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How does firm ownership concentration and female directors influence tax haven foreign direct investment? Evidence from Asia-Pacific and OECD countries

Ali Ahmed^a, Yama Temouri^{b,c}, Chris Jones^c and Vijay Pereira^d

^aLeadership, Work & Organisation Group, Newcastle University Business School, Newcastle upon Tyne, UK; ^bDepartment of Humanities and Social Sciences, Khalifa University, Abu Dhabi, UAE; ^cEconomics, Finance and Entrepreneurship Group, Aston University, Birmingham, UK; ^dDepartment of People & Organisations, NEOMA Business School, Reims Campus, Reims, France

ABSTRACT

The literature on tax havens utilization by multinational enterprises (MNEs) has largely focused on determinants that are financial or technological in nature. We contribute to this literature by showing important corporate governance determinants for tax haven utilization by Asia-Pacific and OECD country MNEs. Theoretically, we show that ownership concentration and female board membership influence tax haven utilization. Empirically, we show negative associations between ownership concentration and female board membership and the likelihood of owning a subsidiary in a tax haven. Based on our results, we draw a number of implications for theoretical and empirical work, which also opens the door for further investigation in this area.

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MNEs; tax havens; corporate governance; ownership concentration; female directors; Asia-Pacific countries; OECD countries

Introduction

This paper investigates tax haven activity with a tax avoidance lens or perspective. Based on this perspective, tax havens represent what Dunning (1993) termed 'escape investments'. These are investments made specifically to avoid high corporate tax rates at home. For example, Apple's investments in Ireland and Amazon's European headquarters in Luxembourg fall neatly into this category.

Recent work by van Tulder (2015) has split foreign direct investment (FDI) motivations into *intrinsic* and *extrinsic*. *Intrinsic motivations* are inherent to being a MNE and are embedded in the various FDI projects, which include maximizing firm-specific advantages by seeking new markets, become more efficient, acquire unique resources or seek superior technology or knowhow. *Extrinsic motives* are more interesting, for they talk about motivations borne out of the environment the firm operates in. Extrinsic motivations align with the 'escape investments' that Dunning (1993) discussed, in the sense that MNEs facing high tax rates at home would want to invest in tax havens where they can avoid the taxation. What is even more relevant about van Tulder's (2015) work is the link to culture and home country institutions, which he argues will influence the mindset of managers when making such tax avoidance investments.

CONTACT Ali Ahmed  ali.ahmed@newcastle.ac.uk

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Jones and Temouri (2016) provide support for this argument, with the implicit suggestion that different approaches to capitalism influence managerial decisions with regards to investments in tax havens. These different approaches to capitalism consist of different national attitudes, different culture, different institutional systems, different government systems and, importantly for our purposes, different approaches to corporate governance (Hall and Soskice 2001).

Thus, van Tulder's (2015) work helps explain both the intrinsic and extrinsic determinants of tax haven utilization identified in literature as well as provides a bridge to investigate the potential impact of corporate governance on tax haven utilization. Indeed, corporate governance characteristics of a firm can also be split into internal (e.g. incentive compensation, board composition) and external factors (e.g. audit, capital market pressure, enforcement and government regulations), with effects for example on executive compensation (Wright and Kroll 2002; Kini, Kracaw, and Mian 2004). The wide-ranging literature defines corporate governance (in different contexts) as the sum of supervision and management rules and practices for firms with multiple shareholders. Within corporate governance literature, the agency theory of corporate governance (Jensen and Meckling 1976; Shleifer and Vishny 1997) and the stakeholder theory (Freeman 1984) are of particular interest.

However, the literature that deals specifically with corporate governance and tax havens is at infancy and limited, especially considering the importance of tax havens in global business and MNEs. Furthermore, there is a lack of cohesion between corporate governance theory, tax avoidance and tax haven. For example, Taylor, Richardson, and Taplin (2015) measure tax haven utilization across a number of variables, including multinationality, performance-based management remuneration and corporate governance. They have a narrow context with only analysing Australian firms and an opaque description of the 'strength of corporate governance' variable that they have based their findings on. Furthermore, there is no model specified defining the corporate governance variable nor a theory to explain the relationship with tax haven utilization.

There is, however, considerable work done on tax avoidance in general and corporate governance. Reviews of the literature are provided by Shackelford and Shevlin (2001), Hanlon and Heitzman (2010), Wilde and Wilson (2018) and Kovermann and Velte (2019). Kovermann and Velte (2019) argue that the previous reviews have been rather broad, with corporate governance being discussed in general terms. They do concede that Wilde and Wilson (2018) have covered corporate governance as a determinant but have focused only on the relationship between management and shareholders, leaving aside other stakeholders. Therefore, they base their analysis of the literature on the stakeholder agency theory (Hill and Jones 1992).

The purpose of this paper is to contribute to the special issue and the literature on tax haven investments by MNEs in a specific manner. We attempt to bridge theoretically the relationship between corporate governance determinants and tax havens activity. We utilize the corporate governance lens to derive two specific firm identity traits that we subsequently use to offer empirical evidence for the relationship between ownership concentration as well as female appointments to the board of directors and the likelihood of tax haven activity by MNEs. We argue and develop arguments from the literature that show both ownership concentration and female directorship to be important determinants of tax haven activity. We also contribute to the literature by offering a cross-country analysis and evidence, which incorporates the Asia Pacific MNEs that are less focused on in tax haven research.

The rest of the paper is structured as follows. The next section outlines the corporate governance theories that inform most of the work in this field, then identifies the work done on tax avoidance and finally links it with the literature on tax havens to derive the theoretical basis for hypothesizes. Section 3 offers a description of the data and methodology used, which is followed by a discussion of our results in Section 4. Finally, section 5 concludes with outlining implications of our results for theory and practice.

Literature review and hypotheses

There are two theories of corporate governance that have interested scholars investigating tax avoidance and in some instances tax havens, namely the agency theory and the stakeholder theory. The agency theory posits a principal-agent view of the firm. The principal is the shareholder who has invested capital in the firm and expects a return. The agent is the manager of the firm who is tasked with running the business and providing returns to the principal. An obvious conflict of interest arises when the actions of managers benefit them more, which at the same time will not necessarily be best for the shareholders and the firm as a whole.

According to Eisenhardt (1989) agency theory is concerned with resolving two problems that can occur in agency relationships. The first is the agency problem that arises when (a) the desires or goals of the principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing. The problem here is that the principal cannot verify that the agent has behaved appropriately. The second is the problem of risk sharing that arises when the principal and agent have different attitudes towards risk. The problem here is that the principal and the agent may prefer different actions because of the different risk preferences.

Outright misappropriation is insured against through the enforcement of contracts, courts and legal safeguards, yet interests still diverge. These manifest in the form of inefficiencies or different priorities. One example is the cash flow problem, highlighted by Jensen (1986) through evidence from the oil industry. Where shareholders' interest is in getting a return on their investment, managers are interested in growing the firm and increasing their own power. This results in profits being invested back into the company, rather than being paid out as dividends to investors.

