JOURNAL OF MANAGEMENT STUDIES

Journal of Management Studies ••:•• Month 2023
doi:10.1111/joms.13012

Tax-Motivated Relocations of Headquarters: The Role of Affinity Bias among Socially-Responsible Blockholders and CEOs

Arjen H. L. Slangen[a], Riccardo Valboni[b,c], Aleksi Eerola[a,d] and Thomas Lindner[e]

[a]KU Leuven; [b]Utrecht University School of Economics; [c]Erasmus University; [d]HEC Montréal; [e]University of Innsbruck

ABSTRACT While socially-responsible large shareholders have been shown to have a substantial impact on corporate leaders' decisions on social responsibility, prior research remains silent on whether that impact is subject to bias among these two sets of actors. To shed light on this issue, we study the role of socially-responsible blockholders as well as CEOs in the occurrence of tax-motivated international relocations of corporate headquarters (HQs) – a key form of shareholder-oriented behaviour. Drawing on stewardship theory and corporate governance research, we first hypothesize that responsible blockholders' total equity stake in a firm is negatively related to a firm's propensity to undertake a tax-motivated HQ relocation. Using complementary insights from social identity theory, we then propose that both socially-responsible blockholders and CEOs tend to identify more strongly with compatriots than with foreigners. This leads us to hypothesize that (a) the stake of responsible *domestic* blockholders is more negatively related to a firm's relocation propensity than the stake of responsible *foreign* blockholders, and that (b) the stake of responsible blockholders that are compatriots of their firm's CEO is more negatively related to that propensity than the stake of responsible blockholders with a different nationality than the CEO's. Logit analyses of a sample of US firms covering the period 1998–2017 lend substantial support to our hypotheses, indicating that affinity bias among socially-responsible blockholders and CEOs shapes the occurrence of a key form of shareholder-oriented behaviour.

Keywords: corporate social responsibility, headquarters relocations, affinity bias, socially-responsible blockholders, social identity theory, stewardship theory

Address for reprints: Riccardo Valboni, Utrecht University School of Economics, Kriekenpitplein 21-22, 3584 EC Utrecht, The Netherlands (r.valboni@uu.nl).

INTRODUCTION

Over the past few decades, corporate social responsibility (CSR) has become a more important managerial and societal issue and thus an increasingly popular research topic, which by now has been addressed by many studies (for reviews, see Pisani et al., 2017; Wickert, 2021). Several of these studies focused on shareholders (e.g., Cox et al., 2004; Filatotchev and Nakajima, 2014; Johnson and Greening, 1999; Schaefer, 2008; for a review, see Marti et al., 2023), generally reporting that certain types of external and internal owners, in particular those with large blocks of shares, foster CSR by acting as so-called 'socially-responsible blockholders'. These are blockholders, such as public pension funds and owner-managers, that actively stimulate firms' leadership to pursue socially-responsible policies – that is, policies that ensure or increase the welfare of stakeholders other than shareholders, such as employees, suppliers, and the public.[1]

Other research has shown, however, that both shareholders and corporate leaders are not always fully rational (Ardalan, 2019; Baker and Nofsinger, 2002; Das and Teng, 1999; Hodgkinson et al., 2023) and may in fact be biased in the degree to which they identify with others and have affinity with them (McDonald and Westphal, 2010; Morse and Shive, 2011; Mueller and Flickinger, 2021). This raises the question whether such affinity bias shows itself in socially-responsible blockholders' level of activism and corporate leaders' receptiveness to such activism and, thereby, in firms' decisions on CSR.

We address this question by exploring the role of socially-responsible blockholders as well as CEOs in the occurrence of tax-motivated relocations of corporate headquarters (HQs) to foreign countries. Such relocations generally benefit shareholders but usually harm several other stakeholders that are based in a relocating firm's original home country (Desai, 2012; Johnson and Holub, 2003; Slangen et al., 2017). Combining insights from stewardship theory and corporate governance research, we argue that, because tax-motivated HQ relocations harm several domestically-based stakeholders, socially-responsible blockholders tend to have moral objections to such relocations and therefore actively oppose them at top management. The pressure to abstain from a relocation that top management experiences as a result, we propose, increases with responsible blockholders' total equity stake in the focal firm, leading us to hypothesize that this stake is negatively related to a firm's propensity to undertake a tax-motivated HQ relocation.

Using complementary insights from social identity theory, we then propose that responsible *domestic* blockholders identify more strongly with the domestic stakeholders that would be harmed by a tax-motivated HQ relocation than responsible *foreign* blockholders, leading the former blockholders to actively oppose this type of relocation more strongly than the latter ones. We therefore hypothesize that responsible domestic blockholders' equity stake is more negatively related to a firm's relocation propensity than responsible foreign blockholders' stake. Likewise, we propose that CEOs, who are generally firms' most powerful top managers, identify more strongly with responsible blockholders that are their compatriots, leading them to be more receptive to activism by such blockholders than to that by responsible blockholders with a different nationality. We therefore hypothesize that the stake of responsible blockholders that are compatriots of their firm's CEO is more negatively related to a firm's relocation propensity than the stake of responsible blockholders with a different nationality than the CEO's.

Our hypotheses receive substantial support in a series of logit analyses of a sample of relocating and non-relocating listed US firms with similar overall levels of responsibility covering the period 1998–2017. Our findings thus indicate that nationality-oriented affinity bias among socially-responsible blockholders and CEOs substantially affects the occurrence of a key form of shareholder-oriented firm behaviour, highlighting the importance of accounting for social identification by corporate actors in studies of CSR. More generally, our findings also enrich international business research on HQ relocations by shedding more light on the role of shareholders and CEOs in such relocations – a role that hitherto received limited scholarly attention (Baaij et al., 2015; Birkinshaw et al., 2006). In particular, we show that socially-responsible blockholders, through their equity stakes, curb HQ relocations that are strongly tax-motivated, and mostly so when such blockholders are domestic ones facing a domestic CEO.

THEORY AND HYPOTHESES

Socially-Responsible Blockholders

Firms have various stakeholders, which encompass all internal and external actors that a firm can affect or can be affected by (Freeman, 1984). Besides shareholders, they include employees, suppliers, customers, the government, non-governmental organizations (NGOs), and the public at large, among others. Traditionally, shareholders have been assumed to be purely self-interested and thus have no regard at all for other stakeholders, striving to maximize their own financial wealth regardless of the consequences for other stakeholders' welfare (Berle and Means, 1932; Jensen and Meckling, 1976). However, an increasing number of studies within the domains of CSR and corporate governance has argued that some shareholders do consider other stakeholders' interests and can therefore be seen as socially responsible (Aguilera et al., 2007; Marti et al., 2023; Schaefer, 2008). Especially when such shareholders own a substantial portion or 'block' of a firm's shares, they are likely to actively promote or defend these stakeholder interests, given that blockholders are generally long-term investors in firms and thus find it important that their preferences be taken into account in corporate decision-making (Chen et al., 2007; Edmans and Holderness, 2017).

This view has received empirical support in several studies. Proffitt and Spicer (2006), for instance, found that over the period 1969–2003 religious groups and public pension funds filed the bulk of shareholder resolutions at US firms on the topics of international human rights and labour standards. Likewise, Reid and Toffel (2009) report that faith communities, labour unions, pension funds, NGOs, college and university endowment funds, and socially-responsible asset management companies united in the Interfaith Center on Corporate Responsibility filed shareholder resolutions on various environmental issues at about 9 per cent of the constituents of the S&P 500 index of 2006 and 2007. Johnson and Greening (1999), finally, found that, in contrast to mutual funds and investment banks, public pension funds had a positive impact on the social performance of large US firms.

Besides certain types of external blockholders, managers with large shareholdings – who are thus internal blockholders and typically their firm's founders or descendants of them – usually also take other stakeholders into account. For instance, firms with higher managerial stock ownership have been found to spend relatively more of their net income on charity (Wang and Coffey, 1992) and manufacture more sustainable products (Johnson and Greening, 1999). Owner-managers are especially prone to take other stakeholders into account when other family members are fellow owner-managers, as firms owned and managed by a founding family were found to make greater investments in their employees and customers than those owned and managed by a single founder (Miller et al., 2008). Along similar lines, firms with family blockholders have been shown to have better environmental performance than other firms (Berrone et al., 2010).

According to stewardship theory (Davis et al., 1997; Fox and Hamilton, 1994), the tendency of these 'socially-responsible blockholders' to champion other stakeholders' interests is explained by the morality of such blockholders or, if they are legal entities, their human representatives.[2] More specifically, stewardship theory proposes that socially-responsible blockholders champion other stakeholders' interests because such blockholders value societal welfare and therefore deem it righteous or fair that societal interests be taken into account in corporate decision-making (Kahneman et al., 1986; Schaefer, 2008). That is, socially-responsible blockholders experience a moral duty to advance or protect other stakeholders' interests (Logsdon and Wood, 2002) in order to 'bring about a fairer world and to correct for the imbalances in wealth, gender, race, and religion, among others' (Aguilera et al., 2007, p. 846).

