DOCTOR OF PHILOSOPHY

Critical analysis of taxation related research papers

Holland, Kevin

Award date:
2019

Awarding institution:
Bangor University

Critical analysis of taxation related research papers.

Kevin Michael HOLLAND

Submitted in accordance with regulations for Doctor of Philosophy by published works

March 2019

PRIFYSGOL BANGOR UNIVERSITY

Index Page

Declaration - Datganiad

I hereby declare that this thesis is the results of my own investigations, except where otherwise stated. All other sources are acknowledged by bibliographic references. This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree unless, as agreed by the University, for approved dual awards.

Yr wyf drwy hyn yn datgan mai canlyniad fy ymchwil fy hun yw'r thesis hwn, ac eithrio lle nodir yn wahanol. Caiff ffynonellau eraill eu cydnabod gan droednodiadau yn rhoi cyfeiriadau eglur. Nid yw sylwedd y gwaith hwn wedi cael ei dderbyn o'r blaen ar gyfer unrhyw radd, ac nid yw'n cael ei gyflwyno ar yr un pryd mewn ymgeisiaeth am unrhyw radd oni bai ei fod, fel y cytunwyd gan y Brifysgol, am gymwysterau deuol cymeradwy.

Kevin Holland

21st March 2019

Acknowledgments Diolchiadau:

I would like to thank my supervisors Professors Doris Merkl Davies and Owain ap Gwilym. Their insightful guidance was particularly helpful in clarifying my thoughts in the writing of the critical review.

To my co-authors of jointly published works, I am grateful for your expertise, camaraderie and encouragement.

To my former students, I have learnt more from you than many of you might have realised. Thank you.

Finally, to my wife and children thank you for your support and tolerance of my long held interest in taxation. Diolch yn fawr iawn Bethan, Angharad a Gethin am eich cefnogaeth dros y blynyddoedd.

Abstract -Taxation is in many respects similar to other forms of regulation in requiring an identifiable set of rules. However, unlike most regulatory systems, taxation is also designed to direct flows of resources from and between those being regulated. This direct influence on resources gives tax systems and their associated regulations a greater salience within society than with many other regulatory systems.

Research on the effects of taxation and its administration draws on a widening range of disciplines including accounting, economics, law, organisational behaviour, public administration, and psychology. This wide range reflects a relatively recent broadening of research perspectives. Arguably, two events have prompted this change. Firstly, the work the European Union (EU) in 1997 and the Organisation of Economic Cooperation and Development (OECD) in 1998 exposed inequities with the international tax system to new audiences. Secondly, the Banking Crisis of 2007 – 2009 and resulting economic responses resulted in reductions in the levels of tax revenues.

The research reviewed in the thesis cover four areas, asset pricing, firm level decision making, investor responses to companies' tax policies, and taxation systems – administration and compliance. These four areas are connected by an overarching question on how decision makers become informed about the taxation system(s) in which they are operating. Taxation systems are typically complex and constantly evolving thereby imposing costs of becoming and remaining informed.

Two broad contributions flow from the above work and are therefore relevant to future research. Firstly, the importance of considering the setting within which tax related decisions are made. As a result of the complexity and uncertainty involved in taxation, decisions are often made in conjunction with a range of parties. Hence, predicting the effects of taxation policy requires an understanding of the likely behaviour of a range of interested parties. Secondly, tax data reported in financial statements often represents aggregated summaries of potentially conflicting or contrasting effects. Further insights about tax decision making in a corporate setting requires an appreciation of how these contrasting effects can be identified using publically available information.

A challenge for tax researchers is to couple expertise from the field of public administration with the necessary understanding of the context in which tax systems operate and tax decisions are made. Such research will have the potential to contribute to real change in society by for example, increased compliance rates, lower administration costs, more effective tax based policy incentives. A better informed society can also improve control, scrutiny and direction of tax systems.

1. Introduction

The purpose of this discussion is to demonstrate how the candidate's contribution to the academic literature represents sustained work at a doctoral level.[1] The structure of the analysis is as follows: Section 2 outlines the positioning of taxation as a subject of academic study and identifies specific sub areas of taxation research; Section 3 explains the contribution of the candidate's taxation related published papers to the identified fields and Section 4 provides a summary.

2. Taxation as an area of academic study

2.1 Introduction

Section 2 is designed to provide a summary of tax research in general and is not limited to the specific areas in which the applicant has published. The aim is to provide context and a summary of changes to the subject area and its status. Where there is a direct link with the candidate's published work, as discussed in Section 3, the relevant sub-section is indicated.

Taxation systems are in many respects similar to other forms of regulation in requiring an identifiable set of rules. This perspective of taxation is the focus of much legal-based tax research. A broader perspective taking in the administration and enforcement of tax regulations draws on a widening range of disciplines including accounting, economics, organisational behaviour, public administration, and psychology. As part of a wider regulatory framework, taxation systems are designed to influence behaviour. However, unlike most other regulatory systems, taxation is also designed to bring about direct flows of resources from and between those being regulated. This direct influence on resources gives tax systems and their associated regulations a greater salience within society than many other regulatory systems.

Paradoxically, this salience has not traditionally been reflected in the subject's status within academia. Instead of observable groups of academic researchers, either working within the boundaries of a single academic discipline or within multidisciplinary or interdisciplinary groupings, tax based researchers are often working individually or in fragmented clusters. There are long standing exceptions e.g. *ATAX* (Australian School of Taxation) at the University of New South Wales, Australia and *Office of Tax Policy Research* at University of Michigan in the US. In the UK, there is a recent recognition of the importance of academic tax research with the establishment of research centres, though the impetus for their establishment has come from outside academia, e.g. *The Centre for*

[1] A list of the candidate's tax related papers is provided in Table 1.

Business Taxation at Saïd Business School, Oxford University initiated by the 100 Group, and *The Tax Administration Research Centre* initiated by HM Treasury and HM Revenue and Customs based at Exeter Business School, Exeter University. [2]

2.2 Role within academia

Within the academic business and management disciplines, the lack of status and presence may reflect a general indifference by the audit firms or other external parties in establishing collaborative research links with UK based academic researchers. This lack of engagement is in contrast to the role of the accounting profession in, for example, Germany and The Netherlands. These countries have a long standing regard for academic research with regular staff movements in either direction between the profession and academia, along with joint appointments. The accounting profession plays a multitude of roles within tax systems. As well as a positive influence on the development and direction of academic research, this recognition and involvement can have detrimental effects in unduly influencing the direction of research.

Economics and Law have been the dominant academic disciplines influencing tax research. In assessing policy, macro economists view taxation through aggregate effects on expenditure and investment decisions. At the micro level of economic analysis, emphasis is given to examining the economic efficiency of tax systems either to attempt to avoid undesirable outcomes, e.g. creation of deadweight loss or the achievement of intended changes in behaviour, e.g. increase in investment in research and development (R&D).