Much of the literature on corporate governance and agency theory deals with how to align the interest of managers, or agents, with those of the principals, or shareholders (Shleifer and Vishny 1997). The supervisory board, government regulations and courts are the main avenues available to the shareholder to exercise control over managers. Making use of these resources, shareholders explore how to ensure that managers do not divert funds for personal enrichment and thus do not waste the firm's capital and instead work to maximize profits.

There have been many approaches to achieve this goal, two of which are of interest in the context of tax havens. The first is large ownership blocks in a firm that give major shareholders a controlling stake in the firm (Shleifer and Vishny 1986, 1997). This in turn means that they control the board of directors and can effectively monitor management, while reducing the costs of doing so. The second is to offer incentive compensation to managers, tying their remuneration with firm profits (Murphy 1985), or offer them firm

stock (Demsetz 1983). These measures, and government regulations, have allowed the corporate governance structures in some firms, mostly the US and the UK (Gilson 2006), to move away from large ownership stakes.

With manager remuneration dependent on stock prices, and the managers getting company stock as a form of incentive, the interest of managers shifts to increases in stock prices. Shareholders profit from this arrangement by treating stocks as a trading commodity rather than a long-term investment. The basic agency problem has led to several proposition when it comes to corporate tax avoidance, which we turn to now.

Compensation, incentives and alignment of interests

The first proposition identified by Hanlon and Heitzman (2010) considers the alignment of interests between shareholders and managers. The shareholder goal is to increase in value and the tool for alignment being incentive compensation. In this case, tax avoidance is expected to increase as managers are incentivized to increase profitability, and hence their remuneration. Indeed, Phillips (2003) uses survey data to show that compensating managers based on after-tax income leads to lower effective tax rates. This would suggest that weaker control or weaker governance mechanisms would then result in less tax avoidance, as managers avoid the risk in the absence of the reward (incentive compensation) or monitoring. Robinson, Sikes, and Weaver (2010) also consider the effect of incentives on tax executives and find that when the tax department is considered a profit centre, then the GAAP effective tax rates (ETRs) are lower but Cash-flows ETRs are not.

Armstrong et al. (2015) find a negative association between tax director compensation incentives and GAAP ETRs, while Rego and Wilson (2012) suggest that managers are encouraged to operate in a more tax-aggressive manner through managerial equity incentives. After-tax compensation incentives have also been found to have an association with corporate behaviour (Gaertner 2014), while CEO performance bonuses result in firms reporting lower cash ETRs compared with bonuses that are based on earnings metrics.

Desai and Dharmapala (2006) model the effect of incentive compensation and governance structures on tax avoidance. They find a negative association between equity-based compensation and tax avoidance, but they find that this holds only in firms with weaker shareholder rights and lower levels of institutional ownership. Their argument is that tax avoidance or 'sheltering' requires obfuscation to prevent detection. This would require shell companies in tax havens to be publicly transparent but are currently hidden and operations are in fact intentionally left unexplained. This in turn creates an opportunity for diversion for the managers.

Since the interests of the principal and the agents are not always aligned due to information asymmetry, agent's selfish behaviour (opportunism) is always present (Jensen and Meckling 1976). Thus, in the absence of strong monitoring mechanisms, proxied here by weaker shareholder rights and low institutional ownership, the manager has the incentive to act against interests of the owners. This also explains empirical literature regarding private family firms, which documents that family firms are less tax aggressive than non-family firms (Chen et al. 2010). Essentially, family-owned firms are willing to forgo tax benefits to avoid concerns by minority shareholders of family rent seeking masked by tax avoidance activities.

However, it can also be argued that the result is consistent with the individual's model for tax evasion, which links aggressive tax reporting to an individual's risk aversion and costs for flagging by the tax authorities would appear more prohibitive to individuals wholly responsible than a large number of shareholders. In fact, Gallemore, Maydew, and Thornock (2014) show that managers are not affected by allegations of using tax shelters nor are the firms that engage in them. This is further reflected in a recent study of UK companies (Brooks et al. 2016) which found that investors are not concerned by tax avoidance activities of managers, only with stock prices. Moreover, stock prices were not affected by the tax payments of firms.

Recently, Bennedsen and Zeume (2018) have analysed the transparency through Tax Information Exchange Agreements (TIEAs) with tax havens. They find that the firm value, for poorly governed firms, increases 2.5% if TIEAs are signed with tax havens they are operating in. Furthermore, some MNEs relocate to more secretive or opaque tax havens after TIEAs are agreed between their home countries and current tax haven states. This behaviour hints at expropriation risk and suggests divergent interests between managers and shareholders. Atwood and Lewellen (2019) have also shown empirical findings in a similar context. They build on the tax avoidance theory of managerial diversion when corporate governance mechanisms are ineffective within the agency framework (Desai and Dharmapala 2006; Desai, Foley, and Hines 2006a, 2006b; Desai, Dyck, and Zingales 2007). The sample consists of 6,734 tax havens and 83,541 non-tax haven firm-year observations, consisting of multinational firms based in 28 countries, and tax haven firms are identified by parent company incorporation into tax haven jurisdictions. They provide evidence that manager diversion and tax avoidance are complementary for tax haven firms, measured by dividend pay-outs, based in countries with weak investor protections but not for tax haven firms based in countries with strong investor protections. This is an important contribution to literature as it sheds some light on the mixed results previous literature has displayed when dealing with tax avoidance when using the agency framework.

Further, it highlights an important overlooked factor of investor protections. Desai and Dharmapala (2006) mention shareholder rights and weak governance mechanisms, which can both be affected by investor protections in a particular region or jurisdiction. Investor protections are among a number of governance institutions outside the firm that could stand to have a role in tax haven utilization, not just in terms of manager expropriation opportunities. One study that highlights this in the context of profit shifting was by Sugathan and George (2015) conducted with Indian firms that had foreign ownership. Their empirical study concludes that on average foreign-owned firms' shift 6% of total pre-tax income outside of the country. They credit the weak government institutions in India for this, noting that tax-motivated profit shifting is interlinked with the quality of institutions at the country level. Furthermore, they find that governance infrastructure that improves collective action and transparency in both the foreign- and host-country reduces shifting.