Socially-Responsible Blockholders and Tax-Motivated HQ Relocations

Because socially-responsible blockholders feel morally obliged to protect other stakeholders' interests, such blockholders will likely object to corporate acts that harm these interests but from which shareholders, including they themselves, financially benefit. One such act that has gained traction in recent decades is the relocation of a firm's tax residence to a country with a more favourable tax regime, notably a country with a lower corporate income tax rate or – for multinational firms from countries that tax worldwide corporate income – a country that only taxes domestic income (Laamanen et al., 2012; Slangen et al., 2017; Voget, 2011). Upon announcement, such a tax-motivated HQ relocation, on average, causes an abnormal increase in the relocating firm's stock price and thus in shareholder wealth (Desai and Hines Jr., 2002; Huang et al., 2017), but it usually harms several other stakeholders by reducing the source country's tax revenues and employment base (Slangen et al., 2017), rendering this type of relocation undesirable from a domestic societal perspective (Baudot et al., 2020).

Tax-motivated HQ relocations tend to reduce source countries' tax revenues because they increase the possibilities for the relocating firms to shift domestic income abroad.

Firms can for instance allocate intangible assets to their relocated HQ and make their remaining domestic operations pay for the use of these assets, or make these operations pay interest on loans provided by the relocated HQ (Desai and Hines Jr., 2002). Moreover, if the source country has a worldwide taxation system, a tax-motivated HQ relocation causes a firm to deprive this country of the right to tax the firm's foreign income (Ault and Arnold, 2013; Slangen et al., 2017). Since firms can generally implement these tactics irrespective of which country they relocate to, the loss of tax revenues experienced by the source country usually does not depend on the chosen destination country.

By reducing source countries' tax revenues, tax-motivated HQ relocations harm the domestic public and the domestic government, as the latter can spend less on public services and, moreover, may be forced to increase personal taxes to compensate for its loss of corporate tax revenue (Slangen et al., 2017). In the US, for example, tax-motivated outbound HQ relocations completed before October 2014 have been estimated to generate a tax revenue loss of $19.5 billion over a decade (Wall Street Journal, 2014).

In addition, tax-motivated HQ relocations often also harm domestic employment, both directly and indirectly. Direct losses of domestic jobs often occur because tax-motivated HQ relocations often require head office personnel to relocate abroad or the replacement of such personnel by destination-country residents. The reason is that most countries have a so-called 'real seat' tax doctrine, which usually necessitates firms to locate their executive management team and other head office personnel in the country in order to be recognized as a local tax resident (Webber, 2011). Indirect losses of domestic jobs will likely occur as well, since relocated head office employees become spatially separated from their firm's original home base and will therefore likely stop contracting domestic providers of corporate support services such as accounting, management consulting, legal advice, and catering. The relocated employees may also gradually alienate from their firm's original home country and therefore eventually stop contracting domestic suppliers of raw materials and components for their firm's operational activities.

Since they feel morally obliged to protect other stakeholders' interests, socially-responsible blockholders will likely oppose tax-motivated HQ relocations, given the welfare loss that such relocations entail for the domestic public, the domestic government, and domestic workers. More specifically, socially-responsible blockholders will likely pressurize top management to abstain from developing or executing plans for this type of relocation by exploiting the informal and formal decision-making power that they have by virtue of their large equity stakes, thus engaging in blockholder activism (for a review, see Edmans and Holderness, 2017). In particular, external responsible blockholders will likely voice their moral objections to a tax-motivated HQ relocation during informal private conversations with top managers about the firm's strategy (Logsdon and Van Buren, 2009). If they have a seat on the firm's board, which is not uncommon for external blockholders (Gilson, 1990; Holderness, 2003), their board representative may also express their moral objections to executive directors during formal board meetings. To exert further pressure, external responsible blockholders may threaten to vote against a formal relocation proposal at the firm's annual shareholder meeting or threaten to exit the firm by selling their block of shares, should management decide to proceed with the plan and put it up for voting. Indeed, through their large ownership stakes, external blockholders have been shown to have privileged access to senior executives and significant influence on managerial decision-making (Holderness and Sheehan, 1988; Wright et al., 1996).

Likewise, internal blockholders, whose status of owner-managers usually renders them socially responsible as well, will likely voice their moral objections to a tax-motivated HQ relocation during formal meetings of their firm's management team or board of directors and during informal conversations with individual executives. Analogous to their responsible external counterparts, they too may threaten to vote against a formal relocation proposal, so as to put further pressure on the rest of the management team to take their objections to a relocation seriously. If top management nevertheless decides to proceed with the relocation plan and seek formal approval for it at a shareholder meeting, both external and internal responsible blockholders may vote against it in an ultimate attempt to prevent the relocation from occurring.

In general, the larger responsible blockholders' total equity stake in a firm, the greater their informal and formal power over corporate decision-making and, hence, the more pressure top management will likely experience from these blockholders to abstain from a tax-motivated HQ relocation. Consequently, the larger responsible blockholders' total equity stake, the lower the chance that top management will develop and execute plans for this type of relocation. Therefore:

> *Hypothesis 1:* Responsible blockholders' total equity stake is negatively related to a firm's propensity to undertake a tax-motivated HQ relocation.

The Role of Nationality-Oriented Affinity Bias among Responsible Blockholders

Although socially-responsible blockholders are likely to actively oppose tax-motivated HQ relocations at top management, the intensity with which they do so may vary among such blockholders. The reason, we propose, is the possible existence of affinity bias among socially-responsible blockholders, meaning that these blockholders may vary in the extent to which they socially identify with the domestic stakeholders that would be harmed by a relocation and, thus, in the extent to which they have affinity with these stakeholders and feel morally obliged to protect their interests.

The notion of social identification plays a key role in social identity theory (Tajfel, 1982, 2010; Tajfel and Turner, 1985), which is rooted in social psychology but has also been applied in management studies (e.g., Ashforth and Mael, 1989; Mell et al., 2020). According to this theory, people identify with others based on whether they share certain fundamental traits with them, such as gender, age, social class, and – important for the present context – nationality (Bertrand et al., 2021; Li et al., 2020; Tajfel, 2010). More specifically, the theory proposes that, all else equal, people perceive others with whom they share a fundamental trait as in-group members whereas they consider those without that trait an out-group.

Perhaps the most relevant trait that socially-responsible blockholders can have in common with the domestic stakeholders disadvantaged by a tax-motivated HQ relocation is nationality. According to Li et al., 'national identities are the dominant sense-making vehicles for intergroup relations in international business settings, suggesting that country-level categories affect individual attitudes, beliefs, and behaviors toward other groups' (Li et al., 2020, p. 301). Consequently, we distinguish between (a) socially-responsible blockholders that originate from the focal firm's home country and thus have the same nationality as the stakeholders disadvantaged by a tax-motivated HQ relocation (henceforth 'responsible *domestic* blockholders') and (b) socially-responsible blockholders that originate from other countries and thus have a different nationality than the disadvantaged stakeholders (henceforth 'responsible *foreign* blockholders').

Since responsible domestic blockholders are compatriots of the disadvantaged stakeholders, they will likely perceive these stakeholders as in-group members, whereas responsible foreign blockholders will likely see them as foreigners and thus as an out-group. That is, responsible domestic blockholders will likely identify more strongly with the domestic stakeholders that would be harmed by a tax-motivated HQ relocation than responsible foreign blockholders, leading the former blockholders to have stronger affinity with these stakeholders and thus experience a stronger moral obligation to protect their interests. Consequently, compared to their foreign counterparts, responsible domestic blockholders will likely oppose tax-motivated HQ relocations more strongly, thus displaying higher levels of activism. More specifically, responsible domestic blockholders are likely to speak their moral objections to such relocations more forcefully and to reinforce these objections with a threat to exit the firm or vote against a formal relocation proposal, as well as being more likely to actually vote against such a proposal at a shareholder meeting. This line of reasoning is supported by Long and Krause (2017), who found that people are more strongly inclined to show altruistic behaviour towards those who are socially closer to them. Therefore:

> *Hypothesis 2a:* The equity stake of responsible domestic blockholders is more negatively related to a firm's propensity to undertake a tax-motivated HQ relocation than the equity stake of responsible foreign blockholders.