2.3 Broadening of scope

More recently, in the last 15 years or so, research perspectives have broadened. Arguably, two events have prompted the change. The first is the recognition by the European Union (EU) in 1997 and the Organisation of Economic Cooperation and Development (OECD) in 1998 of the inequities of the international tax system. The EU's action was aimed at national governments' use of taxation in attracting mobile capital. Indirectly it drew attention to tax avoidance and evasion by individuals and companies through the use of tax havens or secrecy regimes. The OECD initiative had a similar effect in attracting tax payers' attention. While the motive of the EU and OECD work was to protect tax revenues for their respective government members, concerns over inequitable treatment of tax payers naturally followed. A time marker of this new focus was the establishment of the *Tax Justice Network* (TJN) in 2003. The TJN defines itself as:

---

[2] Although now often seen as a quasi-academic based organisation *The Institute for Fiscal Studies* was instigated by practitioners in the 1960s.

"We are an independent international network launched in 2003. We conduct high-level research, analysis and advocacy on international tax; on the international aspects of financial regulation; on the role of tax in society; and on the impacts of tax evasion, tax avoidance, tax 'competition' and tax havens. We seek to create understanding and debate, and to promote reform, especially in poorer countries."

The TJN traces its origins in part to the publication by Oxfam UK of the report *Unlocking the hidden billions to eradicate poverty.* The authors of the report state they were prompted by the sight of the EU and OECD actions above, and their focus on the developed world (Oxfam 2000).

The second event followed the Banking Crises of 2007 – 2009 and the resulting effect on tax revenues and dramatic falls in asset prices. Research focus was drawn to two aspects of the tax system. Firstly, on administration, as a means of increasing tax compliance and efficiency of revenue collection.[3] Secondly, on the actions of individual companies and the role of shareholders and other stakeholders in controlling corporate behaviour.[4]

2.4 Background and perspectives

The academic accounting discipline has provided a fertile setting and range of skills and knowledge in which to investigate these two important areas: operations of tax administrations and individual company behaviour and control. Academic accountants with prior professional experience or qualifications often have a comparative advantage in their knowledge of tax rules and administration and experience of the settings in which tax related decisions are made. Further, an understanding of financial reporting provides insights into the incentives and constraints provided by annual reporting on companies' tax decision making. In contrast, economics and finance based researchers sometimes lack this understanding, though they are often better equipped with respect to applications of quantitative econometric based research methods centred on agency theory.[5]

---

[3] One measure of the effectiveness of tax administrations is magnitude of the "tax gap". While various definitions exist, HMRC describe the 'tax gap' as "the difference between the amount of tax that should, in theory, be paid to HMRC, and what is actually paid" (HMRC 2018). In 2009, HMRC published for the first time its estimate of the Tax Gap. The decision to publish was in response to concerns over the effectiveness of the tax administration and lack of observable measures of effectiveness, *"The department does not have a robust measure of the corporation tax gap. It should develop such a measure and publish the results."* (House of Commons Committee of Public Accounts, 2008).

[4] In February 2009, The Guardian newspaper published a series of articles highlighting corporate tax behaviour of a number of UK and multinational companies. (The Guardian, 2009). Later in the same year, a direct action pressure group *UK Uncut* organised a series of direct actions against a number of UK businesses (UK Uncut, 2010).

[5] See for example Neubig (2006) who in testimony before The US State Finance Committee stated *"Most economists don't think book taxes matter*". Massey (2018) highlights examples of misunderstanding of tax law in recent finance and economic published research.

2.5 Research settings

This section discusses four main areas of investigation where accounting based tax researchers have made a significant contribution to understanding; Asset pricing, Firm level decision making; Investor responses to companies' tax policies and taxation systems – administration and compliance.

2.5.1 Asset pricing

One area, however, where the work of accounting and finance based researchers overlaps is the examination of taxation and asset pricing, e.g. the relative effect of taxation of capital gains and dividend income on share pricing (see subsection 3.1 below). The more fundamental question is who bears the economic consequence of the liability(s), which, in turn, can have consequences for corporate policy decisions on distribution of earnings and redemption of capital. An implied assumption of the popular event study research methodology used in this area, is one of an (semi strong) informationally efficient asset pricing market. With anomalies identified with respect to announcements of "homogenous" financial reporting based information e.g. Post Earnings Announcement Drift attributed to investor under reaction (Kang, Khurana and Wang, 2017), it is reasonable to question the ability of investors to appropriately interpret tax information (Bonsall, Koharki and Watson, 2017; Holland, Lindop and Abdul Wahab, 2018). It should be noted that there is evidence to the contrary, for example, that analysts do "pay attention to taxes and improve on management estimates" (Bratten, Gleason, Larocque and Mills, 2016). The tax environment is characterised by complexity and opaqueness and a heterogeneous disclosure environment (Plumlee 2003, Edgeley and Holland 2018).

Observing a reaction to a tax announcement is consistent with the announcement conveying price sensitive information. However, on its own the reaction does not indicate whether the market has interpreted the information correctly (Doidge and Dyck, 2015). To make such an evaluation, it is standard practice to make an assumption about the tax status of the marginal or price setting investor (Bell and Jenkinson, 2002). An assumed marginal tax rate allows the observed wealth effect to be evaluated with respect to the nature of the announcement e.g. change of tax rate or other variation in legislation.

2.5.2 Firm level decision making

Accounting based tax research following an agency perceptive borrowed from economics and has primarily focused on two main areas of individual company behaviour. Firstly, it has examined determinants of corporate Effective Tax Rates (ETRs) and secondly the potential information content of book-tax differences (BTDs).[6] In expressing companies' tax charges relative to pre-tax financial reporting or accounting income, studies typically assume the differences between this (average) ETR and the statutory rate are attributable to tax management.[7] In jurisdictions with a high degree of conformity between accounting and taxable income measures, this assumption may not be problematic. With a lack of conformity, researchers must attempt to control for non-tax motivated sources of any difference. Earnings management is typically considered to be a potential source of difference when, because of the lack of high conformity, companies' reported earnings are not strongly anchored to taxable earnings.

ETRs and BTDs are further limited in that they can only detect non-conforming tax management. Tax management that reduces both accounting and taxable income does not affect either measure. Despite these practical limitations of ETRs and theoretical arguments often advanced by economists that average ETRs are irrelevant to explaining managers' behaviour, accounting researchers continue to use ETRs. Their use is based on empirical evidence that suggests that managers and investors explicitly use ETRs for managerial motivation and control purposes.

