. (2018). *Estimating Self-Employment Income Gaps From Register and Survey Data: Evidence for New Zealand.* 

income and uses traces of expenditure to deduce true income holdings, drawing on the scholarly works of Pissarides and Weber (1989), and Feldman and Slemrod (2007).

This implies that the study utilises the association between expenditure and income for the employed, since this category of taxpayers have minimal chance of evasion. This is perceived to approximate the true income of the self-employed. Indeed, matching a taxpayer's declared income with his or her actual expenditure might help to reveal discrepancies and circumstances in which individuals have spent more than they have received in income. Cabral and Gemmell (2018) estimate that, on average, the self-employed under-declare approximately 20 percent of their income but this could be estimated to be between 10 and 30 percent with a 95% level of confidence. The authors also find that the income gap might be significantly, but differently, affected by gender and regional settings within the country. All in all, this makes a novel contribution to tax compliance literature and might pave the way for further research into the tax compliance behaviour of self-employed individuals in developing countries for comparison.

Another study, by Dr. Adrian Sawyer (2018)<sup>13</sup>, highlights the contributions that tax committees make from the perspective of New Zealand. The paper indicates that a number of governments, particularly in Western countries (especially Australia, New Zealand and the United Kingdom, seem to be using committees as tools for making contributions towards tax policy reforms. The author indicates that the use of such committees is evident in tax rewriting projects for the period running from the 1990s to the 2000s and, more recently, during their tax system reviews. The committees' contributions have been captured by literature looking at particular jurisdictions' reforms and their implications, tax committees' roles and the incorporation of comparative analyses within other jurisdictions. However, this paper shows that there has been scant research taking a longitudinal approach towards reviews of tax policy reforms as well as examining the contributions that such committees make towards the advancement and impact of tax policy and administration in specific jurisdictions.

Applying "traditional" legal methods, along with a tax policy lens, this study traces and examines the contributions of tax committees instituted by New Zealand over a period of fifty years. It considers, more specifically, the contributions made by the Hunt Committee of 1922, the Sim Commission of 1924 and the Gibbs Committee which took place nearly thirty years later and released its Taxation Committee Report in 1951, all of which were extensive reviews. The next significant contribution to reform made by tax committee was that of the Taxation Review Committee 1967 (The Ross Committee). The Ross Committee was set up in 1966 to undertake a comprehensive review of all aspects of central government taxation in New Zealand. Other contributions include: the McCaw Review on Tax Reform of 1982, which arose from the New Zealand Planning Council of 1981, which was titled "An Agenda for Tax Reform"; and, later, the 2017 Tax Working Group (TWG) which, as of September 2018, had yet to release its report. Therefore, the information provided by the committee outputs is likely to offer general guidance for economies that are considering instituting tax committees, since tax committees are frequently thought of as instruments with which the level of consultation, transparency, process of tax policy development and related administration can be improved.

Turning to another topic, Wang and Sun's (2018)<sup>14</sup> paper, "Satisfaction with Public Services (SPS) in China from Heterogeneous Behavior", suggest that satisfaction is the main aspect of

<sup>&</sup>lt;sup>13</sup> Sawyer, A. (2018). The Contributions of Tax Committees: A New Zealand Perspective.

<sup>&</sup>lt;sup>14</sup> Wang, G., & Sun, J. (2018). Satisfaction with Public Services in China from Heterogeneous Behavior.

happiness economics, and that understanding citizen SPS is frequently seen as a fairly easy and effective way of assessing real happiness levels and service quality. The study uses a multistage stratified design with a sample of 10,968 responses from the Chinese General Social Survey (CGSS) 2015. In their analysis, in order to understand people's satisfaction levels in relation to other constructs, such as income, GDP, tax, area and the internet, the authors consider public services to include: public education; health care; housing security; social governance; employment; social security; basic social services; public culture and sports; and urban and rural infrastructure. Gaining knowledge about citizens' satisfaction levels may help governments to set priorities in order to: guide improvements in the service sector; support citizens and advocacy groups in holding grassroot service providers answerable for services delivered; and abet policymakers in appraising success for the purpose of initiating decentralisation of service delivery and tax compliance.