The Role of Nationality-Oriented Affinity Bias among CEOs

When socially-responsible blockholders, regardless of their origin, oppose tax-motivated HQ relocations at top management, they will likely primarily target the CEO, since the CEO is usually a firm's most powerful top manager (Finkelstein, 1992; Hambrick, 2007) and charged with maintaining relations with a firm's blockholders (Chandler, 2014). Hence, whether responsible blockholders' activism leads a firm to abstain from a tax-motivated HQ relocation will likely depend in particular on the CEO's receptivity to that activism. That receptivity, we argue, may also be subject to affinity bias, in that it may depend on a CEO's degree of identification and resulting affinity with the responsible blockholders concerned.[3]

Analogous to our earlier reasoning, we propose that CEOs tend to identify more strongly with socially-responsible blockholders that are their compatriots than with those that have a different nationality, since CEOs will likely perceive the former as in-group members and the latter as an out-group. Consequently, a CEO will likely have stronger affinity with responsible blockholders that are the CEO's compatriots than with responsible blockholders with a different nationality and will thus likely be more receptive to activism by the first-mentioned group of responsible blockholders. Specifically, the CEO will likely pay more heed to their moral objections to a relocation as well as to their possible threats to exit the firm or vote against a formal relocation proposal, leading the CEO to make greater efforts to convince fellow executives of the need to be responsive to these expressions of discontent. As a result, responsible blockholders that are compatriots of their firm's CEO will likely be more effective in preventing tax-motivated HQ relocations than responsible blockholders whose nationality differs from the CEO's. Therefore:

> *Hypothesis 2b:* The equity stake of responsible blockholders whose nationality matches with the CEO's is more negatively related to a firm's propensity to undertake a tax-motivated HQ relocation than the equity stake of responsible blockholders whose nationality differs from the CEO's.

The conceptual model shown in Figure 1 graphically summarizes the hypotheses.

METHODOLOGY

Data Collection and Sample

We tested our hypotheses on a sample of US firms because the US corporate tax system has long had two unattractive features that triggered tax-motivated HQ relocations to foreign countries. First, until 2018 the US had a federal corporate income tax rate of 35 per cent and an average state-level rate of about 4 per cent, whereas most other countries applied substantially lower rates. Second, whereas most countries have traditionally exempted foreign income from taxation, US-incorporated firms long faced a tax on such income equal to the difference between the (relatively high) US rate and the average rate at which the income had been taxed in its source countries (Desai, 2012). Hence US firms have long had an incentive to shift their tax residence abroad by reincorporating in

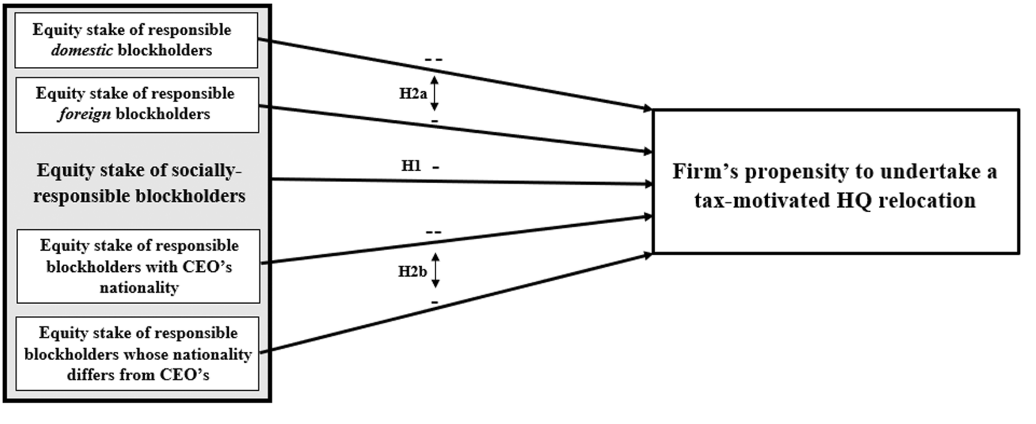

Figure 1. Conceptual model

a foreign country. Because they effected these tax-motivated HQ relocations by overhauling their legal structure such that either an existing foreign subsidiary or a new foreign holding created through a merger with an external partner became the new corporate parent, such relocations have come to be known as 'tax inversions' (Desai and Hines Jr., 2002; Economist, 2015; Marples and Gravelle, 2016). To legally qualify for a shift in tax residence, the change in a firm's place of incorporation resulting from an inversion sometimes required the simultaneous relocation of HQ positions and functions to the foreign country, depending on the country's tax laws and treaties (Marples and Gravelle, 2016; Slangen et al., 2017).

To be able to systematically identify US-incorporated firms that initiated a tax inversion at some point before 2018, we focused our search for such firms on publicly listed ones, since US-listed firms are legally required to disclose formal managerial proposals to engage in a tax inversion. Our focus on listed firms also has the advantage that the data on their shareholders are more widely available than those on private firms' shareholders. To compile a comprehensive list of inversion proposals announced by listed US-incorporated firms, we first collected and merged the lists of proposals reported in extant academic, governmental, and consultancy studies of inversions (Bloomberg, 2015; CFO Magazine, 2002; Chorvat, 2013; Cloyd et al., 2003; Desai and Hines Jr., 2002; Forbes, 2014; Hicks, 2003; Johnson and Holub, 2003; Kun, 2004; Seale and Associates, 2014; Seida and Wempe, 2004; US General Accounting Office, 2002; Ways and Means Committee Democrats, 2014; Webber, 2011; Wells, 2014). We then used Dow Jones' Factiva database, Google.com, and the EDGAR search tools of the US Securities and Exchange Commission (SEC) to (i) collect press releases and other publicly-accessible company documents announcing the previously-identified inversion proposals, and (ii) search for additional proposals using keywords employed in the announcements of the previously-identified proposals (such as 'inversion', 'redomicile', 'redomestication', 'reorganization', 'reincorporate', 'continuance into', and 'new holding'). This process led to the identification of what we think are all 147 inversion proposals that were announced by US-incorporated, listed firms up to 2018.

For each firm that announced an inversion initiative, we then identified in Standard & Poor's *Compustat* database up to five firms that never announced such an initiative, using coarsened exact matching (CEM) on the basis of five criteria (Blackwell et al., 2009; Lee, 2020). In particular, we specified that the matching firms had to be incorporated in the US and publicly listed, have disclosed data for the fiscal year prior to the focal inversion announcement, and have the same main four-digit SIC code as the focal inverting firm and total assets with a similar book value (Slangen et al., 2017). The use of the latter two criteria was partly motivated by our desire to arrive at a set of matched firms whose overall responsibility was comparable to that of the inverting firms, so that potential systematic differences in that responsibility across the two sets of firms cannot drive the effects of our independent variables of interest. More specifically, by creating a matched sample of inverting and non-inverting firms with similar overall levels of responsibility, we can rule out that the various equity stakes of responsible blockholders are negatively related to a firm's inversion propensity because inverting firms happen to have a lower overall sense of responsibility than other firms (Huang et al., 2017) and have therefore attracted less equity capital from responsible investors.

Ideally, we would like to have matched the inverting firms with a set of non-inverting ones using direct indicators of their overall responsibility, but unfortunately such indicators were only available for some of the inverting firms. The reason is that about half of them were medium-sized or small enterprises with less than 1000 employees, which long tended not to disclose their environmental, social, and governance (ESG) practices. Such enterprises are therefore strongly underrepresented in databases that report firms' ESG performance, including MSCI's *KLD* database, which covers the largest number of firms (Berg et al., 2022; Chatterji et al., 2016; Halbritter and Dorfleitner, 2015). We therefore resorted to two proxies for a firm's overall responsibility in the form of its main industry and its size. Firms' overall responsibility may first of all be expected to depend on their industry, since 'similar environmental conditions of firms operating in the same industry may result in each firm adopting similar CSR practices' (Young and Marais, 2012, p. 433). Likewise, firms' overall responsibility may be expected to increase with their size, since larger firms are more visible and therefore tend to lose more legitimacy if their CSR practices are deemed substandard (Kostova and Zaheer, 1999). Furthermore, firms active in the same industry and similarly-sized firms have been shown to imitate each other (Haunschild and Miner, 1997; Henisz and Delios, 2001), which is likely to further amplify the similarity in their overall responsibility.

To assess whether the inverting firms and their matched counterparts indeed exhibited similar overall levels of responsibility, we calculated these levels for those 157 firms in our final sample for which MSCI's *KLD* database did report data on their ESG performance, in particular for the year before the focal inversion announcement. T-tests showed that the average performance scores of the two sets of firms did not significantly differ from each other, neither for all three ESG dimensions combined nor for the social dimension to which tax avoidance is most closely related ($p = 0.48$ and $p = 0.28$, respectively). This was also the case when we performed the two tests separately for those performance indicators that MSCI labels as 'strengths' ($p = 0.34$ and $p = 0.36$, respectively) and those that it labels as 'controversies' ($p = 0.64$ and $p = 0.47$, respectively) (Strike et al., 2006). These results indicate that the observed effects of the various equity stakes of responsible blockholders cannot be attributed to systematic differences in inverting and non-inverting firms' overall responsibility, implying that these effects are not spurious.