With a primary focus on economic efficiency, economists argue that the marginal ETR is an appropriate input into investment appraisal and therefore managerial decision making. Concerns of equity are ignored on the grounds that, under a nexus of contracts view of the company, corporate taxes are borne by contracting parties. Considering equity at the company level is therefore conceptually flawed. A counter argument is the artificial entity view of the company under which companies owe their existence to the state and, in return, are subject to tax (Avi-Yonah, 2006). Tax is seen as a cost of operating within a society with the benefit of limited liability. Tax is an expense of the company and not a cost of a contracting party, i.e., the shareholders. There is support for this view of the firm. The International Accounting Standards Board (IASB) claims this artificial entity perspective has been adopted in the formulation of International Accounting Standards (IAS) and the underpinning Conceptual Framework (van Mourik, 2014). [8]

In a survey of senior tax executives US multinational enterprises, Mulligan and Oats (2016) report that corporate tax policies were often expressed in terms of (average) effective tax rates. Further illustration of the importance of ETRs despite known limitations is found in Graham, Hanlon,

[6] It can be shown analytically that ETRs and BTDs are alternate measures of the same phenomenon. In effect the ETR is the (assumed) tax effect, in percentage terms, of the difference between accounting and taxable income measures i.e. the BTD.
[7] Many studies use the term *tax avoidance* instead of the more general term *tax management* even though, when restricted to using publically available information, a researcher cannot identify the source of any tax saving. *Tax evasion* could be an equally plausible explanation.
[8] Under this approach, asset valuation and income measurement are from the perspective of the entity as distinct from the equity or owners' perspective. Note that van Mourik (2014) claims that despite the IASB's claims to be following an entity approach, some of the IASs in effect adopt an equity perspective.

Shevlin and Shroff (2013). In a survey of corporate tax managers with respect to (average) ETRs, they report ".... *in 84% of the public companies, the accrual accounting measure of taxes that affects reported accounting earnings is at least as important as the cash taxes paid."* The influence of average ETRs is not limited to reporting decisions. US based survey evidence indicates that managers incorrectly use average, rather than marginal ETRs in assessing investment and financing proposals (Graham, Hanlon, Shevlin and Shroff, 2017).

Establishing a link between the performance measurement of managers and average ETRs opened up or legitimised a research agenda examining the direct effect of managerial influence on corporate tax management. Dyreng, Hanlon and Maydew (2010) documented the effect of individual executives on companies' tax management behaviour. Employing Upper Echelon Theory, the paper is notable for developing the literature beyond an agency theory based rational decision maker view of the world. In part, the paper addressed the under sheltering puzzle (Weisbach, 2002), which refers to the apparent lack of consistency between companies in maximising the benefit of tax management strategies. By recognising that managers' preferences with respect to tax management can vary between individuals, part of the apparent lack of consistency can be explained. The concept of tax preferences or attitudes can be extended to consider corporate attitude (see subsection 3.2 below). In a broader study of managers' preferences in both public and private companies, Chen, Chen, Cheng and Shevlin (2010) found differences in response to perceived adverse reputational consequences of tax management. Consideration of reputational effects was given by Gallemore, Maydew and Thornock (2014). They examined reputational costs as faced by individual directors and companies more broadly, but found no evidence of significant reputational effect either in terms of share price or managers' employment turnover.[9]

2.5.3 Investor responses to companies' tax policies

In contrast to explaining managers' behaviour, two strands of research examined equity investors' responses to tax management. One approach centred on directly testing the relationship between tax management and company market value or share price, while a second examined an indirect wealth or pricing effect via the information content of book tax differences (BTDs). Desai and Dharmapala (2009) reported that the association between the level of tax management and firm value is a function of companies' corporate governance. In weakly governed companies the relationship was negative, consistent with the view that the benefit in the form of a reduction in tax paid to the state did not

[9] As the authors note, the results can be challenged because the sample consists of companies publicly identified as participating in tax shelter activity. These companies may have lower potential reputational costs compared with non-participants in tax shelters.

accrue to the shareholders. Only in the sub-sample of well governed companies was there an observed positive relationship between tax management and market value.

The information content of BTDs centres on the interpretation by investors of the factors underlying the difference between companies' accounting income and (estimated) taxable income (see sub-section 3.3 below). Some differences may occur because of a mechanical interaction between financial reporting standards and tax legislation (Hanlon, Krishnan and Mills, 2012). Such non-discretionary differences may have relatively low information content beyond assisting in forecasting future tax payments. Other differences, or discretionary differences, may convey information about the quality of companies' earnings in terms of their persistence (Hanlon, 2005). Depending on managers' incentives, earnings management can generate a BTD (Erickson, Hanlon, and Maydew, 2004). [10]

2.5.4 Taxation systems: Administration and compliance

Accounting researchers desiring an alternative theoretical motivation or underpinning to their work are required to supplement their technical and contextual understanding by importing approaches from other disciplines e.g. "*history, philosophy, political science, social psychology, sociology, organisational behaviour*" (Parker and Guthrie, 2014). This richer range of available theoretical approaches allows a wider range of research questions to be addressed and enables accounting researchers to contribute to these broadening research perspectives (Slemrod, 2005). In contrast to the US dominated quantitative tax research, the roots of qualitative tax research primarily lie amongst European or Australian based researchers. Such researchers have long recognised the importance of taxation beyond its technical setting. Slemrod (2005) captures its importance as follows:

> *"Taxation is about the relationship between individuals and the state, about honesty and trust, and about how a society designs institutions to try to overcome the free-rider impulse that threatens to undermine beneficial collective action."* (Slemrod, 2005).

Notable examples of research examining tax in a wider focus include; knowledge management within the tax administration - tax adviser - corporate tax payer framework (see sub section 3.4 below), tax and performance measurement of corporate tax managers (Mulligan and Oats, 2016), regulatory practice within the tax field (Gracia and Oats, 2012) and tax payer behaviour in a non-

[10] A related question is the ability of investors to interpret BTDs. Lev and Nissim (2004) find that BTDs are informative in forecasting subsequent stock returns. The strength of the relationship weakened over time suggesting an improvement in investors' ability.

compliance setting (Onu and Oats, 2018).[11] A challenge to the development of such future work is obtaining the necessary tax and tax institutional knowledge to inform and apply appropriate research questions, theoretical motivation and interpretation.

2.6 Summary

In summary, the volume and breadth of tax inspired research have grown significantly over the last twenty years. Critical to its continued development is an adequate supply of suitably equipped researchers. Researchers with practical experience of how tax administrations operate and interact with taxpayers and their advisers, have an understanding of the context in which tax decisions are made. Existing tax informed researchers are challenged by this increase in research by the often *ad hoc* or broad approaches adopted by other researchers. However, without such research it is possible that some relevant research questions would have remained unexamined e.g. the association between effective tax rates and a range of characteristics of corporate managers including, age, gender, party political allegiance, and propensity towards risk.

3. Review of own published work:

The published research is connected by an overarching question on how decision makers become informed about the taxation system(s) in which they are operating. Taxation systems are typically complex and constantly evolving thereby imposing costs of becoming and remaining informed. The submitted published work can be sub categorised within the following broad questions:

1. How do financial asset markets respond to taxation?
2. What are managers' attitudes to corporate tax management?
3. Are Effective Tax Rates a valid measure of tax management?
4. How do parties within a tax system become informed?

Each of these questions will be discussed in terms of its relevance and then in the context of the candidate's contribution.

3.1 How do financial asset markets respond to taxation?

[11] Tax informed researchers are also using their knowledge of tax institutions to examine non-tax specific questions e.g. recursive governmentality (Tuck, 2013) and changing work practices in the public sector (Tuck, 2010).