D'Attoma, Tuxhorn and Steinmo (2018)<sup>15</sup> also indicate that mass attitudes could be strong determinants of budget preferences. They reveal that the U.S. Federal Government debt has increased tremendously in the past decades as a result of annual budget deficits, and that these increases create fiscal budget constraints, forcing politicians to make tough choices between spending and increasing revenue. In order to understand the kind of federal budget that voters are prepared to support when fiscal constraints exist and to explain budgetary choices, the authors utilise a budget tool designed to measure how people weigh the fiscal trade-offs between revenue and spending items. Results from a voter-age population-based survey with the embedded budget tool show that budget preferences are strongly predicated by citizens' trust in government and partisanship, but are weakly predicted by the economic self-interest construct. Improving citizens' trust in government and partisanship might therefore alleviate budget deficits so as to enhance political choices between spending and revenue items.

Although literature indicates that trust in government is important, Chen, Fonseca, Grimshaw and Kotsogiannis (2018)<sup>16</sup> suggest that the quality and delivery mechanism of tax guidance issued by the tax administration service as a starting point may influence the overall level of compliance among taxpayers. Indeed, the results from two experiments in which subjects were required to complete tax returns for fictitious profiles containing a number of complex items partially supported this hypothesis. The content of the guidance in the first experiment was shown to have an effect on compliance, but the delivery mechanism had no effect. The results of that experiment also demonstrated that subjects made similar numbers of errors. The subjects also reported a pattern of values which conformed to a particular set of errors as a result of the erroneous classification of items and a failure to correctly process particular values. Similar results were obtained in the second experiment, where an alternative mechanism for tax filing was used, as the patterns of incorrect categorisation observed on a "by item" basis were found to be consistent with the errors found in declarations when a more general tax form was used. This means that if alternative guidance is provided to taxpayers, error rates could be reduced, which might improve tax compliance and revenue collection.

In another study, Björklund Larsen (2018)<sup>17</sup> considers legitimacy which has been proposed as the foundation of a functioning welfare state. In such a state, a legitimate tax system is that

<sup>&</sup>lt;sup>15</sup> D'Attoma, J., Tuxhorn, K., & Steinmo, S. (2018). A Holistic Approach to Studying Budget Preferences: Using Interactive Budget Tools for Social Science Research.

<sup>&</sup>lt;sup>16</sup> Chen, (c). J., Fonseca, M. A., Grimshaw, S. B., and Kotsogiannis, C. (2018). *Experimental Examination of Incorrect Categorisation and Calculation Errors in Tax Returns*.

<sup>&</sup>lt;sup>17</sup> Björklund Larsen, L. (2018). Striving for Legitimacy. The Swedish Fiscal System in Practice.

which is widely accepted and broadly considered to be fair by all citizens. The author contends that a legitimate tax system, from the taxpayers' perspective, should be grounded in a legal mandate, and be applied and interpreted as such. This work recognises that legitimacy is only achieved over a long period of time, to the extent where citizens accept such authority under multiple dimensions. This is likely to be manifested in guidance on how citizens, in general, react to the provisions of the law, politicians and bureaucracy, as well as in their morale. Using ethnographic fieldwork following a risk assessment project, this study finds that Swedish citizens have confidence in the Swedish Tax Agency due to the legitimacy built up over time while applying insights from international research on tax compliance and cautious interpretation of the tax law to ensure that every taxpayer contributes their fair share. In creating legitimacy, the study reveals, tax authorities like the Swedish Tax Agency may use communication strategies, such as treating taxpayers in correct, serviceable but empathetic manners, both internally, when talking about taxpayers within the authority, and externally, when directly contacting taxpayers in writing and orally. Additionally, due to the various control systems in place to reduce errors, and the provision of information about the administration's control systems and its analysis work, all citizens are likely to trust the system and pay their fair share of tax.