After identifying the inverting firms and their matched counterparts, we collected data on the blockholders and CEOs of the two sets of firms at the last time point for which these data were available during the fiscal year prior to the respective inversion announcements. Following many prior studies (e.g., Chen et al., 2007; Dai et al., 2017; Henry, 2011; Liu et al., 2018), we defined blockholders as shareholders owning at least 5 per cent of a firm's common stock. We obtained the data on the identity and equity stake of each of a firm's blockholders from Refinitiv's *Thomson ONE Banker* database, Bureau van Dijk's *Orbis* database, and firms' SEC filings (mostly proxy statements). In the few cases where the stakes reported in these three sources differed, we used the stakes reported in the SEC filings. We also used such filings, in combination with Euromoney's *BoardEx* database, to identify the CEOs of the sample firms.

We then identified those blockholders that can be considered socially-responsible ones using several criteria described below, and assigned such blockholders a nationality. For those that were legal entities, we considered their nationality to be their country of incorporation as reported in *Thomson ONE Banker*, *Orbis*, or firms' SEC filings. For blockholders that were individuals, we attempted to obtain three indicators of their nationality, i.e., their country of citizenship, their country of birth, and the country where they received their lowest tertiary degree (typically a bachelor's university degree). To do so, we consulted various sources, notably SEC filings, social networks (such as LinkedIn), voter registries, obituaries and – for internal blockholders – *BoardEx*, *CapitalIQ*, and Bloomberg's online executive profiles. Whenever we managed to obtain data on an individual's country of citizenship, we used that country to indicate the person's nationality. We did so because this operationalization is most closely aligned with our operationalization of a corporate blockholder's nationality (i.e., the entity's country of incorporation). For individuals for which data on several nationality indicators were available, we observed that their country of citizenship was usually the same as their country of birth (i.e., in 92 per cent of the cases) and the country where they obtained their lowest tertiary degree (i.e., in 95 per cent of the cases). For those individuals for which the data on their country of citizenship were missing, we therefore used their country of birth as a second-best indicator of their nationality and the country where they obtained their lowest tertiary degree as a third-best indicator. We used the same data collection and coding approach to assign the CEOs of our sample firms a nationality.[4]

To obtain data on the control variables for our regression models, we relied on a variety of sources specified below. After excluding observations with missing data, we were left with a final sample of 375 firms, 89 of which announced a tax-motivated HQ relocation over the period 1998–2017. Sixty-six of the announced relocations (74 per cent) were subsequently completed, whereas the remaining 23 were subsequently called off, either because the announced relocation proposal was withdrawn by management or because it was voted down at the shareholder meeting required for gaining approval for inversions.

Dependent Variable

To capture a firm's propensity to undertake a tax-motivated HQ relocation, we created a binary dependent variable that we coded 1 for the sample firms that announced a managerial proposal for such a relocation and 0 for the firms that did not. Hence, we focus on a firm's decision of whether to initiate a relocation and do not require an announced relocation to be subsequently completed. We take this approach because a tax-motivated HQ relocation is a highly consequential event (Laamanen et al., 2012), which will likely cause socially-responsible blockholders to be involved in internal discussions about its expediency in a very early stage. As a result, such blockholders are especially likely to play a key role in the decision of whether to develop and announce a relocation plan in the first place. Moreover, by focusing on this decision, we avoid the potentially distorting influence of small shareholders, as such shareholders generally do not have a say in this stage of the process. However, we acknowledge that socially-responsible blockholders may also affect the decision of whether to proceed with a relocation plan once it has been announced. In an additional analysis we therefore also tested our hypotheses using a finer-grained dependent variable that distinguishes between announced relocations that were called off and those that were completed.

Main Independent Variables

To be able to test Hypothesis 1, we calculated responsible blockholders' total equity stake in a firm by summing the fractions of a firm's shares held by each of its socially-responsible blockholders. To determine which of our sample firms' blockholders were socially-responsible ones, we used *Thomson ONE Banker*'s shareholder classification scheme as the starting point.[5] More specifically, for those sample firms that were included in *Thomson ONE Banker*, we recorded which shareholder category each of their blockholders belonged to according to this database and cross-checked the recorded data with company blockholder data from *Orbis* and SEC filings where possible, leading us to reclassify a few blockholders. For the firms whose blockholder data were only available from *Orbis* or SEC filings, we manually assigned each of their blockholders to one of *Thomson ONE Banker*'s shareholder categories. We then coded those blockholders that were classified as endowment funds, foundations, government agencies, pension funds, or sovereign wealth funds as socially-responsible blockholders, since these external investors have been shown to consider other stakeholders' interests rather than maximize profitability by any legal means (e.g., Cox et al., 2004; Johnson and Greening, 1999; Proffitt and Spicer, 2006). In addition, within the shareholder category of 'individual investors', we coded those blockholders who were executives of the focal firm (i.e., owner-managers) as socially-responsible blockholders as well. We did so because these internal blockholders, who are typically their firm's founders or descendants of them, are also known to consider other stakeholders' interests (e.g., Berrone et al., 2010; Wang and Coffey, 1992).

To test Hypotheses 2a and 2b, we decomposed responsible blockholders' total equity stake into pairs of variables and compared their respective regression coefficients. Specifically, to test Hypothesis 2a, we split responsible blockholders' total equity stake into the fraction held by responsible blockholders with the US nationality (i.e., responsible domestic blockholders) and the fraction held by responsible blockholders with any other nationality (i.e., responsible foreign blockholders). Likewise, to test Hypothesis 2b, we split responsible blockholders' total equity stake into the fraction held by responsible blockholders that had the same nationality as their firm's CEO and the fraction held by those with a different nationality than the CEO's. To account for the possibility that a firm's CEO may be among its socially-responsible blockholders, we subtracted the equity stake of CEOs who were blockholders from the fraction held by responsible blockholders that had the same nationality as the CEO.[6] Moreover, in testing Hypothesis 2b, we entered a separate control variable for the equity stake held by CEO-blockholders. Because the spread of the above-described stakes differed within each pair of variables, we standardized their values to obtain mutually comparable effect sizes in our regression models.

Control Variables

To rule out alternative explanations for the effects of our main independent variables, our regression models contain a range of control variables, which are specified in Table I. To control for possible year-specific and industry-specific effects on the likelihood of tax-motivated HQ relocations, we also included year and industry dummies in our models, with the latter dummies being based on the first digit of the SIC code of a firm's main industry.

Statistical Methods

Because our primary dependent variable is dichotomous, we first estimated a series of logit models. To account for possible heteroskedasticity, we used Huber-White standard errors to determine the significance of the regression coefficients.

RESULTS

Table II displays the descriptive statistics of our variables and their correlations. On average, socially-responsible blockholders have a stake of 10 per cent in our sample firms, with a maximum of 86 per cent. The correlation between their stake and the occurrence of a tax-motivated HQ relocation is significantly negative ($r = -0.17$, $p < 0.05$), lending tentative support to Hypothesis 1. The correlation matrix also lends tentative support to the other hypotheses, as the equity stakes of responsible domestic blockholders and responsible blockholders with the CEO's nationality show significant negative correlations with the occurrence of a tax-motivated HQ relocation ($p < 0.05$), whereas the stakes of responsible foreign blockholders and responsible blockholders whose nationality differs from the CEO's do not. With a value of −0.72, the highest correlation between any pair of independent variables included in the same model is that between responsible blockholders' equity stake and the binary variable coded 1 for firms without responsible blockholders. Although this correlation is considerable, the inclusion of the binary variable is actually beneficial because it ensures that any effect observed for responsible blockholders' equity stake is caused by heterogeneity in that stake rather than by the mere presence or absence of responsible blockholders.

Table III reports the results of the logit models that we estimated. Model 1 only contains the control variables, whereas the other models report the results of the tests of our hypotheses. Model 2 tests Hypothesis 1, which proposed that responsible blockholders' total equity stake is negatively related to a firm's propensity to undertake a tax-motivated HQ relocation. This hypothesis is supported, as the regression coefficient of responsible blockholders' equity stake is significantly negative ($p < 0.001$). More specifically, the average marginal effect of this stake is such that a standard deviation increase from its mean, amounting to an increase of 18 percentage points, decreases the likelihood of a tax-motivated HQ relocation by 14.7 percentage points.