Related to the question of how parties within a tax system become informed, as discussed in Section 3.4 below, is a related question of the effect of taxation on decision making. Two papers, namely Holland, Hodgkinson and Jackson (2006) and Holland and Jackson (2011) examined the effect of taxation on the pricing of financial assets, specifically shares, i.e. investor and market makers' responses. Traditionally, the approach to examining the relationship between tax and share prices has been to examine ex-dividend day share price changes in order to identify the effect of different rates of taxation on capital gains and dividend income respectively, e.g. Elton and Gruber (1970), Bell and Jenkinson (2002). Interpretation of any price change or the *Drop of Ratio* (DOR) arising when the basis of companies' share prices moves from *cum-dividend* to *ex-dividend*, can provide estimates of the tax status of the price setting or marginal investor. In contrast, Scholes and Miller (1978) argue that ostensibly taxable investors can avoid taxation on dividend income relatively easily, thereby reducing the power of DOR based studies [12]

Accounting based researchers starting with Harris and Kemsley (1999) used developments in theoretical and empirical accounting research on firm valuation, e.g. Ohlson (1995) to develop an alternative approach. *Inter alia*, this approach avoids the pricing effect of short term dividend capture trading on DORs (Kalay, 1982) and potential market micro structure effects on pricing (Frank and Jagannathan, 1998). The general approach is to model firm value as a function of net assets sub divided between issued share capital and retained profits. This approach, referred to as *the tax capitalisation debate* in accounting journals gave rise to a flurry of papers, e.g. Harris and Kemsley (1999), Harris, Hubbard and Kemsley (2001), Kemsley 2001(a)(b), Dhaliwal, Erickson, Frank and Banyi (2003), Gentry, Kemsley and Mayer (2001) and Hanlon, Myers and Shevlin (2003), with competing conclusions and perceived validity. In considering this strand of work by Harris and Kemsley, Shackelford and Shevlin (2001) observed "… *we find these results implausible …".* Despite the fundamental nature of the issue, there is a still a lack of consensus on the basic question of how to measure the effect of taxation on share prices, let alone answer the central question.

Holland, Hodgkinson and Jackson (2006) used a DOR approach in a specific setting of an unexpected change in dividend related taxation. In July 1997, the UK Government abolished with immediate effect the ability of tax exempt investors to reclaim the tax credit on Franked Investment Income (FII).[13] Building on the work of Bell and Jenkinson (2002), Holland, Hodgkinson and Jackson (2006) used a provision in the Double Taxation Convention between Ireland and the UK to identify a sub category of companies listed on the London Stock Exchange whose UK resident tax exempt shareholders could continue to reclaim the tax credit on FII beyond July 1997. The paper documented

[12] Even access to detailed information on investors' trading patterns and taxable status may not be sufficient to estimate their marginal tax rate.
[13] This is sometimes incorrectly described as the abolition of the ability to reclaim Advance Corporation Tax (ACT).

evidence of dividend capture trading and, with changes in the Irish rate of tax credit, provided estimates of the benefits of dividend capture trading. An indirect contribution of the paper was the importance of identifying detailed provisions of tax legislation and changes.

Holland and Jackson (2011) attempted to circumvent some of the limitations of using DORs as identified above, though at the expense of the ability to generalise the results to a broader range of equity class. They examined Venture Capital Trusts' (VCTs) IPOs on the London Stock Exchange.[14] On subscription, investors in a VCT obtain a range of income tax and capital gains tax reliefs. These reliefs are conditional upon the subscribing investor not disposing of the share within a five (three) year period, i.e. a holding period, thereby creating a 'lock-in effect'.[15] To avoid problems of illiquidity and underlying changes in the worth of the share, Holland and Jackson (2011) instead modelled and examined bid-ask spreads. The finding of a time trend in the relative bid ask spread consistent with the cost of the lock in effect highlighted a conflict between the requirement for VCTs to be quoted in order to promote liquidity and the stated aim of the holding period to limit tax avoidance.[16]

3.2 What are managers' attitudes to corporate tax management?

If governments, tax administrations, society etc. wish to influence managers' decisions with respect to tax, an understanding of managers' attitudes would be helpful. It is difficult to observe managerial behaviour using publicly available information because of the limited disclosure requirements. Tax administrations and governments can struggle to observe the complete picture of a company's or groups' tax outcomes, even with their access to private information.[17] Hence it is not always possible to observe tax outcomes, and even when observed, it is not always possible to attribute an underlying motive, e.g. is a company's observed level of capital intensity attributable to production technology considerations, optimising tax based capital allowances, or a combination of both?

Instead of attempting to observe tax outcomes, Holland, Lindop and Zainudin (2016) adopt an alternative approach in assessing managers' attitudes to tax. They examined companies' tax related disclosures in Annual Reports (AR) and Corporate Social Responsibility (CSR) Reports. An advantage of this approach is the ease of identifying tax motivated actions, in this case disclosures. The disclosures are meaningful in the context of signalling theory in that they have a cost or consequence (Ross, 1977),

---

[14] The use of the term trust is a misnomer as VCTs are limited companies.

[15] The holding period for new issues was reduced from five to three years with effect from 2000/01 and then restored to five years with effect from 2006/07.

[16] A copy of the paper was requested by HMRC's Knowledge, Analysis and Intelligence (KAI) directorate, which is HMRC's central analytical team.

[17] As recognised by the BEPS requirement for Country-by-Country Reporting of groups' tax and related activities and characteristics (HMRC, 2016a).

e.g. providing information to a tax administration, constraining managers' future behaviour or valuation and contracting costs. In a series of articles on taxation published by *The Guardian* newspaper in 2009 (The Guardian, 2009), a number of UK based companies were publicly criticised. Some of these companies were also subject to direct action by UK Uncut (UK Uncut, 2009). Based on an analysis of seven companies in total, each reference to taxation in their Annual Reports (ARs) and Corporate Social Responsibility (CSR) Reports was read, interpreted and classified. The disclosures in the Annual Reports and Corporate Social Responsibility (CSR) Reports arose from a variety of regulations. These comprised International Accounting Standard (IAS) 12 Income Taxes, discretionary narrative statements that expanded on IAS 12 mandated disclosures, and non IAS statements made elsewhere in the AR, e.g. Chairmen's statement, Review of Business etc.

In order to infer an underlying motive and attitude, legitimacy theory was used to provide a basis for classifying each disclosure as either *confirmatory, deflecting* or *influencing* (Lindblom, 1993). Observing how managers respond or do not respond via their disclosures allows for inferences on about their (publicly observable) attitude to tax management. Using a time series of reports allowed for any changes in attitudes over time to be observed. The analysis indicated a lack of consistency within companies over time and a lack of consistency between companies across time. One interpretation of this finding is that managers are opportunistic or short term focused in formulating their disclosures. A policy implication follows that if governments, tax administration, investors or society require informative tax disclosures, these groups cannot rely on managers' voluntary behaviour. From a methodological perspective, given the cross sectional and temporal variation in the motives underlying the observed disclosures, the paper argues against relying solely on large scale aggregated samples in studying managerial attitudes to taxation.