Institutional ownership

Firms' managers have significant individual effects on tax avoidance (Dyreng, Hanlon, and Maydew 2010) and would trade off the costs of tax avoidance (enforcement action by tax authorities and reputational costs) against the benefits for themselves and the firm. However, owners have different capacities and competencies and different visions for

the firm. In the tax haven context, quasi-indexer institutional investors (Bushee 1998, 2001) are of interest who hold diverse, large portfolios and have significant competencies of their own and expectations from managers. Chen et al. (2018) investigate the effect of quasi-indexer institutional ownership on firms' tax avoidance behaviour. They suggest that although institutional investors do not have an explicit mandate to reduce taxes, they put pressure on managers to improve post-tax profit. Indeed, quasi-indexers position themselves as long-term investors and there is some literature that relates institutional ownership with improvements in firms' long-term performance metrics such as Tobin's Q (Appel, Gormley, and Keim 2016). The argument is that this pressure to increase firm performance will also lead towards an increase in tax savings (avoidance). Using a regression discontinuity design, Chen et al. (2018) find evidence for their hypothesis and show that higher institutional ownership leads to greater tax savings. They find that this is achieved through a focus on increasing performance, not tax avoidance, and that the tools used by investors to achieve this include, at least partially, executive equity incentives and information environment. These results corroborate earlier findings by Khan, Srinivasan, and Liang (2017)

Bird and Karolyi (2017) pose the same question but extend it to the use of tax havens. Using a regression discontinuity design, they examine the effect of positive shocks to institutional ownership on effective tax rates, finding a negative association. Furthermore, they find that a 1 percentage point increase in institutional ownership is associated with a 1.3% increase in the likelihood of having a subsidiary in at least one tax haven country. These effects are smaller for firms with initially strong governance and high executive equity compensation, suggesting that an increase in tax avoidance and tax haven utilization comes about with significant improvement in corporate governance.

Ownership concentration

Another strand of the literature builds around the traditional view of the agency theory but focuses on ownership concentration instead of manager remuneration. Manager remuneration is a means to align interests, whereas ownership concentration reduces the costs of monitoring, but also could shift the interests of owners. As seen earlier in the case of private family firms, the model of tax avoidance for firms in certain situations shifts towards the individual's model, with risk aversion and costs becoming a significant factor.

Badertscher, Katz, and Rego (2013) extend this argument to ownership concentration and tax avoidance. They argue that tax avoidance has certain costs associated with it, which makes it a risky business decision. These costs include fees paid to tax experts, time devoted to the resolution of tax audits, reputational penalties, and penalties paid to tax authorities. In firms where ownership and control is concentrated in the hands of a few, this would result in managers taking less risky decisions, such as less tax avoidance. Conversely, in firms where ownership is diversified and there exist less effective measures of control over management, managers are likely to make riskier decisions, namely more aggressive tax avoidance. This is also complimented with diversified shareholders' lack of concern with tax avoidance activities (Brooks et al. 2016). Thus, Badertscher, Katz, and Rego (2013) confirm their theory with an analysis of private manager-owned firms and private firms owned by Private Equity firms and find divergence in their tax behaviour.

This paper extends this argument to tax havens. Tax havens are a tool for tax avoidance, perhaps the most potent tool, but they can also mask manager diversion activities. A good case study is that of Siemens. Siemens, as revealed by the Panama Papers, ran a number of secret tax haven subsidiaries. Hans-Joachim Kohlsdorf, a high-ranking employee who was involved in running slush funds through the subsidiaries is believed to have funnelled around \$2 million into his own accounts. Atwood and Lewellen (2019) suggest higher costs of diversion would discourage this behaviour, which a concentrated ownership firm would represent. Furthermore, concentrated ownership models represent shareholders with different motivations than diluted ownership shareholders, i.e. diluted shareholders are less concerned with tax avoidance (Brooks et al. 2016).

In MNEs with high ownership concentration, shareholders are less averse to take risks and more likely to take a long-term view, thus making less risky decisions. With tax havens constantly in the news, they also carry a reputational penalty that would discourage large shareholders. A manifestation of this reputational penalty is perhaps the trend of reducing the number of subsidiaries disclosed, at least in the US, by MNEs that Donohoe, McGill, and Outslay (2012) argue could be because of media interest in tax havens. Similar phenomena can be seen in firms with private family ownership (Chen et al. 2010), who forego tax avoidance in order to allay fears of diversion and avoid reputational penalties and investor suspicion.

On the other hand, firms with low ownership concentration, shareholders are likely to take the short-term view, with post-tax profits and stock price a primary concern. This behaviour incentivizes high-risk decisions by managers, especially tax avoidance and by extension tax haven utilization. Small shareholders are also less likely to be perturbed by reputational penalties and would have weaker control, reducing the costs on managers for diversion. Thus, this leads to our first hypothesis as follows:

H1: Higher ownership concentration reduces the likelihood of MNEs owning tax haven subsidiaries

Stakeholder theory and tax havens

The agency theory presents the equation of corporate governance as one with only two factors, the principals (shareholders) and the agents (managers). The corporate governance mechanisms are thus derived to mediate the relationship between the two. This leads to a somewhat limited view of the firm, a shortcoming addressed by Kovermann and Velte (2019) by using the stakeholder agency theory, a theory that takes into consideration both agency and stakeholder motivations, instead of the classical agency theory.

The reason is that, in the context of tax avoidance, the stakeholder view is important as it brings the focus to managers and directors as individuals instead of the just agents and principals. The literature suggests that tax avoidance is a decision that rests with managers (Kovermann and Velte 2019), due to the incentives that are offered to align manager interests with shareholder's motivations for tax avoidance, and, as Crocker and Slemrod (2005) point out why penalties on the tax managers represent a more effective tool in reducing tax evasion than penalties on the shareholder.

A purely agency view of the firm would be in danger of overlooking the individual roles and motivations. Dyreng, Hanlon, and Maydew (2010) identified the gap in the literature concerning the impact that key executives play in determining the tax strategy of a firm. Their work provides evidence of the impact of both CEOs and CFOs in company tax strategy and find an 11% difference between the GAAP ETRs when moving between the top and bottom quartile of executives.

Shareholders are, in practice, not the sole consideration of managers when making decisions. Other groups exert pressure on managers as they too are responsible for or affected by the decisions that managers take. These groups today include governments, labour unions, communities and suppliers and buyers, among others. The stakeholder theory (Freeman 1984) proposes that the principal-agent contract is not all that defines a firm, instead there are stakeholders impacted by the firm's actions and they too are part of the equation. Though it may still be argued that shareholders are the most important among the stakeholders of a firm, stakeholder theory posits that they do not have a monopoly when it comes to manager decisions. From a stakeholder-centric perspective of corporate governance, managers of public corporations are tasked not only with protecting and maximizing shareholder wealth but are also responsible for ensuring that strategic decisions prove beneficial for all other stakeholders.

Corporate governance can thus be framed as rules and practices that ensure that managers act with the interests of the firm's stakeholders in mind, rather than just focus on value creation for shareholders. Wood (1991) describes the term corporate social performance (CSP) as the outcome of corporate activities undertaken to fulfil the legal, discretionary, economic and ethical responsibilities of a firm towards its stakeholders, rather than just the shareholders.