Gyoshev, Kambourov and Pavkov (2018)<sup>18</sup> carried out a study of flat tax reforms, European Union accession and earnings inequality in Bulgaria from 2005 to 2016, specifically looking at the changes involving Bulgaria, which joined the European Union in 2007 and the introduction of flat corporate and personal income taxes. Using a comprehensive administrative dataset that covers all working individuals and their monthly earnings (excluding those employed by the central government), the authors discovered the following information about individuals between the ages of 20 and 60. First, earnings inequality increased during the period from 2005 to 2016 and there was a perceptible sharp increase in 2006-2007, which can be explained by the unique combination of tax reforms and EU accession. Second, a breakdown of the total inequality data into between-firm and within-firm inequality shows higher betweenfirm inequality, which jumps in 2006-2007, and a lower within-firm inequality, which demonstrates a steady increase for the period under study, all of which is contrary to patterns observed in the United States. In addition, the study finds substantially higher withinoccupation inequality, which accounts for most of the observed patterns in total earnings inequality, as well as the 2006-2007 sharp increase. Overall, in order to understand the effects of Bulgaria's entry into the European Union and the changes in its tax structure on earnings inequality, we need to focus on their effects on within-occupation inequality. Furthermore, the authors suggest that the introduction of a flat personal income tax might have a small effect on overall earnings inequality, although it can create increased between-occupation inequality, as was demonstrated for the period between 2007 and 2008, when within-occupation inequality decreased slightly. The paper also advises that within-occupation inequality is likely to increase for senior officials and managers but reduce for skilled production workers, craftsmen, and assemblers and machinery operators, rather than for the other categories of occupations. This study is likely to help other countries intending to join the EU to understand the implications of doing so.

<sup>&</sup>lt;sup>18</sup> Gysoshev, S., Kambourov, G., & Pavkov, T. (2018). Flat Tax Reforms: European Union Accession, and Earnings Inequality in Bulgaria.

### **3. DETERMINANTS OF TAX NON-COMPLIANCE**

Many governments face challenges in financing public expenditure due to inadequate revenue sources. As indicated earlier, taxpayers' loss of tax morale might be one of the factors responsible for triggering tax evasion and avoidance behaviour. One study of tax avoidance scenarios is that of Gamannossi degl'Innocenti and Rablen (2018)<sup>19</sup>, which addresses tax avoidance in a social network. Drawing on the existing literature on self and social comparison in judgements, the authors argue that taxpayers choose to evade taxes so as to try to further their consumption when compared to first, their referent others in a social network, and second, their past consumption trends. The authors use the unique Nash equilibrium of the model to relate optimal evasion to a (Bonacich) measure of network centrality, where more evasion is experienced among taxpayers who are central in the network. The study finds that a related Bonacich centrality might rank the direct and indirect revenue effects from auditing. The study also identifies celebrity taxpayers within the network structures with widely observed consumption, whose wealth is systematically higher, implying that authorities' observation of such taxpayers in the social network can yield additional revenue through appropriate audit targets, since a number of measures of network centrality directly and indirectly correlate with evasion.

García-Montalvo, Piolatto and Raya (2018)<sup>20</sup>, on "Tax Evasion in the Housing Market", suggest that Spain experiences high tax evasion of approximately 20 to 25% of GDP. They indicate that many recent corruption case investigations have shown that the sectors that are most vulnerable to high corruption across the EU are urban development and construction. In the housing market, incidences of tax evasion consist of the under-declaration of purchase prices to tax authorities, where buyers tend to reduce the real estate transfer tax burden, while the vendors pay income taxes based on the lower capital gains disclosed. Although the linkage between the housing market, tax evasion and corruption has been in existence for a long time, research in this area is scant, making this study a novel contribution to the existing literature on the housing market, as it models and estimates the determinants of the undeclared income. By extending the housing market setting (Gete & Reher, 2016) to include circumstances in which buyers are allowed to declare only a portion of the value of their purchase, and using a unique dataset of housing transactions from 2005-2011, the model allows for the calculation of the extent of under-declared income in the business of second-hand housing estate sales, which might strengthen the fight against tax evasion.