3.3 Are Effective Tax Rates a valid measure of tax management?

As discussed above an extensive literature has developed around the use of ETRs to make inferences about managerial and investor behaviour. The basic approach is that after appropriate controls, any difference between a statutory rate(s) and a company's effective tax rate is attributed to tax related decisions. Abdul Wahab and Holland (2014) make use of the fact that ETRs can be restated and expressed as the book tax difference (BTD). The paper uses a sample of 798 UK companies listed on the London Stock Exchange (LSE) and drawn from the ARs in the 6 year sample from 2005 to 2010, hand collected data from the IAS 12 mandated ETR reconciliations. The reconciliations allowed disaggregation of companies' BTDs into temporary, permanent, tax rate differential, and other/unclassified sources. As each of these components can have differing underlying sources, an understanding of cross sectional differences in the components of BTDs and temporal consistency in the composition of companies' BTDs provides insights into managerial behaviour. In particular, differences in temporal consistency can lead to inferences about managers' attitudes to tax management. For example, among the 78 companies with a statutory rate differential[18] (STRD), 29 had at least five positive STRDs, while 13 reported at least five negative STRDs, and the remaining 36 exhibited less persistence. This variation is observable at the industry level, inferring consumer, supplier or production decisions are not the underlying source of the observed variation in persistence. Instead the variation may be attributable to tax management decisions and again reveal variation in managerial behaviour. A direct implication of the findings is that using (database) generated ETRs without adjustment for variation in the underlying source of variation can lead to erroneously assuming homogeneous underlying sources of ETRs (BTDs). A limitation of the paper is a lack of consistency in the degree of aggregation in ETR reconciliations beyond the key stated required disclosures. This does not bias the findings, but limits the extent of further disaggregated analysis.

3.4 How do parties within a tax system become informed? [19]

A tax system can be defined as typically comprising a legislator, tax administration, tax payers and tax payers' agents (Hasseldine, Holland and van der Rijt, 2010). For a system to operate effectively requires each party to be informed. Effectiveness can be defined in the context of revenue raised and/or achieving policy outcomes, e.g. increasing level of R&D expenditure to promote economic growth. Although not without limitations, tax gap analysis and revenue cost analysis can be used to measure the success of revenue related objectives. Isolating the effectiveness of a tax system in bringing about a policy objective is even more problematic with respect to having to identify and isolate the effects of potentially conflating factors.

In a series of papers, Hasseldine, Holland and Van der Rijt (2010, 2011, 2012a and 2012b) and Van der Rijt, Hasseldine and Holland (forthcoming) examine knowledge flows within a tax system as an indicator of the likelihood of the tax system being effective from a policy perspective (Hasseldine, Holland and Van der Rijt, 2010 and 2011) and from a revenue perspective (Hasseldine, Holland and Van der Rijt, 2010 and 2012a). Drawing on the knowledge management literature, Hasseldine, Holland and Van der Rijt (2010 and 2011) characterised a typical tax system as comprising three actors with

[18] The statutory rate differential represents the difference between the UK statutory corporate tax rate for a period and the weighted average statutory tax rates faced by a company taxable across a number of jurisdictions in the same period.

[19] This work was instigated by the candidate following his attendance at a HM Treasury workshop on how to increase R&D. In a discussion on the use of R&D tax credits, no consideration was given to the processes and their limitations by which *R&D decision makers* within tax paying companies become informed about changes in the level of credits. There was an implied assumption of a costless transmission of knowledge.

the following functions: knowledge selling, knowledge buying and knowledge brokering. In the UK setting, these roles would be played by the following parties; HMRC, corporate tax payers and accounting firms. Potentially these roles are interchangeable depending on the setting, e.g. a corporate tax payer could in one setting be a knowledge buyer and in another a knowledge supplier. Figure 1 illustrates the market and knowledge flows schematically. Note the bi-directional knowledge flows highlighting the interdependencies between the three actors, while also allowing for bipartite exchanges. The role played by each actor is not fixed.

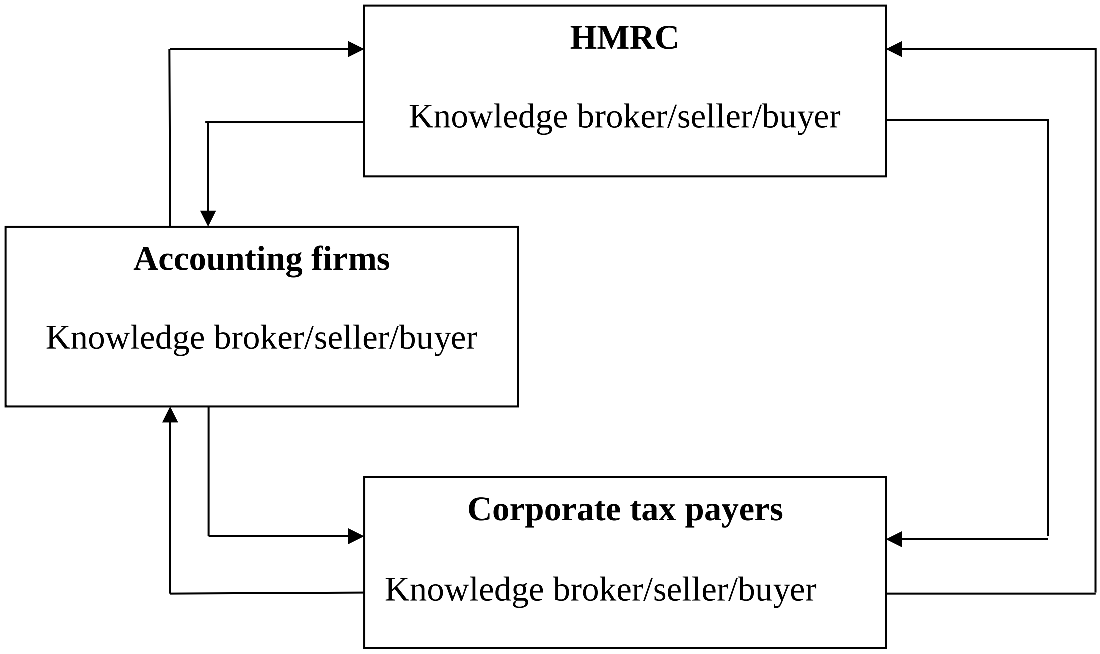

Figure 1: Tax Knowledge Market (Adapted from: Hasseldine, Holland and van der Rijt, 2010).