Shahzad, Rutherford, and Sharfman (2016) identify corporate governance mechanisms that in theory could impact CSP and use an empirical study to confirm that these do in practice as well. Measures used in their study include board size, board gender diversity, auditor independence, CEO duality and board committees among others.

Board of directors

The board of directors (BOD) is an oversight system for managers, a tool used to ratify and monitor the corporation's most important decisions and to hire, fire and compensate top-level managers within the corporation (Fama and Jensen 1983). However, the tax haven literature is scant when it comes to measuring the impact of variables identified by the stakeholder theory, such as the BOD. This is because the framing of the issue has revolved mostly around the agency theory (Desai and Dharmapala 2006; Crocker and Slemrod 2005). For example, Lanis and Richardson (2011) measure the effect of board of director composition on tax aggressiveness. Their study of Australian corporations shows that the inclusion of a higher proportion of outside members on the board of directors reduces the likelihood of tax aggressiveness.

There are competing narratives about the role of outside directors as other studies (Richardson, Taylor, and Lanis 2016; McClure et al. 2018) have shown the opposite effect, i.e., the presence of outside directors is positively associated with tax avoidance. Kovermann and Velte (2019) explain the dichotomy as a function of other conditions affecting the firm, like financial distress, culture of company, country or time period of

study falling before or after the global financial crisis of 2008. Furthermore, outside directors are significantly important in the tax avoidance context because they have an implicit duty of care not only to shareholders but also to other key stakeholders and critically to society as a whole (Ibrahim, Howard, and Angelidis 2003; Pearce and Zahra 1991; Rose and Spiegel 2007), and while corporation's adoption of tax aggressive is often viewed to have a negative impact on society (Slemrod 2004; Landolf 2006; Williams 2003).

Gender diversity

Dyrenge, Hanlon, and Maydew (2010) point out that individual managers can have significant effects on firm's tax behaviour, other scholars have investigated individuals if there exist individual characteristics, traits or backgrounds that affect the firm's tax behaviour. Subsequently, studies have revealed relationships between a number of individual traits and backgrounds within managers to behaviour of the firm with regard to tax. For example, Chyz (2013) shows an association between personal aggressiveness of managers with tax outcomes, Feller and Schanz (2016) point to manager power and Koester, Shevlin, and Wangerin (2017) identify managerial ability. Further traits relating to tax avoidance include military background (Law and Mills 2017), political orientation (Christensen et al. 2015) and narcissism (Olsen and Stekelberg 2016).

Other work has investigated the management team has found interesting insights for tax avoidance. For example, Abernathy, Kubick, and Masli (2016) find an increase in tax avoidance associated with the ascension of the general counsel – i.e., a lawyer – into the top-management team. As discussed earlier, managers are decision makers when it comes to tax avoidance. This is all relevant since the BOD monitors management, and different traits and characteristics of the board should in turn affect management, and in turn tax strategy. For this study, we are particularly interested in board gender diversity.

Previous literature has revealed that women are more likely to bring expertise from outside of business and therefore may have different perspectives on the issues facing the board (Hillman et al. 2002). Women are thought to take a different approach to board membership, with research demonstrating that they take a more participative and democratic approach (Eagly and Johnson 1990; Eagly, Johannesen-Schmidt, and Van Engen 2003). Early research on board gender diversity by Betz, O'Connell, and Shepard (1989) found that women members of the board of directors are less likely to take risks compared to male directors with regards to financial matters and corporate reporting. Yu et al. (2010) analysed the same question to managers and found that firms with female Chief Female Officers (CFOs) adopt a more conservative, risk-averse financial reporting style compared to firms with male CFOs.

Carter, Simkins, and Simpson (2003) argue that women directors generally are likely to display more independent thinking than male directors, which is crucial for effective board oversight. Daily, Certo, and Dalton (2000) observe that compared to all-male boards, women bring different viewpoints to the boardroom and facilitate more informed decisions that increase the level of transparency at the board level. McLeod-Hemingway (2007) find that women are likely to contribute positively to the general functioning and deliberations of the board by enhancing the degree of trustworthiness of the board to the firm's various stakeholders.

Krüger (2009) found that companies with higher female board representation have higher incidence of positive social responsibility. More specifically, the study indicates more generous attitude towards communities and more attention to the welfare of a firm's natural stakeholders (e.g. communities, employees or the environment) for companies with a higher proportion of women on the board of directors. Similar arguments were put forward by Bear, Rahman, and Post (2010) who found a positive relationship between CSR and the number of women on the board of directors. They identified that two major strengths, participative decision making styles (Konrad, Martinuzzi, and Steurer 2008) and increased sensitivity (Williams 2003), brought by the women to the board are found to be the key reasons for corporate responsibility strength ratings (Bear, Rahman, and Post 2010).

Relationship between female members of the board of governors and tax has also been investigated. Adams and Ferreira (2009) examine the association between women in the boardroom and corporate governance and firm performance. They find gender composition of the board being positively associated with board effectiveness. They argue that higher female participation on the board acts comparably to outside directors and is therefore likely to reduce tax aggressiveness.

Early work by Baldry (1987) shows that females are likely to be more compliant in tax-reporting decisions than males. Ruegger and King (1992) also find that in most cases, gender diversity is significant in explaining attitude changes in tax ethics. This has recently been further confirmed by Richardson, Taylor, and Lanis (2016) who find that in a sample of Australian firms, female presence on the board of directors reduces the likelihood of tax aggressiveness. This effect is relative to increase in the proportion of women from a baseline of 1, suggesting that alone they might not have a drastic impact but increasing in percentage amplifies the effect. These studies focusing on the tax aggressiveness and tax ethics aspect of gender diverse board, backed by the positive CSR outcome studies, form the basis of our second hypothesis as follows:

H2: The presence of female members on the board of directors will reduce the likelihood of an MNE operating a subsidiary in a tax haven jurisdiction

Data and methodology

To test the hypothesis, this paper draws on the ORBIS database by Bureau van Dijk that compiles detailed information, including financials, shareholdings and the locations of subsidiaries from around the globe. In order to identify characteristics of firms that could lead to their identities, we focus on ownership concentration and female directorship. It is important to mention that it is quite challenging to define issues on identity, especially when using secondary data sources such as balance sheet and profit and loss accounts. However, as argued in the derivation of the hypotheses, the paper focuses on two well-established corporate governance dimensions, which have hitherto not been linked to tax haven activity of MNEs.

For our ownership concentration model, the sample contains over 7,000 MNEs from 12 developed world countries for the year 2016. Table 1 shows that these include the USA, the UK, Japan, Germany, Australia, New Zealand, Austria, Sweden, Norway, Finland, Denmark

Table 1. Country distribution of MNEs.

Country	No of MNEs	Percent
Austria	102	1.32
Australia	167	2.16
Canada	70	0.91
Germany	995	12.87
Denmark	290	3.75
Finland	270	3.49
United Kingdom	1,285	16.62
Japan	1,929	24.95
Norway	100	1.29
New Zealand	13	0.17
Sweden	798	10.32
USA	1,714	22.16
Total	7,733	100

Source: Authors calculations using ORBIS.