Model 3 tests Hypothesis 2a, which predicted that the equity stake of responsible domestic blockholders is more negatively related to a firm's propensity to undertake a tax-motivated HQ relocation than the equity stake of responsible foreign blockholders. The model shows that the regression coefficients of both equity stakes are significantly

Table I. Control variables

Variable	*Operationalization*	*Data sources*
Other blockholders' equity stake	Total fraction of a firm's shares held by blockholders that were not coded as socially responsible ones	*Thomson ONE Banker, Orbis*, DEF14A and 10-K SEC filings
CEO-blockholder's equity stake	Fraction of a firm's shares held by the firm's CEO in case the CEO was a blockholder (0 for firms whose CEO was not a blockholder)	*Thomson ONE Banker, Orbis*, DEF14A and 10-K SEC filings
Firm has no responsible blockholders	Binary variable coded 1 for firms without socially responsible blockholders and 0 otherwise	*Thomson ONE Banker, Orbis*, DEF14A and 10-K SEC filings
Firm has a domestic CEO	Binary variable coded 1 for firms with a US CEO and 0 for those with a foreign CEO	*BoardEx*, *CapitalIQ*, Bloomberg's online executive profiles
CEO's performance-based cash pay	CEO's variable cash pay in the fiscal year before the focal relocation announcement (in thousands of US dollars adjusted for inflation based on the US GDP deflator)	*ExecuComp* and 10-K and DEF14A SEC filings
CEO is board chair	Binary variable coded 1 for firms whose CEO was also chairman of the board and 0 otherwise	*BoardEx* and 10-K and DEF14A SEC filings
Firm's repatriation tax costs	$\frac{(PTFI_i \times [FEDT\% + ST\%]) - FIT_i}{TA_i}$, where $PTFI_i$ is a firm's pre-tax foreign income in the fiscal year before the focal relocation announcement, $FEDT\%$ the US federal income tax rate after deductions for state income taxes, $ST\%$ the income tax rate of the US state where the firm was registered, FIT_i the amount of foreign income taxes payable by the firm in the fiscal year before the focal relocation announcement, and TA_i the book value of the firm's total assets at the end of that year. For more details, see Slangen et al. (2017)	*Compustat*, 10-K SEC filings, OECD's *Tax Database*, Tax Foundation's Center for State Tax Policy
Firm's financial performance	Firm's net income as a fraction of the book value of its total assets in the fiscal year before the focal relocation announcement	*Compustat* and 10-K SEC filings
Firm's degree of internationalization	Share of a firm's foreign sales in its total sales in the fiscal year before the focal relocation announcement	*Compustat* and 10-K SEC filings
Firm has a foreign listing	Binary variable coded 1 for firms that had a non-US listing in the fiscal year before the focal relocation announcement, and 0 for firms that only had a US listing in that year	*Datastream*

(Continues)

Table I. (Continued)

Variable	*Operationalization*	*Data sources*
Firm's US government dependence	Firm's federal-level lobbying expenses as a fraction of the book value of its total assets in the fiscal year before the focal relocation announcement	OpenSecrets.org database of the Center for Responsible Politics, *Compustat*, and 10-K SEC filings
Firm's size[a]	Natural logarithm of a firm's number of employees in the fiscal year before the focal relocation announcement	*Compustat* and 10-K SEC filings
Firm's leverage	Firm's total liabilities as a fraction of its common equity in the fiscal year before the focal relocation announcement	*Compustat* and 10-K SEC filings
Firm's product portfolio contains consumer products	Binary variable coded 1 for firms that had at least one consumer good or consumer service in their product portfolio, and 0 otherwise	10-K SEC filings
Firm's state of incorporation has a constituency statute	Binary variable coded 1 for firms incorporated in US states that had a constituency statute in the year of the focal relocation announcement and 0 for firms incorporated in states without such a statute	Flammer and Kacperczyk (2015)
Number of analysts following firm	Total number of stock market analysts that followed a given firm in the year before the focal relocation announcement	Refinitiv's *I/B/E/S* database
Firm's auditor belongs to Big Four	Binary variable coded 1 for firms that had an auditor in the year before the focal relocation announcement that belonged to the Big Four (i.e., PricewaterhouseCoopers, Ernst & Young, KPMG, and Deloitte) and 0 for all other firms. Up to the sample year 2002 the variable was also coded 1 for firms whose auditor was Arthur Andersen, the surviving parts of which merged with Deloitte in that year.	Refinitiv's *I/B/E/S* database
Number of previously-announced relocations in firm's main industry	Total number of tax-motivated HQ relocations announced in a firm's four-digit main industry during the five years prior to the focal relocation announcement	Various sources previously specified in the subsection 'Data collection and sample'

[a]Log transformed.

negative ($p < 0.01$ and $p < 0.05$, respectively), but a Wald test showed that the coefficient of the first stake is significantly more negative ($p = 0.02$), lending support to Hypothesis 2a. When calculating the average marginal effects, we found that a standard deviation increase in responsible domestic blockholders' mean stake, amounting to an increase of 17 percentage points, decreases a firm's propensity to relocate by 18.6 percentage points,

Table II. Descriptive statistics and correlations

Variable	*Mean*	*S.D.*	*Min*	*Max*	*1*	*2*	*3*	*4*	*5*	*6*
1. Tax-motivated HQ relocation	0.24	0.43	0	1						
2. Responsible blockholders' equity stake	0.10	0.18	0.00	0.86	−0.17					
3. Responsible domestic blockholders' equity stake	0.09	0.17	0.00	0.86	−0.20	0.89				
4. Responsible foreign blockholders' equity stake	0.02	0.09	0.00	0.79	0.04	0.39	−0.08			
5. Equity stake of responsible blockholders with CEO's nationality	0.06	0.13	0.00	0.76	−0.18	0.68	0.75	−0.03		
6. Equity stake of responsible blockholders whose nationality differs from CEO's	0.01	0.06	0.00	0.79	0.10	0.24	−0.05	0.62	−0.06	
7. Other blockholders' equity stake	0.23	0.21	0.00	1.00	−0.06	−0.27	−0.24	−0.11	−0.15	−0.04
8. Firm has no responsible blockholders	0.62	0.49	0	1	0.15	−0.72	−0.67	−0.23	−0.57	−0.18
9. Firm has a domestic CEO	0.89	0.31	0	1	−0.19	−0.05	0.16	−0.44	0.13	−0.30
10. CEO's performance-based cash pay	444.27	857.51	0.00	7137.60	0.10	−0.15	−0.12	−0.09	−0.13	−0.06
11. CEO is board chair	0.55	0.50	0	1	0.03	0.03	−0.02	0.12	−0.18	0.07
12. Firm's repatriation tax costs	0.00	0.01	0.00	0.20	0.13	−0.13	−0.14	0.00	−0.10	−0.03
13. Firm's financial performance	−2.00	35.39	−685.00	5.02	0.03	−0.03	−0.04	0.01	−0.06	0.01
14. Firm's degree of internationalization	0.27	0.30	0.00	1.00	0.13	−0.14	−0.26	0.21	−0.19	0.06
15. Firm has a foreign listing	0.66	0.47	0	1	−0.06	−0.10	−0.10	−0.02	−0.07	0.00
16. Firm's US government dependence	97.63	723.11	0.00	10765.92	−0.03	0.07	0.09	−0.02	0.14	0.00
17. Firm's size[a]	1.37	1.32	0.00	6.29	0.05	−0.21	−0.17	−0.12	−0.12	−0.12
18. Firm's leverage	3.14	26.87	−124.59	469.47	−0.01	0.12	0.13	0.00	0.19	0.00
19. Firm's product portfolio contains consumer products	0.43	0.50	0	1	0.02	0.04	0.07	−0.05	0.14	−0.10
20. Firm's state of incorporation has a constituency statute	0.22	0.42	0	1	−0.01	0.11	0.03	0.19	0.01	0.13
21. Number of analysts following firm	7.91	9.01	0.00	37.00	0.10	−0.31	−0.27	−0.14	−0.19	−0.11
22. Firm's auditor belongs to Big Four	0.73	0.44	0	1	0.01	−0.26	−0.21	−0.14	−0.12	−0.16
23. Number of previously-announced relocations in firm's main industry	1.46	2.88	0.00	14.00	0.19	−0.06	−0.04	−0.05	0.01	0.02

Note: N = 375; correlations higher than |0.10| are significant at $p < 0.05$.
[a]Log transformed.

whereas a standard deviation increase in responsible foreign blockholders' mean stake, amounting to an increase of 9 percentage points, decreases that propensity by only 4.8 percentage points.