Hasseldine, Holland and Van der Rijt (2011) conducted a series of 26 interviews with corporate tax paying companies (x13), tax advisers (x8) and HMRC (x5). The corporate interviewees were with staff employed primarily from the accounting or finance function, though other functions were represented, such as human resources. Hasseldine, Holland and Van der Rijt (2011) argued that the tax knowledge market differs from many other knowledge markets in that participation, i.e. compliance, is obligatory and is characterised by high level of complexity and uncertainty. Further, they argue HMRC faces a dilemma or *double edged sword* when attempting to determine optimum levels of awareness of the tax system by tax payers. To minimise compliance costs and to bring about effectiveness of tax based policy initiatives, a given level of awareness is desirable. However, a high level of awareness may facilitate tax management activities with undesired revenue consequences and other negative consequences, e.g. inefficient location decisions. Drawing on these insights, tax advisors were likened to bumble bees; pollenating by disseminating and *stinging* by facilitating tax planning (Hasseldine, Holland and Van der Rijt, 2012b) and *enforcers* and *exploiters* (Klepper, Mazur and Nagin 2001).

Hasseldine, Holland and Van der Rijt (2011) found the motives of companies utilising the services of tax advisers to be varied and to extend beyond the obvious desire to minimise the direct economic cost of taxation. Companies employed advisers to identify, manage and in some cases shift risk. Within the group of corporate tax payers, the level of tax awareness was perceived as being low, and again this has a double edge. Without appropriate awareness, policy initiatives may be unsuccessful, while managers may be unwittingly exposing companies and investors to unknown tax risks.[20] A challenge for all parties is how to raise awareness of taxation issues among such individuals without overburdening them with detail and complexity.

Hasseldine, Holland and Van der Rijt (2012a) also applied a knowledge management framework to examine the tax system's responses to corporate tax payers' tax management behaviour. In doing so, they contextualised regulatory responses to tax payers and tax payer agent activity. Figure 2 is a schematic representation of the UK tax network and is based on Figure 1 above with the addition of three further sets of actors. Knowledge flows involved in the formation of tax policy are captured by the inclusion of Parliament, HM Government and HM Treasury. Monitoring of, and reporting on HMRC's activities is performed by National Audit Office and gives rise to knowledge flows with HMRC and Parliament. Private sector organisations, individuals and third sector organisations are represented by the actor groupings NGOs and charities, and company stakeholders. NGOs and charities have only recently become part of the tax environment with a range of activities involving knowledge flows with several actors. Finally, the extreme right of the diagram recognises the interconnections between national tax systems through tax advisers and corporate tax payers' internal knowledge flows. A striking feature of the system is the large number of actors involved and the intricacy of the knowledge flows. This intricacy is both a strength and a weakness. Strong links have the potential to improve the formulation of policy and its dissemination while reducing compliance and administration costs. However, a closely entwined system runs the risk of being slow to respond in terms of necessary and effective policy and/or administrative changes. This latter scenario may explain the perception that HMRC is trying to circumvent the role of tax advisers by transacting directly with corporate tax payers (Hasseldine, Holland and Van der Rijt, 2011).

[20] An example of steps to shift or raise responsibility is the Senior Accounting Officer (SAO) regime introduced in the Finance Act 2009. The aim is to make directors of companies responsible for tax compliance decisions.

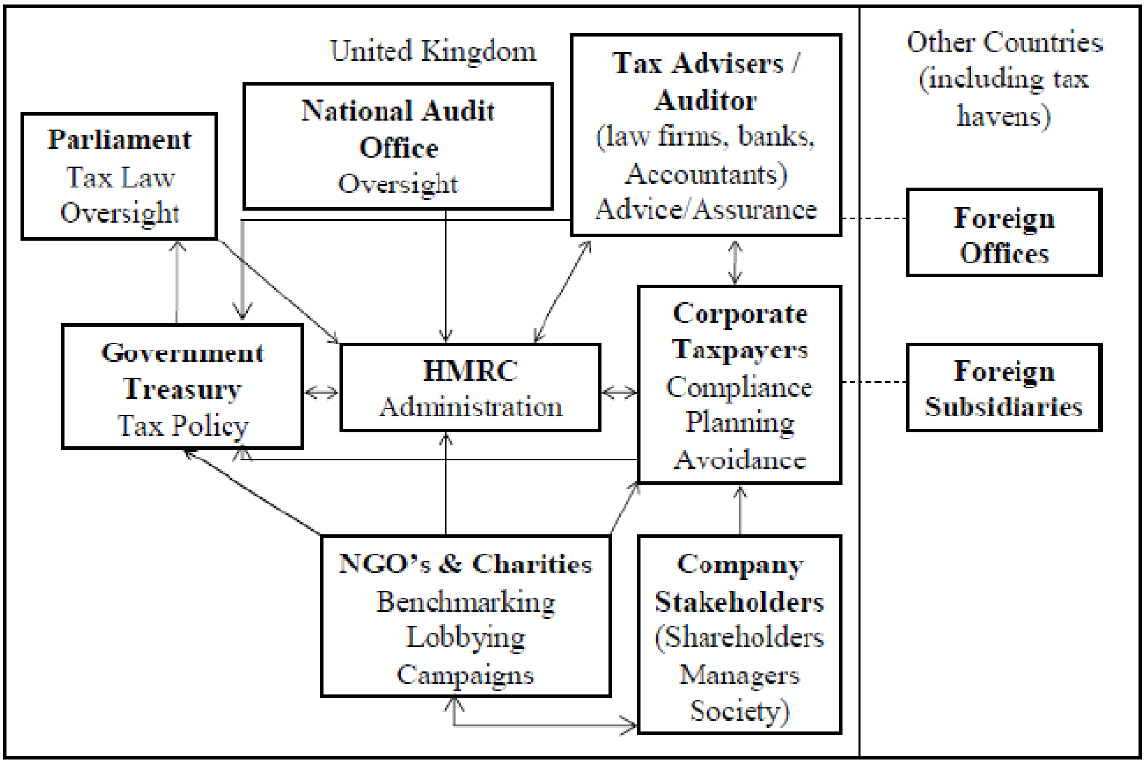

Figure 2: Actors and Relationships in the U.K. Corporate Tax Environment (based on Hasseldine, Holland and van der Rijt, 2012a).

Van der Rijt, Hasseldine and Holland (forthcoming) extends the authors' previous studies by examining factors influencing corporate tax payers' decision to share knowledge with external tax advisers. A significant contribution of the paper is the identification of a novel distinction between operational and strategic knowledge sharing. The operational dimension has a functional nature, whereas the strategic dimension has a more intentional character. More importantly, differences occur in the role of relational factors in explaining companies' decisions to share and thereby reveal information about themselves. The effectiveness of shareholders to apply informed influence on companies is challenged in the absence of adequate disclosure. This finding supports the legislative requirement for companies to make a public disclosure of the tax strategy (HMRC, 2016b), while questioning the willingness of companies to supply adequate information enabling effective control.