More precisely, the study finds that the existence of the Loan-To-Value (LTV) ratio is linked to real estate appraisal as a critical mechanism of tax non-compliance, meaning that the study is related to the overappraisal literature. Moreover, the model used reveals that tax fraud is highly likely in regions where levels of corruption are higher and the citizens are less well educated, even if different transparency indices are used. Besides, tax evasion is more likely to increase with a larger shadow economy, which this theoretical model can demonstrate with a sufficiently high weight of social stigma in the utility function. Therefore, fighting corruption, increasing citizens' awareness, reducing the informal sector and improving disclosure of real estate income might encourage tax compliance in Spain's housing market.

<sup>&</sup>lt;sup>19</sup> Gamannossi degl'Innocenti, D., & Rablen, M. (2018). *Tax Evasion on a Social Network*.

<sup>&</sup>lt;sup>20</sup> García-Montalvo, J., Piolatto, A., & Raya, J. (2018). Tax Evasion in the Housing Market.

Moreover, in their study titled "Voting with Tax Evasion: Ideological Motives in Tax Compliance Behaviour", Rodríguez-Justicia and Theilen (2018)<sup>21</sup> develop a theoretical model of voting for redistributive taxation, in which voters' tax compliance behaviour is driven by fairness concerns. Using individual-level data from the World Values Survey (WVS) database and the European Values Study (EVS) with approximately 75,000 observations from 24 OECD countries over the period 1995-2012, the findings show that both the ideological stance of government and individuals, and the size of the public sector significantly influence tax compliance behaviour. Additionally, the authors indicate that voluntary tax compliance may be significantly affected by ideological remoteness between taxpayers and governmental parties. This means that, in both cases, the probability of a moderate rightist exhibiting the highest level of tax compliance under a moderate left-wing government is between -five and six percentage points lower than that of a moderate leftist doing so under a moderate rightwing government. These results emphasise the significance of ideological stances in shaping effectual income redistribution and reveal that policymakers might have to focus their attention on the growing ideological divergence lately observed in advanced nation states, as this may be an impediment to reducing income disparity.

Petruzzi and Prasanna  $(2018)^{22}$  indicate that the borders between traditional and digital economies are progressively blurring as existing business models are continually being reformulated by Multinational Enterprises (MNEs). In considering the transfer pricing connotations of business restructurings, the authors indicate that the focus of MNEs is to gain unexploited commercial value and competitive advantages through digitisation and changes in the global value chains as they modify financial transactions between related businesses. Business restructuring activities are the focus of tax administrators (OECD, 2017a), especially when associated enterprises' structures are tax-motivated and result in the transfer of profit potential between related companies, because digitalisation increases the risk of profit-shifting behaviour when restructurings go unnoticed. Although international tax policymakers and certain individual tax jurisdictions are working towards addressing the challenges arising from digitisation (OECD, 2018; OECD, 2015b), taxpayers are at risk of litigation when transfer prices differ from comparable arm's length prices. This paper, therefore, discusses the challenges in accurately delineating and recognising transactions under technologically transforming businesses models, as well as the adjustments to comparability analysis and the process of determining reparation for restructuring transactions that are likely to be needed. Lastly, the study discusses the influence of the information collected by tax administrators (OECD, 2015b) along with the role that may be played by alternate dispute resolution machinery in tackling disputes.