7	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*21*	*22*
0.23															
0.04	0.06														
0.04	0.24	0.01													
−0.13	−0.04	−0.02	0.02												
0.03	0.11	−0.16	0.19	−0.01											
0.05	0.07	−0.01	0.03	−0.05	0.02										
0.02	0.22	−0.18	0.19	−0.08	0.27	0.05									
−0.02	0.15	−0.02	0.22	−0.10	0.12	0.07	0.20								
−0.05	−0.09	0.00	−0.02	−0.04	−0.03	0.01	−0.07	0.08							
−0.11	0.32	0.17	0.44	0.11	0.15	0.06	0.31	0.32	−0.06						
−0.01	−0.04	0.01	0.01	−0.05	−0.01	0.01	−0.05	0.06	−0.01	0.11					
0.01	0.00	0.03	0.19	−0.01	0.07	−0.06	−0.11	0.19	0.06	0.27	0.09				
−0.14	−0.12	−0.16	0.03	0.08	−0.02	−0.10	0.01	0.03	−0.03	0.01	0.10	−0.01			
−0.06	0.36	0.15	0.32	0.08	0.17	0.05	0.31	0.30	−0.04	0.61	0.05	0.23	−0.11		
0.09	0.29	0.17	0.29	−0.17	0.11	0.09	0.38	0.30	−0.01	0.51	0.07	0.30	−0.14	0.44	
−0.01	0.03	−0.06	0.02	0.02	0.00	0.03	−0.10	−0.20	0.08	−0.12	−0.04	0.01	−0.09	−0.08	−0.2

Model 4a provides an initial test of Hypothesis 2b, which predicted that the equity stake of responsible blockholders with the CEO's nationality is more negatively related to a firm's propensity to undertake a tax-motivated HQ relocation than the equity stake

Table III. Logit analyses of the determinants of a firm's propensity to undertake a tax-motivated HQ relocation

Variable	*Model 1*	*Model 2*	*Model 3*	*Model 4a*	*Model 4b*	*Model 4c*
Responsible blockholders' equity stake (Hypothesis 1)		−1.01***				
		(0.30)				
Responsible domestic blockholders' equity stake (Hypothesis 2a)			−1.28**			−1.18**
			(0.44)			(0.42)
Responsible foreign blockholders' equity stake (Hypothesis 2a)			−0.33*		−0.34*	
			(0.15)		(0.15)	
Equity stake of responsible blockholders with CEO's nationality (Hypothesis 2b)				−1.17***		
				(0.35)		
Equity stake of responsible blockholders whose nationality differs from CEO's (Hypothesis 2b)				−0.02		
				(0.20)		
Equity stake of responsible domestic blockholders in firms with a domestic CEO (first extra test Hypothesis 2b)					−1.28**	
					(0.40)	
Equity stake of responsible domestic blockholders in firms with a foreign CEO (first extra test Hypothesis 2b)					−0.25	
					(0.26)	
Equity stake of responsible foreign blockholders with CEO's nationality (second extra test of Hypothesis 2b)						0.09
						(0.18)
Equity stake of responsible foreign blockholders whose nationality differs from CEO's (second extra test of Hypothesis 2b)						0.04
						(0.20)
Other blockholders' equity stake	−0.19	−0.28	−0.27	−0.30†	−0.28	−0.29†
	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)	(0.18)
CEO-blockholder's equity stake				−4.99*		
				(1.94)		
Domestic CEO-blockholder's equity stake					−4.77†	
					(2.46)	

Table III. (Continued)

Variable	*Model 1*	*Model 2*	*Model 3*	*Model 4a*	*Model 4b*	*Model 4c*
Foreign CEO-blockholder's equity stake						−7.81*
						(3.71)
Firm has no responsible blockholders	0.80*	−0.39	−0.62	−0.64	−0.76	−0.50
	(0.36)	(0.47)	(0.52)	(0.48)	(0.51)	(0.51)
Firm has a domestic CEO	−1.54**	−1.59***	−1.35**	−1.29**	−1.36**	−1.36**
	(0.50)	(0.49)	(0.52)	(0.52)	(0.57)	(0.53)
CEO's performance-based cash pay ($\times 10^2$)	0.02	0.02	0.03†	0.03†	0.03†	0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0. 02)	(0.02)
CEO is board chair	0.01	0.04	−0.04	−0.11	−0.13	−0.002
	(0.30)	(0.31)	(0.31)	(0.33)	(0.32)	(0.31)
Firm's repatriation tax costs	11.94†	8.17	7.93	9.66	7.19	5.44
	(8.81)	(8.86)	(8.44)	(8.92)	(8.40)	(9.24)
Firm's financial performance	0.05	0.07	0.04	0.04	0.06	0.04
	(0.07)	(0.08)	(0.08)	(0.07)	(0.07)	(0.08)
Firm's degree of internationalization	0.62	0.91†	0.76†	0.85†	0.79†	0.87†
	(0.58)	(0.57)	(0.59)	(0.58)	(0.59)	(0.59)
Firm has a foreign listing	−0.43	−0.43	−0.45	−0.49†	−0.47†	−0.56†
	(0.35)	(0.35)	(0.36)	(0.36)	(0.36)	(0.37)
Firm's US government dependence ($\times 10^3$)	−0.03	−0.02	−0.01	−0.05	−0.01	−0.05
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Firm's size[a]	−0.10	−0.13	−0.13	−0.12	−0.13	−0.13
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Firm's leverage	0.002	0.01†	0.01*	0.01*	0.01*	0.01*
	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
Firm's product portfolio contains consumer products ($\times 10$)	−1.00	−0.10	−0.007	0.80	0.60	−0.10
	(4.20)	(4.40)	(4.40)	(4.40)	(4.30)	(4.50)

(Continues)

Table III. (Continued)

Variable	*Model 1*	*Model 2*	*Model 3*	*Model 4a*	*Model 4b*	*Model 4c*
Firm's state of incorporation has a constituency statute	0.08	0.17	0.09	0.07	0.06	0.10
	(0.39)	(0.38)	(0.39)	(0.39)	(0.39)	(0.40)
Number of analysts following firm	0.02	0.02	0.02	0.02	0.02	0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Firm's auditor belongs to Big Four	0.13	0.11	0.14	0.16	0.16	0.22
	(0.44)	(0.46)	(0.47)	(0.48)	(0.47)	(0.49)
Number of previously-announced relocations in firm's main industry	0.12†	0.10†	0.11†	0.10†	0.11†	0.11†
	(0.07)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Constant	0.12	0.64	0.50	0.68	0.76	0.44
	(0.98)	(0.97)	(0.98)	(1.02)	(1.03)	(1.01)
Pseudo R-squared	0.15	0.18	0.18	0.19	0.19	0.19
Chi-squared	54.76†	61.44*	61.39*	69.52**	67.61*	65.62*

Note: N = 375. Robust standard errors in parentheses. Fixed effects for industry and year included but not shown.

[a] Log-transformed.

† $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (two-tailed tests for the variables that concern equity stakes, one-tailed tests otherwise).

of responsible blockholders whose nationality differs from the CEO's. The model lends support to the hypothesis, as the regression coefficient of the first-mentioned equity stake is significantly negative ($p < 0.001$), whereas that of the second stake is insignificant, with a Wald test indicating a significant difference between the two coefficients ($p = 0.001$). When calculating the average marginal effect of the equity stake of responsible blockholders with the CEO's nationality, we found that a standard deviation increase in this stake from its mean value, amounting to an increase of 13 percentage points, decreases the likelihood of a tax-motivated HQ relocation by 16.7 percentage points. Interestingly, the extra control variable for a CEO-blockholder's equity stake is significantly negative, indicating that firms with greater responsible block-ownership by their CEO are less likely to undertake tax-motivated HQ relocations.

Although Model 4a lends support to Hypothesis 2b, the correlation matrix in Table II indicates that the equity stake of responsible blockholders with the CEO's nationality is substantially correlated with the equity stake of responsible *domestic* blockholders ($r = 0.75$), whereas the equity stake of responsible blockholders with a different nationality than the CEO's is substantially correlated with the equity stake of responsible *foreign* blockholders ($r = 0.62$). Hence, rather than being driven by whether or not responsible blockholders' nationality matches with the CEO's, the support for Hypothesis 2b in Model 4a may be driven instead by the fact that responsible blockholders whose nationality matches with the CEO's are more often domestic ones whereas those whose nationality differs from the CEO's are more often foreign ones.

To eliminate this possibility, we therefore also tested Hypothesis 2b separately for responsible domestic blockholders and responsible foreign ones. Model 4b tests the hypothesis for responsible *domestic* blockholders, thus distinguishing between their stake in firms with a domestic CEO and their stake in firms with a foreign CEO, while controlling for responsible *foreign* blockholders' equity stake. The hypothesis continues to receive support in this model, as the regression coefficient of the equity stake of responsible domestic blockholders in firms with a domestic CEO is significantly negative ($p < 0.01$), whereas that of responsible domestic blockholders in firms with a foreign CEO is insignificant, with a Wald test indicating a significant difference between the two coefficients ($p = 0.01$).

Model 4c tests Hypothesis 2b solely for responsible *foreign* blockholders, while controlling for responsible *domestic* blockholders' equity stake. In this model the hypothesis is not supported, as both the equity stake of responsible foreign blockholders with the CEO's nationality and that of responsible foreign blockholders with a different nationality than the CEO's have insignificant regression coefficients, with a Wald test showing that these coefficients are not statistically different from each other ($p = 0.82$). Combined, the results of Models 4b and 4c suggest that whereas firms with a domestic CEO are more responsive to responsible domestic blockholders than to responsible foreign ones, firms with a foreign CEO are generally unresponsive to responsible blockholders, even if the foreign CEO is a compatriot of these blockholders.