4. Summary

Academic research in the field of taxation has broadened in the last 15 years or so beyond its predominantly technical legal and economic heartlands. Importantly, tax and tax systems are seen as an important determinant of corporate and societal behaviour and outcomes. Simultaneously, taxation is no longer regarded as a unique field of study, but is seen as part of a wider system of public administration and regulation. The candidate considers that two broad contributions flow from the above work and are therefore relevant to future research. Firstly, the importance of considering the setting within which tax related decisions are made. As a result of the complexity and uncertainty involved in taxation, decisions are often made in conjunction with a range of parties. Hence, understanding the likely policy responses requires an understanding of the likely behaviour of a range of interested parties. Secondly, tax data reported in financial statements often represent aggregated summaries of potentially conflicting or contrasting effects, e.g. tax deferral, relative benefit (cost) of income being subject to overseas tax rates, rather than at domestic rates. Further insights about tax decision making in a corporate setting requires an appreciation of the contrasting effects and how they can be identified using publically available information. A challenge for tax researchers is to couple expertise from the field of public administration with the necessary understanding of the context in which tax systems operate and tax decisions are made. Such research will have the potential to contribute to real change in society through for example, increased compliance rates, lower administration costs, more effective tax based policy incentives. A better informed society can also improve control, scrutiny and direction of tax systems.

References

Avi-Yonah, R. S., 2006. Corporate Social Responsibility and Strategic Tax Behavior, University of Michigan Legal Working Paper Series. Program in Law and Economics Archive: 2003–2009, Working Paper 65, available at: http://law.bepress.com/umichlwps/olin/art65/ [Accessed 30th October 2018]

Bell, L. and Jenkinson, T., 2002. New evidence of the impact of dividend taxation and on the identity of the marginal investor. *The Journal of Finance*, 57(3), pp.1321-1346.

Bonsall IV, S.B., Koharki, K. and Watson, L., 2017. Deciphering tax avoidance: Evidence from credit rating disagreements. *Contemporary Accounting Research*, *34*(2), pp.818-848.

Bratten, B., Gleason, C.A., Larocque, S.A. and Mills, L.F., 2016. Forecasting taxes: New evidence from analysts. The Accounting Review, 92(3), pp.1-29.

Chen, S., Chen, X., Cheng, Q. and Shevlin, T., 2010. Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, 95(1), pp.41-61.

Dhaliwal, D. S., Erickson, M., Frank, M. M. and Banyi, M., 2003a. Are shareholder dividend taxes on corporate retained earnings impounded in equity prices? Additional evidence and analysis. *Journal of Accounting and Economics*, 35 (2), pp. 179-200.

Desai, M.A. and Dharmapala, D., 2009. Corporate tax avoidance and firm value. *The Review of Economics and Statistics*, 91(3), pp.537-546.

Doidge, C. and Dyck, A. (2015), 'Taxes and corporate policies: Evidence from a quasi natural experiment', *The Journal of Finance*, 70 (1), pp. 45-89.

Dyreng, S.D., Hanlon, M. and Maydew, E.L., 2010. The effects of executives on corporate tax avoidance. *The Accounting Review*, 85(4), pp.1163-1189.

Edgley, C. R. and Holland, K. M., 2018. "Unknown unknowns" and the tax knowledge gap: Mediating materiality and tax risk in tax disclosures. Working paper (available from authors upon request).

Elton, E.J. and Gruber, M.J., 1970. Homogeneous groups and the testing of economic hypotheses. *Journal of Financial and Quantitative Analysis*, 4(5), pp.581-602.

Erickson, M., Hanlon, M. and Maydew, E.L., 2004. How much will firms pay for earnings that do not exist? Evidence of taxes paid on allegedly fraudulent earnings. *The Accounting Review*, 79(2), pp.387-408.

Frank, M. and Jagannathan, R., 1998. Why do stock prices drop by less than the value of the dividend? Evidence from a country without taxes, *Journal of Financial Economics*, 47. (2), pp. 161-188.

Gallemore, J., Maydew, E.L. and Thornock, J.R., 2014. The reputational costs of tax avoidance. *Contemporary Accounting Research*, 31(4), pp.1103-1133.

Gentry, WD., Kemsley, D. and Mayer, C., 2001. 'Dividend taxes and share prices: Evidence form Real Estate Investment Trusts', Columbia and Yale Working Paper, Available at SSRN.

Gracia, L. and Oats, L., 2012. Boundary work and tax regulation: A Bourdieusian view. *Accounting, Organizations and Society*, 37(5), pp.304-321.

Graham, J.R., Hanlon, M., Shevlin, T. and Shroff, N., 2013. Incentives for tax planning and avoidance: Evidence from the field. *The Accounting Review*, 89(3), pp.991-1023.

Graham, J.R., Hanlon, M., Shevlin, T. and Shroff, N., 2017. Tax rates and corporate decision-making. *The Review of Financial Studies*, 30(9), pp.3128-3175.

Hanlon, M., 2005. The persistence and pricing of earnings, accruals, and cash flows when firms have large book-tax differences. *The Accounting Review*, 80(1), pp.137-166.

Hanlon, M., Myers, J.N. and Shevlin, T., 2003. Dividend taxes and firm valuation: a re-examination. *Journal of Accounting and Economics*, 35(2), pp.119-153.

Hanlon, M., Krishnan, G.V. and Mills, L.F., 2012. Audit fees and book-tax differences. *Journal of the American Taxation Association*, 34(1), pp.55-86.

Harris, T., Kemsley, D., 1999. Dividend taxation in firm valuation: new evidence. *Journal of Accounting Research,* 37(2), pp.275-291.

Harris, T., Hubbard, R., Kemsley, D., 2001. The share price effects of dividend taxes and tax imputation credits. *Journal of Public Economics,* 79(3), pp.569-596.

Holland, K. M., Lindop, S., and Abdul Wahab, N. S., 2018. How Do Managers and Investors Respond to Corporate Income Tax Incentives?" Working paper (available from authors upon request).

HMRC, 2016a. Country by country reporting updated, available at www.gov.uk/government/publications/country-by-country-reporting-updated [Accessed 30th October 2018].

HMRC, 2016b. Publish your large business tax strategy, available at www.gov.uk/guidance/large-businesses-publish-your-tax-strategy [Accessed 30th October 2018].

HMRC, 2018. Measuring tax gaps 2018 edition Tax gap estimates for 2016-17, available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/715742/HMRC-measuring-tax-gaps-2018.pdf [Accessed 19th November 2018].

House of Commons Committee of Public Accounts, 2008. Management of large business Corporation Tax, Thirtieth Report of Session 2007–08 HC 302.

Kalay, A., 1982. The ex-dividend day behaviour of stock prices: a re-examination of the clientele effect. *The Journal of Finance*, 37, 4, pp. 1059-1070.

Kang, T., Khurana, I.K. and Wang, C., 2017. International diversification, SFAS 131 and post-earnings-announcement drift. *Contemporary Accounting Research*, 34(4), pp.2152-2178.

Kemsley, D., 2001a. Dividend Tax Capitalization: Clarifications and Responses to Recent Challenges. Working paper 10, Yale School of Management, Available at SSRN.

Kemsley, D., 2001b. Dividend Tax Capitalization: Further Thoughts, Comments, and Response to Michelle Hanlon, James Myers and Terry Shevlin. Working paper 11, Yale School of Management, Available at SSRN.