Table 2. Classification of whether MNEs are in tax havens or not.

Country	MNEs with tax haven presence	MNEs without tax haven presence	Total
Austria	68	34	102
Australia	111	56	167
Canada	39	31	70
Germany	650	345	995
Denmark	216	74	290
Finland	213	57	270
United Kingdom	724	561	1,285
Japan	926	1,003	1,929
Norway	55	45	100
New Zealand	8	5	13
Sweden	608	190	798
USA	653	1,061	1,714
Total	4,271	3,462	7,733

Source: Authors calculations using ORBIS.

and Canada. Home country firms are defined in ORBIS as Global Ultimate Owners based in said country with at least a 50.01% stake in a foreign enterprise. Admittedly, some MNEs that have used corporate inversion to relocate in a tax haven might not show up in the data.

The ORBIS data contains published information by MNEs that also includes disclosures about location of their subsidiaries. Using this information, we can map out how many subsidiaries each MNE has in a tax haven jurisdiction. This leads to creation of the dependent variables 'Tax Haven' and 'Tax Island', which are binary measures for each MNE signalling ownership, or lack thereof, of a tax haven subsidiary. If we look at the sample by MNEs' country of origin, [Table 2](#) shows Japan as the most well represented with over 1,900 MNEs and New Zealand occupying the other end of the spectrum with 13 MNEs.

Among the MNEs in the sample, over 3,000 own at least one subsidiary in a tax haven location. Japan boasts the highest percentage of MNEs, with tax haven subsidiaries at 45%, while Finland has the lowest average at 20%, signalling plenty of diversity in the sample.

Ownership concentration

The sample size is very large but across and contains MNEs of a multitude of sizes. This is to capture as much variation in the snapshot as possible. This study does acknowledge that scholars have argued (Pedersen and Thomsen 1997) that 'more variation in

ownership patterns [can be expected] for large [than for small] companies' (766). This argument is consistent with the view of Faccio and Lang (2002) who indicate that cross-country differences are less significant among small firms than they are among large ones. However, to get a richer dataset we abstain from restricting the sample to just firms of a large size, as has been done in previous studies on ownership concentration (Richter and Weiss 2013).

The concept of ownership in this study pertains to financial holdings (capital blocks), which may diverge from the voting rights that owners may hold (Faleye, Mehrotra, and Morck 2005). However, it can be argued that the financial stakes that owners hold provide the economic basis for the return rights associated with ownership. Furthermore, previous literature (Faccio and Lang 2002) shows that discrepancies between financial ownership and control are not widespread. Among the 13 countries Faccio and Lang (2002) investigated, the ratio between cash flow rights and control rights varied only between 0.74 and 0.94, and the standard deviation of this ratio across all countries is less than a third of its mean. Using financial holdings, or percentage of shareholdings, as the basis for calculating the ownership concentration ratio in this study was assessed to be the correct decision.

Existing studies on ownership concentration use two main types of concentration measures. First, ownership-specific count measures, such as the sum of the ownership percentages of the five largest owners (cr5). Increasing the number of owners taken into account when creating the measurement variable, i.e. using the largest 20 instead of largest 10 or largest 5, does not enhance, but rather decreases the precision of the measure of ownership concentration (Sánchez-Ballesta and García-Meca 2007).

The second measure study used is the 'universal' concentration estimates such as the Herfindahl-Hirschman-Index (HHI), defined as the sum of the squared percentages of ownership shares. The HHI has an advantage over the cr5 in that it takes into account all owners, thereby drawing a comprehensive picture of ownership dispersion. However, the problem this measure presents is that of the availability of data. With the ORBIS data set, complete shareholder ownership details are not available for a wide range of MNEs. Using HHI in this scenario will result in accurate measures of some MNEs, drawing on complete information, but for a majority of MNEs the measures would be drawn from incomplete information. Previous work has shown that when complete ownership information is available for some firms but not for others, the comparability of the HHI suffers (Sánchez-Ballesta and García-Meca 2007).

After taking this into account and going through the data sample available for the study, it has been decided to use a cr4 measure of ownership concentration, i.e. a measure of percentage ownership by the four largest shareholders. There are shortcomings in this measure. One problem that applies to both the largest shareholder method as well as the HHI is that they sometimes do not take into account the possibility that shareholders may act in concert, whether through informal or through formal mechanisms (e.g. written shareholder agreements; for an overview of the latter see Chemla, Habib, and Ljungqvist 2007, 117–119). If two or more shareholders act in concert, their power may exceed the sum of their voting rights, and this phenomenon has even been formally recognized in some jurisdictions (e.g. in the context of takeover legislation). According to a study

Table 3. Summary statistics ownership concentration sample.

Country	Mean	Std. dev.	Frequency
Austria	0.333	0.473	102
Australia	0.335	0.473	167
Canada	0.442	0.500	70
Germany	0.346	0.476	995
Denmark	0.255	0.436	290
Finland	0.211	0.408	270
United Kingdom	0.436	0.496	1,285
Japan	0.519	0.499	1,929
Norway	0.45	0.5	100
New Zealand	0.384	0.506	13
Sweden	0.238	0.426	798
USA	0.619	0.485	1,714
Total	0.447	0.497	7,733

Source: Authors calculations using ORBIS.

commissioned by the European Commission (ISS, Shearman Sterling and ECGI 2007, 31–32), shareholder agreements constitute a control-enhancing mechanism that is widely considered to be in line with the principle of contractual freedom of economic actors.

ORBIS provides an answer to this problem by providing details of controlling shareholders by both their direct and indirect (through intermediaries) control over shareholding blocks. This goes a long way in negating the indirect shareholding problem faced by previous studies, but the information is still reliant on public disclosures. In cases where MNEs were not required to, and chose not to, disclose such details, the accuracy of the measure will suffer. Table 3 shows summary statistics for the ownership concentration in the sample.

Appointment of female members of the board of directors

The second variable of interest is the appointment of female members to the board of directors. The dataset utilized for this study is focused on the UK and US firms, looking at over 650 firms for the period 2010 to 2018. The variable ‘Female Appointments’ represents the number of women appointed to the board of directors by an MNE between the years 2010 and 2012. The data is extended up to 2018 in order to measure the long-term effects of these appointments. In order to capture the effect of female representation on the board of directors, this study also utilizes two measures of tax havens, as shown in Table 4.

Table 4. Tax haven presence by year for the UK and the US (2010–2018).

Year	Tax Island		Tax Haven		Total
	No	Yes	No	Yes	
2010	419	144	274	289	563
2011	461	164	295	330	625
2012	487	196	311	372	683
2013	440	202	264	378	642
2014	399	225	234	390	624
2015	336	284	191	429	620
2016	248	374	111	511	622
2017	162	416	59	519	578
2018	131	360	40	451	491

Source: Authors calculations using ORBIS.