Interestingly, Model 4c also shows that the extra control variable measuring the stake of foreign CEO-blockholders has a significantly negative effect. This suggests that, when foreign CEOs are themselves larger blockholders in their firm, they generally object to tax-motivated HQ relocations more strongly. In fact, in combination with the above-discussed insignificant effects of the two other sub-stakes of responsible foreign blockholders, the negative effect of foreign CEO-blockholders' stake indicates that the latter stake largely drives the negative effect of the overall stake of responsible foreign blockholders in Model 3. That is, foreign CEO-blockholders seem to be a key category of responsible foreign blockholders opposing tax-motivated HQ relocations.

As to the other control variables in the different models, we find that the effect of other blockholders' equity stake is mostly non-significant, a finding to which we return in the Discussion section. Furthermore, as one might expect, the binary variable coded 1 for firms without responsible blockholders is significantly positive in Model 1, but this effect disappears once we enter our variables of interest in the subsequent models, indicating that firms' propensity to relocate primarily depends on the magnitude of ownership by responsible blockholders and not so much on the mere absence or presence of such blockholders. Another noteworthy finding is that, all else equal, firms with a domestic CEO are less likely to initiate tax-motivated HQ relocations than those with a foreign CEO. Consistent with prior research (Desai and Hines Jr., 2002), we also find that firms tend to have a higher propensity to relocate when they are more internationalized or more highly leveraged. Finally, we find some evidence that tax-motivated HQ relocations are partly explained by imitation among rivals, as the coefficient of the number of previously-announced relocations in a firm's main industry is consistently positive and marginally significant.

Additional Analyses

So far, we coded blockholders that were endowment funds, foundations, government agencies, pension funds, sovereign wealth funds, and owner-managers as socially responsible and all other blockholders as purely profit-oriented. However, whether a blockholder can be considered socially responsible may also depend on the type of country it originates from. More specifically, the comparative capitalism literature has argued that, unlike their counterparts from Anglo-Saxon countries, investors from non-Anglo-Saxon countries generally have a stakeholder orientation and can thus be considered socially responsible, even if they strive for profits (Aguilera and Jackson, 2003; Devinney et al., 2013; Hall and Soskice, 2001). One likely exception concerns investors from non-Anglo-Saxon countries that are tax havens, as being based in a tax haven signals a preference for tax minimization and thus a pure profit orientation rather than a stakeholder orientation. Consequently, we reran our models using a broader operationalization of socially-responsible blockholders that includes those profit-seeking blockholders that were based in non-Anglo-Saxon countries that are not tax havens.[7] The results we obtained were virtually identical to those of our main models.

Moreover, using this broader operationalization of socially-responsible blockholders, we estimated one additional logit model in which we split responsible domestic blockholders' equity stake and that of their foreign counterparts into the fraction held by internal blockholders (i.e., owner-managers, including CEO-blockholders) and that held by external ones, thus testing Hypothesis 2a separately for internal and external blockholders.[8] Consistent with Hypothesis 2a, we found that the stake of responsible domestic blockholders had a more negative effect on a firm's relocation propensity than the stake of responsible foreign blockholders, both for internal blockholders and for external ones ($p < 0.05$ for both Wald tests). Especially the stake of responsible foreign blockholders external to the firm showed a weak effect, suggesting that such responsible foreign blockholders identify the least with the domestic stakeholders harmed by a relocation.

Furthermore, to account for the fact that not all announced relocations were ultimately completed, we estimated ordered logit models with a dependent variable coded 2 for the firms that announced a relocation and subsequently completed it, 1 for those that announced a relocation but subsequently called it off, and 0 for the matching firms.[9] Table IV reports the results we obtained when using our initial operationalization of responsible blockholders, and shows that these results are very similar to our original ones.[10]

Finally, to account for the possibility that socially-responsible blockholders may have stronger concerns about tax-motivated HQ relocations to tax havens than about those to non-havens, we also estimated ordered logit models with a dependent variable coded 2 for the firms that announced a relocation to an official tax haven, 1 for those that announced a relocation to a non-haven, and 0 for the matching firms.[11] Table V displays the results for our initial operationalization of socially-responsible blockholders, showing that these results were again highly similar to our original ones.[12]

DISCUSSION AND CONCLUSIONS

In this paper we have combined insights from stewardship theory and corporate governance research with those from social identity theory to hypothesize on how corporate ownership by socially-responsible blockholders affects the occurrence of tax-motivated HQ relocations to foreign countries. We obtained substantial support for our hypotheses in various logit analyses of a matched sample of relocating and non-relocating public US firms covering the period 1998–2017. To begin with, we found that responsible blockholders' total equity stake has a limiting effect on tax-motivated HQ relocations, in contrast to the stake of other, purely profit-oriented blockholders. Unlike the latter blockholders, socially-responsible blockholders thus seem to have moral objections to such relocations and actively oppose them at top management, thereby seemingly contributing to preventing a key form of shareholder-oriented firm behaviour (Baudot et al., 2020). This finding is all the more interesting because socially-responsible blockholders' mean stake in our sample firms was only 10 per cent, suggesting that, within listed US firms, such blockholders often only require relatively modest ownership stakes to be able to substantially affect managerial decisions on CSR.

The fact that other blockholders' equity stake largely showed an insignificant effect suggests that, in general, purely profit-oriented blockholders neither push for tax-motivated HQ relocations nor oppose them. The reason for this ambiguous attitude may be that although such relocations tend to generate tax savings, they also cause the relocating firms to lose legitimacy among the disadvantaged domestic stakeholders and thus face the risk of losing their support, potentially resulting in lower domestic sales revenues or higher costs that negate the tax savings (Slangen et al., 2017).

Importantly, we also obtained substantial evidence that the limiting effect of socially-responsible blockholders on tax-motivated HQ relocations is subject to affinity bias among both such blockholders themselves and among CEOs. Specifically, we first of all found that the equity stake of responsible *domestic* blockholders has a more limiting

Table IV. Ordered logit analyses distinguishing between announced relocations that were completed and those that were called off

Variable	*Model 5*	*Model 6*	*Model 7*	*Model 8a*	*Model 8b*	*Model 8c*
Responsible blockholders' equity stake (Hypothesis 1)		−1.01**				
		(0.31)				
Responsible domestic blockholders' equity stake (Hypothesis 2a)			−1.29**			−1.18**
			(0.47)			(0.45)
Responsible foreign blockholders' equity stake (Hypothesis 2a)			−0.33*		−0.35*	
			(0.16)		(0.15)	
Equity stake of responsible blockholders with CEO's nationality (Hypothesis 2b)				−1.19**		
				(0.38)		
Equity stake of responsible blockholders whose nationality differs from CEO's (Hypothesis 2b)				−0.07		
				(0.20)		
Equity stake of responsible domestic blockholders in firms with a domestic CEO (first extra test Hypothesis 2b)					−1.32**	
					(0.43)	
Equity stake of responsible domestic blockholders in firms with a foreign CEO (first extra test Hypothesis 2b)					−0.41	
					(0.26)	
Equity stake of responsible foreign blockholders with CEO's nationality (second extra test of Hypothesis 2b)						0.10
						(0.19)
Equity stake of responsible foreign blockholders whose nationality differs from CEO's (second extra test of Hypothesis 2b)						0.01
						(0.20)
Other blockholders' equity stake	−0.17	−0.25	−0.24	−0.27	−0.25	−0.26
	(0.17)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
CEO-blockholder's equity stake				−4.68*		
				(1.96)		

Table IV. (Continued)

Variable	*Model 5*	*Model 6*	*Model 7*	*Model 8a*	*Model 8b*	*Model 8c*
Domestic CEO-blockholder's equity stake					−4.47†	
					(2.56)	
Foreign CEO-blockholder's equity stake						−7.57†
						(3.94)
Firm has no responsible blockholders	0.79*	−0.38	−0.62	−0.64	−0.80	−0.49
	(0.37)	(0.47)	(0.53)	(0.49)	(0.52)	(0.53)
Firm has a domestic CEO	−1.68***	−1.73***	−1.48**	−1.43**	−1.57**	−1.48**
	(0.50)	(0.51)	(0.54)	(0.54)	(0.59)	(0.54)
CEO's performance-based cash pay ($\times 10^2$)	0.02†	0.02†	0.02†	0.02†	0.03†	0.02†
	(0.02)	(0. 02)	(0.02)	(0.02)	(0.02)	(0.02)
CEO is board chair	−0.02	0.002	−0.08	−0.17	−0.19	−0.04
	(0.30)	(0.31)	(0.32)	(0.34)	(0.33)	(0.32)
Firm's repatriation tax costs	10.31	6.42	6.12	7.75	4.94	3.76
	(8.86)	(8.87)	(8.38)	(9.03)	(8.28)	(8.86)
Firm's financial performance	0.05	0.07	0.04	0.04	0.06	0.04
	(0.08)	(0.08)	(0.08)	(0.07)	(0.07)	(0.08)
Firm's degree of internationalization	0.60	0.89†	0.72	0.79†	0.73	0.81†
	(0.61)	(0.61)	(0.62)	(0.61)	(0.63)	(0.62)
Firm has a foreign listing	−0.48†	−0.47†	−0.49†	−0.53†	−0.52†	−0.59†
	(0.36)	(0.36)	(0.36)	(0.37)	(0.36)	(0.37)
Firm's US government dependence ($\times 10^2$)	−0.10	−0.20	−0.20	−0.40	−0.009	−0.10
	(0.20)	(0.30)	(0.30)	(0.30)	(0.02)	(0.20)
Firm's size[a]	−0.15	−0.18	−0.18	−0.18	−0.18	−0.18
	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)