#### 4. CHALLENGES IN TAX ADMINISTRATION

Dr. Aleksandra Bal (2018)<sup>23</sup> considers whether and, if so, how blockchain technology might create transformation in tax administration and tax compliance, and what factors might impede its widespread acceptance. The author posits that, as an open, transparent and unchallengeable thin ledger, blockchain technology can record transactions among many parties and it has developed rapidly in this respect. Given that they have more diverse purposes than Bitcoin digital currencies, blockchain-based tools could be used to simplify the process of transfer

<sup>&</sup>lt;sup>21</sup> Rodríguez-Justicia, D., & Theilen, B. (2018). *Ideology and Tax Morale*.

<sup>&</sup>lt;sup>22</sup> Petruzzi, R., & Prasanna, S. (2018). Digitalization of Traditional Business Models – Transfer Pricing Implications of "Business Restructurings".

<sup>&</sup>lt;sup>23</sup> Bal, A. (2018). Technology Trends and Taxation: Does the Tax Sector Need Blockchain?

pricing and tax compliance in the tax arena by, for example, providing the tax administrations with greater clarity and a better understanding of each and every transaction, and tracking the movement of goods and services across the value chains. Both transfer pricing documentation and audit would be made possible by the use of blockchain technology. However, new technology is normally labour-intensive and costly, as the implementation of such technology requires skills that tax officials, tax managers and taxpayers lack, Therefore, advance planning is required so that the benefits that come from the use of such technology can be enjoyed.

In a related study, van Rijswijk, Hermsen and Arendsen (2018)<sup>24</sup> explore the future of tax administration with reference to a blockchain scenario study conducted by the Netherlands Tax and Customs Administration (NCTA). They question whether centralised tax authorities will be relevant in the next 20 or so years as, in the digital age, there is a likelihood of a huge shift towards complex information processing occurring and large quantities of transactions being executed, which could change how these authorities operate in future. The study provides the example of Distributed Ledger Technology (DLT) as used in blockchain, and presents a novel digital infrastructure for economic transactions. Like Dabla-Norris, Misch, Cleary and Khwaja (2017), van Rijswijk et al. (2018) argue that this digital infrastructure is a transparency-based governance model which is differentiated by its distributed and immutable nature, shared information and consensus mechanisms. Given that DLT is being implemented by tax administrations, the authors indicate that this technology might have a disruptive influence on the societal playing field in which these administrations operate.

The authors highlight that, even though a large amount of publicity has been generated about DLT, the current strategic policies, plans and efforts of tax authorities are ineffective due to uncertainties with regard to understanding how DLT advances might evolve in the near future. Using an explorative scenario and thinking about gaining insights into the future, the authors carried out interviews and three expert workshops with a diverse group of blockchain experts to explore uncertainties about tax authority perspectives. The axes determined for the scenarios were active vs. passive government engagement and public vs. private dominant DLT-type adoption. When crossed, these axes generate a matrix of four separate future scenarios which were then validated with additional explanation in the final workshop by a group of tax authority employees.

Tax simplification has long been believed to influence tax compliance behaviour among various taxpayers and has been thought of as simplifying the language of the tax law so that all taxpayers can understand it. However, Paul Morton and Peter Allen (2018)<sup>25</sup>, from the UK's Office of Tax Simplification, suggest that the volume of UK tax legislation has expanded considerably with time and argues that, in the current circumstances, tax simplification could be interpreted as the need to shorten the tax code to the length that it was in the early 1980s. However, the inexorable increase in the volume of tax law resulting from a number of factors and the complexity of broader society are issues of concern. Nonetheless, the authors note that improving the user experience is vital, since the majority of taxpayers can easily interact with the tax system which seems to be more feasible.

In fact, the author suggests a number of ways in which user experience could be improved through functional simplification of the tax legislation, including: the smoothing of cliff-edges,

<sup>&</sup>lt;sup>24</sup> van Rijswijk, L., Hermsen, H., & Arendsen, R. (2018). *Exploring the Future of Taxation: A Blockchain Scenario Study*.