Explanatory variables

Explanatory variables employed for the purpose of this study are identified by drawing on previous literature. These include multi-nationality, a factor identified as contributing to an MNEs use of tax haven subsidiaries by (Taylor, Richardson, and Taplin 2015) and proxied by the number of foreign subsidiaries each MNE owns. Size has been identified as an explanatory variable by (Graham and Tucker 2006), and measures to account for this range from revenues to assets to number of employees. Technology intensiveness and ownership of patents, and intangible assets are key indicators of an MNEs propensity to invest in tax havens, because of the specific transfer pricing opportunities afforded to MNEs on account of these. The ownership concentration study uses NACE industry codes to form categorizations of firms by industry by technology intensiveness, as was done by Jones and Temouri (2016). This is important because it captures industry-level differences that affect tax haven utilization and would remove biases in the data.

For the female appointment model, the industries are more finely classified, for a total of 20 different classifications, again by using the NACE industry code and Eurostat categorizations. The larger number of classifications used in the female appointment model is to cater for any bias that could arise with gender preferences for certain industries. Which might not be clearly accounted for in the broad technology-intensiveness-based classifications.

Econometric model

The dependent variable for the hypothesis is a dummy created to represent the presence of a tax haven subsidiary. If an MNE has a tax haven subsidiary, the dependent variables 'Tax Island'/'Tax Haven' will signal this with a value of 1 and signal the absence of a tax haven subsidiary with a value of 0. With a binary dependence, a probit model is used as seen in a previous work of this nature (Jones and Temouri 2016). The study runs two variations of two different models, one for calculating effect of female board member appointments in the UK and US and the second for 'OWNCON' (Ownership Concentration) across firms from the 12 home countries. For robustness count models are also run, these measure the number of tax haven subsidiaries owned by each firm at a certain point in time.

$$\text{Tax Haven} = \beta_0 + \beta_1 \text{OWNCON} + \beta_2 \text{FSA}_{\text{kit}} + \beta_3 \text{SectorTech} + \beta_4 \text{Tax}_{\text{it}} + \varepsilon_{\text{it}}$$

FSA contains firm-specific independent variables identified in earlier studies. SectorTech vector refers to industry sectors that cover high tech manufacturing, medium/high tech manufacturing, medium/low tech manufacturing, low tech manufacturing, knowledge intensive and less knowledge intensive. TAX is tax rates represent the corporate tax rate faced by each MNE in 2016, and this is a country-level variable. For the female appointment hypothesis, the model is modified.

$$\text{Tax Haven} = \beta_0 + \beta_1 \text{Fem Appoint} + \beta_2 \text{FSA}_{\text{kit}} + \beta_3 \text{SectorWide} + \beta_4 \text{Tax}_{\text{it}} + \varepsilon_{\text{it}}$$

here, the SectorWide variable represents the different finely tuned industry classifications used. Tax is the corporate tax rate each MNE faced in the UK or the US from 2010 through to 2018.

Results and discussion

The model for ownership concentration was run with two specifications in Tables 5 and 6, one with each definition of tax haven dummy. In both cases, the results supported the initial hypothesis that ownership concentration has a negative association with MNEs propensity to own a tax haven subsidiary. The marginal effects reported indicate a negative, significant association between owning a subsidiary in a tax haven and ownership concentration. A 1% increase in ownership concentration signals a 0.13% decrease in the likelihood of owning a subsidiary in a Tax Haven and almost a 0.2% decrease in likelihood of owning a subsidiary in a Tax Island. These results seem to align with previous work on both tax avoidance (Badertscher, Katz, and Rego 2013; Chen et al. 2010) and the recent study on tax havens (Atwood and Lewellen 2019) in so far as the theoretical basis, but since those studies are not directly based on measures of ownership concentration, there can be no definitive conclusion drawn on the variable.

Table 5. Results ownership concentration.

	(1) Tax Island	(2) Tax Haven
Ownership Concentration	-0.00196*** (0.000233)	-0.00103*** (0.000216)
Foreign Subs	0.0152*** (0.000604)	0.0181*** (0.000566)
High Tech Manufacturing	-0.00749 (0.0414)	0.0170 (0.0378)
Knowledge Intensive Services	0.0476** (0.0190)	0.0636*** (0.0170)
Less Knowledge Intensive Services	0.0610** (0.0241)	0.0623*** (0.0215)
Operating Revenue	-0.0198* (0.0109)	-0.0202** (0.0102)
Total Assets	0.0480*** (0.00757)	0.0464*** (0.00710)
Cash-flow	-0.156 (0.0994)	-0.184* (0.0980)
Low Tech	0.0269 (0.0281)	0.0349 (0.0257)
Medium High Tech	-0.103*** (0.0237)	-0.0453** (0.0228)
Medium Low Tech	0.0441** (0.0206)	0.0424** (0.0190)
Number of employees	-4.71e-07 (4.44e-07)	-3.83e-07 (4.38e-07)
Top Corp Tax	0.00677*** (0.00113)	0.00544*** (0.00106)
Observations	7,527	7,527

Each column reports probit regression. The dependent variable is whether a firm owns a subsidiary in a tax haven. Two variations of tax haven dummy. Marginal effects are reported. Some controls, the constant and the fixed effect coefficients are unreported for brevity. Total turnover, free cash flow and assets are entered as their natural logarithms.

Standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 6. Results ownership concentration by count.

	(1) Tax Island	(2) Tax Haven
Ownership Concentration	-0.00160*** (0.000175)	0.00494* (0.00291)
Foreign Subs	0.00146*** (0.000101)	0.119*** (0.00168)
High Tech Manufacturing	0.0410 (0.0306)	-0.797 (0.508)
Knowledge Intensive Services	0.0658*** (0.0143)	0.141 (0.238)
Less Knowledge Intensive Services	0.0688*** (0.0187)	0.827*** (0.310)
Operating Revenue	0.0269*** (0.00804)	-0.833*** (0.134)
Total Assets	0.0542*** (0.00564)	0.583*** (0.0936)
Cash flow	-0.0462* (0.0248)	0.356 (0.413)
Low Tech	0.0567*** (0.0210)	-0.0798 (0.349)
Medium High Tech	-0.0172 (0.0173)	-1.248*** (0.288)
Medium Low Tech	0.0790*** (0.0156)	-0.809*** (0.259)
Number of employees	-7.41e-07*** (2.11e-07)	-1.20e-05*** (3.50e-06)
Top Corp Tax	0.00206** (0.000838)	0.0615*** (0.0139)
Observations	7,527	7,527

Each column reports a regression. The dependent variable is the number of tax haven subsidiaries owned by a firm. Two variations of tax haven used. Some of the controls and constant are unreported for brevity. Total long-term debt, turnover, free cash flow and intangible assets are entered as their natural logarithms and lagged. Standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The rest of the variables provide results in line with previous studies. MNEs tax haven subsidiary ownership is positively related with size, multi-nationality, technology intensive-ness etc. The recent findings (Jones and Temouri 2016) that MNEs based in liberal market economies are more likely to own tax haven subsidiaries also holds. Notice that the relationship holds when the regression is estimated for the count variables (see Table 6). That is to say, ownership concentration is negatively related with the number of subsidiaries in a Tax Island. This is statistically significant. We get statistically insignificant results for the count of Tax Haven variable, which is a measure that includes some larger tax havens.