Klepper, S., Mazur, M. and Nagin, D., 2001. Expert intermediaries and legal compliance: The case of tax preparers. *Journal of Law and Economics*, 34(1), pp.205-229.

Lev, B. and Nissim, D., 2004. Taxable income, future earnings, and equity values. *The Accounting Review*, 79(4), pp.1039-1074.

Lindblom, K.C 1993. The implications of organizational legitimacy for corporate social performance and disclosure, Conference Proceedings, Critical Perspectives on Accounting Conference, New York, (1993). Reproduced in: R. Gray, L. Bebbington and S. Gray (eds), Social and Environmental Accounting, Sage Library in Accounting and Finance (London: Sage Publications, 2010).

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? paper presented at Tax Administration Research Centre's 6th Annual Conference 2018.

Miller, M.H. and Scholes, M.S., 1978. Dividends and taxes. *Journal of Financial Economics*, 6(4), pp.333-364.

Mulligan, E. and Oats, L., 2016. Tax professionals at work in Silicon Valley. *Accounting, Organizations and Society*, *52*, pp.63-76.

Ohlson, J. A., 1995. Earnings, book values, and dividends in security valuation. *Contemporary Accounting Research,* 11(2), pp.661-687.

Onu, D. and Oats, L., 2018. Tax talk: an exploration of online discussions among taxpayers. *Journal of Business Ethics,* 149(4), pp.931-944.

Oxfam, G.B., 2000. Tax havens: Releasing the hidden billions for poverty eradication. Oxfam. Available at https://policy-practice.oxfam.org.uk/publications/go-with-the-flows-capital-account-liberalisation-and-poverty-126046 [Accessed 30th October 2018].

Parker, L. D. and Guthrie, J., 2014. Addressing directions in interdisciplinary accounting research. *Accounting, Auditing & Accountability Journal*, 27(8), pp.1218-1226.

Plumlee, M. A., 2003. The effect of information complexity on analysts' use of that information. The Accounting Review: 78 (1), pp. 275-296

Ross, S.A., 1977. The determination of financial structure: the incentive-signalling approach. *The Bell Journal of Economics*, 8(1), pp.23-40.

Shackelford, D.A. and Shevlin, T., 2001. Empirical tax research in accounting. *Journal of Accounting and Economics*, 31(1-3), pp.321-38.

Slemrod, J., 2005. What corporations say they do, and what they really do: Implications for tax policy and tax research. *Journal of the American Taxation Association*, 27(1), pp.91-99.

The Guardian, The Tax Gap, 2009, available at: http://www.guardian.co.uk/business/series/tax-gap [Accessed 30th October 2018].

Tuck, P., 2010. The emergence of the tax official into a T-shaped knowledge expert. *Critical Perspectives on Accounting*, 21(7), pp.584-596.

Tuck, P., 2013. The changing role of tax governance: remaking the large corporate taxpayer into a visible customer partner. *British Journal of Management*, 24, pp.S116-S131.

UK Uncut (2009) www.ukuncut.org.uk/ [Accessed 30th October 2018].

van Mourik, C., 2014. The equity theories and the IASB conceptual framework. *Accounting in Europe, 11(2), pp.219-233.*

Weisbach, D. 2002. Ten truths about tax shelters. *Tax Law Review,* 55: 215–53.

Table 1 Summary of peer reviewed tax related papers and other tax related publications

Panel A - Peer reviewed tax publications (included for consideration)

No.	Authorship	Title	Journal
1	Van der Rijt, P. G., Hasseldine, J., and K. M. *Holland* (forthcoming)	Sharing corporate tax knowledge with external advisers	*Accounting and Business Research*, (forthcoming)
2	*Holland*, K. M, Lindop, S. and F. Zainudin. (2016).	Tax avoidance: a threat to corporate legitimacy? An examination of companies' Financial and CSR Reports.	*British Tax Review*, 3, pp. 310-338.
3	Abdul Wahab, N. S. and *Holland*, K. M. (2014).	The persistence of book-tax differences.	*British Accounting Review*, 44 (2), pp. 111-124.
4	Hasseldine, J., *Holland*, K. M. and Van der Rijt, P. G. A. (2012).	Companies and taxes in the UK: actors, actions, consequences and responses.	*eJournal of Tax Research*, 10 (3), pp. 532 – 551.
5	Hasseldine, J., *Holland*, K. M. and Van der Rijt, P. G. A. (2011).	The Market for tax knowledge.	*Critical Perspectives on Accounting*. 22 (1), pp. 39-52.
6	*Holland*, K. M. and Jackson, R. H. G. (2011).	Taxation Influences upon the Market in Venture Capital Trust Stocks: Theory and Practice.	*Accounting and Business Research*. 4(1), pp. 1 – 27.
7	*Holland*, K. M., Hodgkinson, L. and Jackson, R. H. G. (2006).	Ex-Dividend Day Effects: The 1997 Abolition of Dividend Tax Credit Repayments and the Case of Irish Firms Quoted on the London Stock Exchange.	*Accounting and Business Research*. 36 (4), pp. 253 – 270.
	Panel B - earlier peer reviewed tax publications (not included for consideration)		
8	*Holland*, K. M. and Jackson, R. H. G. (2004).	Earnings Management and Deferred tax.	*Accounting and Business Research*. 34 (2), pp. 101 – 123.

9	*Holland*, K. M. (1998)	Accounting Policy Choice: The Relationship between Corporate Tax Burdens and Company Size.	*Journal of Business Finance and Accounting*. 25 (3 & 4), pp. 265 - 288.
10	Curry, B. and *Holland*, K. M. (1989).	Residence and Ordinary Residence; an Expert System.	*British Tax Review*. No 4, pp. 124-129.

Table 1 (continued) Summary of peer reviewed tax related papers and other tax related publications

Panel C - Other tax publications (not included for consideration)

11	Evans, C., Carlon, S. and *Holland*, K. (2016).	Tax knowledge in large corporations: insights and analysis.	Project Report. Institute of Chartered Accountants in Australia (ICAA)
12	*Holland*, K. M (2014).	Market Valuation of UK Real estate Investment Trusts Briefing.	Published by ICAEW Charitable Trust
13	Hasseldine, J., *Holland*, K. M., and Van der Rijt, P. G. A, (2012).	The Management of Tax Knowledge.	Published in Taxation: A Fieldwork Research Handbook ed. Lynne Oats. Routledge.
14	Hasseldine, J., *Holland*, K. M. and Van der Rijt, P. G. A. (2010).	Management of Tax Knowledge.	Research monograph published by Certified Accountants Educational Trust (London), pp. 1-60 ISBN: 978-1-85908-455-7.

Panel D - Peer reviewed papers based on co-authors' doctoral thesis (not included for consideration)

15	Lindop, S., and *Holland*, K. (2013)	Dividend taxation and the pricing of UK equities	*Journal of Applied Accounting Research*, 14(3), 203-223.
16	Abdul Wahab, N. S. and *Holland*, K. M. (2012)	Tax planning, corporate governance and firm value.	*British Accounting Review*. 44 (2), pp. 111-124.