<sup>&</sup>lt;sup>25</sup> Morton, P. and Allen P. (2018). What is Tax Simplification?

the use of tax reliefs, optionality and the use of technology. There is recognition that the various thresholds in the UK tax system function as cliff edges, with unequal consequences for those on either side of the thresholds (e.g. the VAT law) which may be evened out so that young businesses can easily work with the system in order to comply. The authors highlight a growing number of tax reliefs which are believed to amplify the complexity of the tax system. However, the existence of tax reliefs serves different purposes and people. Therefore, the authors argue that their retention in the tax codes remains appropriate but advises taxpayers to be responsible and only to access reliefs that relate to their needs. To further improve user experience, taxpayers would be automatically granted tax reliefs that are known to be due to them. Having general options also increases tax system complexity. However, conversely, selectively providing choices in relation to alternative treatment, such as the computation or non-computation of capital allowances for small taxpayers, might result into improved simplicity, whereas just reducing the options could introduce more intricacies into the code. In addition, if taxpayers appropriately adopt technology, there is a likelihood that their user experience will be simpler.

Stephen Daly's (2018)<sup>26</sup> study looks at the use of two types of soft law (type 1 and type 2) and their relationship in context of protections for taxpayers. Daly argues that the term "soft law" describes a selection of instruments at both international and national levels, although it explains norms with informal binding effects on the behaviour of others. The study indicates that there is a significant difference at the national level between soft law instruments which set out rules which the relevant official or public authority has the discretion to decide upon and soft law instruments which set out an official or public authority's view of rules which have been set by Parliament. The author indicates that this distinction is of critical importance where citizens need protection in circumstances where an official or public authority wants to take a direction other than the one set out in the instrument. The study shows that taxpayers receive more robust protection from non-legal redress through arbitration than from the courts when HMRC seeks to depart from its position in type 2 soft law instruments. This means that the use of type 2 soft law mechanisms might be more beneficial in encouraging taxpayers to comply, which could therefore improve tax revenue collections.

Other studies include that of Massey (2018)<sup>27</sup>, who explores the gap between theoretical studies of bunching around tax thresholds and what taxpayers experience in the real world. According to Massey (2018), even though bunching is a novelty to some people in the academic world and the research divisions of tax authorities, its manifestation would not surprise those at the sharp end of tax. The author argues that the manifestation of kink points can be misleading because underlying data is often not well understood. The study also reveals more striking behaviours which only occur around the kink points, which all quantitative researchers and revenue authority analysts are advised to take note of in their work.

Lastly, in their exploratory study, Beynon and Holland  $(2018)^{28}$  discuss the fuzzy-set qualitative comparative analysis (fsQCA), a set-theoretical technical methodology. The authors argue that this method is able to carry out multi-conjunctional asymmetric analyses that form a foundation for casual formula which connect, for example, the corporate effective tax rates (ETRs) measures, which include the annual total tax charge and the current tax charge. Though

<sup>&</sup>lt;sup>26</sup> Daly, S. (2018). HMRC as Tax Advisor – Types 1 & 2 Soft Law and Protections in Tax.

<sup>&</sup>lt;sup>27</sup> Massey, D. (2018). *How "The Kinks" Can Enlighten us About Bunching at the Kinks: What do Taxpayers, Tax Advisers and Front-line Tax Administrators Really Get Up to at Those Kink Points?* 

<sup>&</sup>lt;sup>28</sup> Beynon, M. J., & Holland, K. (2018). Dynamic Analysis of Corporate Tax Management Strategies.

different, these methods have hardly been used in tax compliance research, which could facilitate future research studies in this area.

#### **5. CONCLUSION**

The 6<sup>th</sup> annual TARC Conference brought together a lively set of presenters and audience and diverse set of research studies. The disciplinary mix has become a hallmark of the TARC programme and the conference provides a venue for stimulating debate from different perspectives about the ways in which our tax systems are and could be administered now and in the future.

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