For the models testing the female board member hypothesis, the results are also encouraging. In Table 7, the first one is calculated using the 'Fem Appoint' variable and the results confirm the hypothesis that female representation on the board reduces the likelihood of MNEs operating as subsidiaries in tax haven jurisdictions. The marginal effects indicate a large negative relationship between owning a Tax Island subsidiary and female appointments to the board of directors. Specifically, each appointment reduces the likelihood of owning a Tax Island subsidiary by 7.9%. The finding is statistically significant. The relationship with the Tax Haven variable, the variable including larger countries, is insignificant. Table 8 shows the result for the count variable of tax haven subsidiaries which indicates a similar relationship with female representation in the board of directors, i.e. a negative effect on the MNEs propensity to operate a subsidiary in a tax

Table 7. Results female appointments on BOD.

Variables	(1) Tax Island	(2) Tax Haven
Female appointment	-0.0792*** (0.0137)	0.00988 (0.00971)
Turnover	-0.00518 (0.0119)	0.00932 (0.00817)
Cash-flow	0.0363*** (0.0104)	0.0188*** (0.00704)
Long term debt	0.0272*** (0.00588)	0.0121*** (0.00372)
Intangible fixed assets	0.0383*** (0.00667)	0.0114*** (0.00433)
Corporate Tax	-0.0119*** (0.00143)	-0.00535*** (0.00103)
Foreign Subsidiaries	0.00340*** (0.000161)	0.00342*** (0.000121)
Agriculture	-0.0252 (0.250)	-0.358 (0.246)
Mining	0.106 (0.0914)	-0.0881 (0.0756)
Manufacturing	0.0365 (0.0747)	0.0123 (0.0482)
Info Com	0.0560 (0.0796)	0.00949 (0.0500)
Financial	0.470*** (0.0367)	0.138*** (0.0279)
Real Estate	0.385*** (0.0663)	0.0627 (0.0573)
Education	0.487*** (0.0453)	0.141*** (0.0464)
Arts & Ent	0.242 (0.148)	0.0800 (0.0977)
Observations	5,448	5,448

Each column reports probit regression. The dependent variable is whether a firm owns a subsidiary in a tax haven. Two variations of tax haven dummy. Marginal effects are reported. Some of the industry category controls, constant and the fixed effect coefficients are unreported for brevity. Total long-term debt, turnover, free cash flow and intangible assets are entered at their natural logarithms and lagged. Robust standard errors in parentheses. Standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

haven location. However, these are not statistically significant. These results are largely in line with previous work by Richardson et al. (2016) that link the presence of female members on the BOD to a negative effect on the tax aggressiveness of the firm. Similarly, Law and Mills (2017) have found male members of the BOD tend to be more aggressive compared with female members.

Theoretical implications

Our study has highlighted that the corporate governance and stakeholder perspectives in explaining tax haven activity by MNEs are underexplored. This means that there is ample scope to delve deeper into the antecedents at the firm ownership and board composition and diversity level in order to complement our understanding vis-à-vis the previous literature and evidence. The work by Jones and Temouri (2016) has identified another significant factor, orientation of the particular economy of the MNE using the VOC approach. This suggests that differences in culture, national ethos, institutional

Table 8. Results female appointment on BOD 2.

VARIABLES	(1)	(2)
	Tax Island	Tax Haven
Female appointment	-0.179 (0.306)	-1.063** (0.519)
Turnover	-0.485** (0.230)	-0.404 (0.334)
Cash-flow	0.0904 (0.174)	-0.140 (0.228)
Long term debt	0.477*** (0.0983)	0.506*** (0.132)
Intangible fixed assets	-0.217* (0.126)	-0.316* (0.183)
Corporate Tax	-0.105*** (0.0222)	-0.114*** (0.0284)
Foreign Subsidiaries	0.0495*** (0.00140)	0.135*** (0.00184)
Agriculture	-0.0858 (4.350)	-1.183 (6.987)
Mining	0.679 (1.964)	-1.675 (3.225)
Manufacturing	0.229 (1.568)	-0.593 (2.585)
Info Com	1.600 (1.671)	0.495 (2.758)
Financial	7.681*** (1.832)	4.767 (3.029)
Real Estate	6.545*** (2.262)	6.966* (3.761)
Education	3.988 (4.192)	4.818 (6.875)
Arts & Ent	-1.447 (3.390)	-5.670 (5.630)
Observations	5,448	5,448
Number of Firms	776	776

Each column reports xt regression. The dependent variable is the number of tax haven subsidiaries owned by a firm. Two variations of tax haven used. Some of the industry category controls are unreported for brevity. Total long-term debt, turnover, free cash flow and intangible assets are entered as their natural logarithms and lagged.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

environment and corporate governance may play a significant role in a firm's decision to invest in tax havens. Among these, corporate governance is a factor that is largely rooted in agency theory, and scholars have identified ownership concentration, private ownership, manager incentives, manager diversion and institutional investors as determinants of tax avoidance. Recent studies have built on the work of Desai and Dharmapala (2006) to extend the managerial diversion, in the presence of weak corporate governance mechanism, theory to tax havens and found supportive evidence. Similarly, institutional ownership is not only associated with tax avoidance but also with tax havens. However, tax avoidance determinants rooted in the stakeholder theory, such as board composition and diversity, remain less explored in tax haven literature.

The results for the female appointments on propensity to own tax havens are also interesting. This is especially true when looked at in light of the literature that links the presence of women on the board of directors with positive CSR outcomes or ratings (Braun 2010; Krüger 2009; Bear, Rahman, and Post 2010). Future research could explore

whether firms who appoint female directors tend to close down subsidiaries in island tax havens, which carry a greater reputational penalty, but not in the larger Big 7 havens due to CSR concerns?

Managerial implications

Our results imply that managers need to consider the value of excessive tax haven usage for their firms both in the short and long terms. Previous studies (Desai and Dharmapala 2006; Chen et al. 2010) highlight various concerns from multiple stakeholders. Ownership concentration is argued to drive down tax haven utilization and should indicate that large investors with significant influence would be in a position to divest from this particular practice. This indicates that managers perceive value in doing so, or share diversion concerns that other studies have hinted at. In either case, managers need to take into account shareholder concerns or tendencies reflected when making such important strategic decisions to align interests of all stakeholder as much as they can.

The significant result from female appointments to board members on the tax island variable as compared with the tax haven variable is very interesting when viewed in light of the previous literature that links the presence of women on the board of directors with positive CSR outcomes or ratings (Braun 2010; Krüger 2009; Bear, Rahman, and Post 2010). The tax islands variable is comprised of smaller tax haven jurisdictions that draw the ire of an increasingly conscious global media and anti-tax avoidance campaigners. This is the case more so than for the larger tax haven locations, which are economically significant countries and are included in the more general tax haven variable. The behaviour uncovered in our study could reflect an astuteness on behalf of gender diverse boards that managerial practice, especially in customer oriented, CSR sensitive industries, should be analysed further in order to draw more detailed lessons from future findings.

Conclusion

Tax havens play a key role in tax avoidance in today's interconnected world. In fact, most methods of international tax avoidance, such as transfer pricing, strategic intellectual property location, corporate inversions, international debt shifting, would not be possible without tax havens. The academic and policy literature talks about the 'under-sheltering puzzle' that can at least be partially explained by the work that identifies key determinants such as intangible assets, firm size, multi-nationality, debt and technology intensiveness. Aspects of corporate governance, we argue, are also important determinants that explain tax haven utilization by MNEs. Despite the theoretical and empirical contributions of our paper, we note the following limitations that our paper has faced. First, our analysis relies on cross-sectional information on ownership structures, which can be extended to a panel setting in the future research with better data coverage. Another important limitation is to extend and replicate the female directorship analysis to Asia Pacific MNCs. This was not possible in this paper due to data limitations and coverage and is a fruitful avenue of future research.

This study has only scratched the surface of the relationship between corporate governance and MNEs' tax haven utilization. Results from this paper suggest that arguments forwarded by scholars about the negative association between tax avoidance and costs of diversion (Atwood and Lewellen 2019) or private family ownership (Chen et al. 2010) hold weight and may apply to the use of tax havens as well. Would other areas of corporate governance and other theories also lead to the same answers? For example, what are the differences between co-ordinated market economies and liberal market economies that drive the divergence in tax haven utilization? Can tax haven activity be partly explained by the stakeholder model of corporate governance? Is representation of labour on boards of directors impacting on tax haven investment decisions? Is greater participation by women in managerial positions relevant or diversity in educational backgrounds or employment history? All these questions are worth posing and have a basis in the tax avoidance literature already. Moreover, in delving deeper into MNC identity and tax haven research, future research can use more qualitative research techniques (e.g. interviews) which may help to uncover more complex characteristics and identity traits of MNCs that quantitative techniques are less able to do.

Another fruitful area of research would be to combine corporate governance at the MNE level and institutional theory (Peng et al. 2009), which can lead to a better understanding of the motivations that emerging market MNEs (EMNEs) may have when deciding to shift capital into tax havens. For example, there are various dimensions to the institutional environment that are common across many emerging markets, affecting a significant number of EMNEs, which are either state-owned, partially state-owned; or former state-owned enterprises that have been privatized. Given their sheer size and the speed of expansion internationally, the rise and spread of state capitalism in the emerging world has increasingly caused concern (e.g. Huawei with government backing). Yet the impact of state ownership and political connections of state-owned enterprises on their internationalization, and the use of tax havens, is an under-explored area. Do state-owned firms have different objectives compared to privatized firms in terms of tax haven use?

Last, but not the least, the identification of government institution quality as a factor in profit shifting (Sugathan and George 2015) and the effect of investor protections on the relationship between manager diversion and tax avoidance (Atwood and Lewellen 2019) pose other interesting research questions. What is the effect of governance structures not in home countries, but in other institutional weak or corrupt countries that MNEs operate in with respect to tax haven utilization? The answer to such research questions that arise from the intersection of tax avoidance and tax havens could provide important insights not only to the under-sheltering puzzle but also increase our understanding of the role of corporate governance on a firm's strategic choices and decision-making process.

Disclosure statement

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Notes on contributors

Ali Ahmed is a Lecturer in International Business at Newcastle University. Prior to joining he worked at Aston University, where he completed his PhD in Management and MSc in International Business. Dr Ahmed's research interests are in the areas of tax avoidance and tax evasion, the use of tax havens by multinational enterprises, corporate governance and the movement of undocumented labour. He has published in *Transnational Corporations* and *Annals of Corporate Governance*.

Dr Yama Temouri is an Associate Professor of International Business at Khalifa University in the UAE and Aston Business School in the U.K. He received his Ph.D. in Management from Aston University. His research interests are mainly in the economics of multinational enterprises and their impact on developed and developing countries. He is particularly interested in tax haven activities of multinational enterprises (MNEs). He is an Associate Editor for the *Business Research Quarterly* and has published in top tier journals such as *Academy of Management Perspectives*, *Journal of World Business*, *Long Range Planning*, *International Journal of Management Reviews*, *British Journal of Management*, *Journal of International Management*; *Journal of Business Research*, *Journal of Technology Forecasting and Social Change*, *Journal of Intellectual Capital*, *Journal of Knowledge Management*, *Economica*, *Small Business Economics*, and *Corporate Governance: An International Review*.

Chris Jones is a Professor of International Business and Economics at Aston Business School. His research interests in various areas of international economics and international business. The broad theme of his research revolves around international financial flows such as foreign direct investment (FDI), international trade, foreign aid and migrant remittances. He is particularly interested in profit shifting activities of multinational enterprises (MNEs) and how MNEs utilize tax havens. Professor Jones has published articles in leading journals such as the *Journal of World Business*, *International Journal of Management Reviews*, *British Journal of Management* and *World Development*.

Vijay Pereira is Full Professor in International and Strategic Human Capital Management, NEOMA Business School, Reims, France. Previously he was an Associate Professor of Strategic and International HRM at Khalifa University, Abu Dhabi, UAE, and the Associate Dean of Research and at the University of Wollongong in Dubai. He is currently the Associate Editor (Strategic Management and Organisation Behaviour), *Journal of Business Research*. Prof. Pereira is on the editorial boards for the *International Journal of HRM* and *Asia Pacific Journal of Management*. He is also an adjunct at Portsmouth University and a visiting scholar at Manchester University, UK. He has to his credit over 100 publications including in top journals such as *HRM (US)*; *Journal of World Business*; *Journal of Business Ethics*; *International Journal of HRM*; *Journal of Business Research*; *Journal of International Management*; *Asia Pacific Journal of Management*; *International Journal of Production Research*; *Human Resource Management Review*, etc. Additionally, he has authored and edited over 10 books and 10 special issues. Overall, he has wide ranging exposure in industry, consultancy and academia, working in several countries in Asia, Europe and the Middle East, and has been a consultant to the UK and Indian governments. His efforts have been recognized by the United Nations recently.

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