Table IV. (Continued)

Variable	*Model 5*	*Model 6*	*Model 7*	*Model 8a*	*Model 8b*	*Model 8c*
Firm's leverage	0.002	0.01[†]	0.01*	0.01*	0.01*	0.01*
	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
Firm's product portfolio contains consumer products	−0.12	−0.01	0.003	0.07	0.05	−0.01
	(0.43)	(0.45)	(0.45)	(0.44)	(0.43)	(0.47)
Firm's state of incorporation has a constituency statute	0.12	0.21	0.12	0.09	0.08	0.12
	(0.38)	(0.38)	(0.39)	(0.38)	(0.38)	(0.39)
Number of analysts following firm	0.03[†]	0.03[†]	0.03[†]	0.03[†]	0.03[†]	0.03[†]
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Firm's auditor belongs to Big Four	0.13	0.09	0.12	0.14	0.13	0.20
	(0.45)	(0.47)	(0.48)	(0.49)	(0.48)	(0.50)
Number of previously-announced relocations in firm's main industry	0.08	0.07	0.08	0.07	0.08	0.07
	(0.06)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Pseudo R-squared	0.14	0.16	0.16	0.17	0.17	0.16
Chi-squared	726.95***	615.52***	489.79***	679.36***	471.07***	578.38***

Note: N = 380. Robust standard errors in parentheses. Fixed effects for industry and year included but not shown.
[a]Log-transformed.
[†]$p < 0.1$; *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$ (two-tailed tests for the variables that concern equity stakes, one-tailed tests otherwise).

Table V. Ordered logit analyses distinguishing between relocations to tax havens and those to non-havens

Variable	*Model 9*	*Model 10*	*Model 11*	*Model 12a*	*Model 12b*	*Model 12c*
Responsible blockholders' equity stake (Hypothesis 1)		−1.05*** (0.32)				
Responsible domestic blockholders' equity stake (Hypothesis 2a)			−1.39** (0.48)			−1.28** (0.44)
Responsible foreign blockholders' equity stake (Hypothesis 2a)			−0.33* (0.16)		−0.34* (0.15)	
Equity stake of responsible blockholders with CEO's nationality (Hypothesis 2b)				−1.22*** (0.36)		
Equity stake of responsible blockholders whose nationality differs from CEO's (Hypothesis 2b)				−0.03 (0.19)		
Equity stake of responsible domestic blockholders in firms with a domestic CEO (first extra test Hypothesis 2b)					−1.35** (0.42)	
Equity stake of responsible domestic blockholders in firms with a foreign CEO (first extra test Hypothesis 2b)					−0.20 (0.25)	
Equity stake of responsible foreign blockholders with CEO's nationality (second extra test of Hypothesis 2b)						0.16 (0.19)
Equity stake of responsible foreign blockholders whose nationality differs from CEO's (second extra test of Hypothesis 2b)						0.03 (0.18)
Other blockholders' equity stake	−0.17 (0.17)	−0.25 (0.18)	−0.24 (0.17)	−0.27 (0.18)	−0.25 (0.17)	−0.27 (0.18)

(Continues)

Table V. (Continued)

Variable	*Model 9*	*Model 10*	*Model 11*	*Model 12a*	*Model 12b*	*Model 12c*
CEO-blockholder's equity stake				−5.39**		
				(2.02)		
Domestic CEO-blockholder's equity stake					−5.37*	
					(2.65)	
Foreign CEO-blockholder's equity stake						−9.02†
						(4.67)
Firm has no responsible blockholders	0.81*	−0.42	−0.71	−0.71	−0.84	−0.58
	(0.37)	(0.49)	(0.55)	(0.51)	(0.54)	(0.54)
Firm has a domestic CEO	−1.71***	−1.75***	−1.45**	−1.42**	−1.45**	−1.48**
	(0.49)	(0.47)	(0.51)	(0.49)	(0.55)	(0.52)
CEO's performance-based cash pay ($\times 10^2$)	0.02†	0.02†	0.02†	0.02†	0.03†	0.02†
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
CEO is board chair	0.07	0.12	0.04	−0.02	−0.05	0.10
	(0.29)	(0.30)	(0.31)	(0.32)	(0.32)	(0.31)
Firm's repatriation tax costs	6.18	2.26	1.72	3.77	1.25	−2.65
	(7.45)	(7.54)	(6.89)	(7.90)	(6.88)	(8.00)
Firm's financial performance	0.08	0.10	0.07	0.07	0.09	0.06
	(0.07)	(0.08)	(0.08)	(0.07)	(0.08)	(0.08)
Firm's degree of internationalization	0.55	0.88†	0.71	0.80†	0.76†	0.85†
	(0.56)	(0.56)	(0.57)	(0.57)	(0.57)	(0.57)
Firm has a foreign listing	−0.58†	−0.57†	−0.60*	−0.64*	−0.60†	−0.72*
	(0.36)	(0.36)	(0.36)	(0.37)	(0.37)	(0.37)
Firm's US government dependence ($\times 10^2$)	0.001	0.001	0.002	0.001	0.002	0.005
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)

Table V. (Continued)

Variable	*Model 9*	*Model 10*	*Model 11*	*Model 12a*	*Model 12b*	*Model 12c*
Firm's size[a]	−0.09	−0.13	−0.13	−0.13	−0.13	−0.14
	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Firm's leverage	0.002	0.01*	0.01*	0.01*	0.01**	0.01*
	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
Firm's product portfolio contains consumer products	−0.17	−0.06	−0.05	0.01	0.01	−0.07
	(0.43)	(0.45)	(0.45)	(0.45)	(0.44)	(0.47)
Firm's state of incorporation has a constituency statute	0.16	0.27	0.17	0.17	0.15	0.18
	(0.39)	(0.38)	(0.39)	(0.39)	(0.39)	(0.40)
Number of analysts following firm	0.02	0.02	0.02	0.02	0.02	0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Firm's auditor belongs to Big Four	0.23	0.22	0.26	0.29	0.29	0.38
	(0.45)	(0.47)	(0.48)	(0.49)	(0.49)	(0.50)
Number of previously-announced relocations in firm's main industry	0.12*	0.10†	0.12*	0.10†	0.12†	0.11†
	(0.07)	(0.07)	(0.07)	(0.08)	(0.08)	(0.07)
Pseudo R-squared	0.14	0.16	0.16	0.17	0.17	0.17
Chi-squared	694.74***	499.42***	503.97***	736.15***	466.51***	593.14***

Note: N = 380. Robust standard errors in parentheses. Fixed effects for industry and year included but not shown.
[a]Log-transformed.
†p < 0.1; *p < 0.05; **p < 0.01; ***p < 0.001 (two-tailed tests for the variables that concern equity stakes, one-tailed tests otherwise).

effect on such relocations than the stake of responsible *foreign* blockholders, suggesting that the first-mentioned blockholders oppose tax-motivated HQ relocations more forcefully because they identify more strongly with, and thus have more affinity with, the domestic stakeholders harmed by these relocations. One might argue that this finding can also be caused by responsible foreign blockholders simultaneously identifying relatively strongly with stakeholders in their own home country, leading them to prioritize welfare gains for these stakeholders over domestic welfare losses and thus push for relocations to their home base. However, if responsible foreign blockholders would generally push for such relocations, the equity stake of such blockholders should have had a *positive* effect on a firm's relocation propensity, which is not the case in any of our models.

Furthermore, we found that the relatively modest limiting effect of responsible foreign blockholders' stake is largely driven by foreign CEO-blockholders and not so much by responsible foreign blockholders external to the firm, indicating that foreign CEO-blockholders identify more strongly with the domestic stakeholders harmed by a relocation than external responsible foreign blockholders. The likely reason is that, unlike the latter blockholders, foreign CEO-blockholders are generally located in the country where their firm is headquartered and thus to some degree embedded there; as a result, they are less likely to see the disadvantaged domestic stakeholders as an out-group than external responsible blockholders based overseas. That is, proximity to stakeholders with a different nationality may strengthen responsible blockholders' perceived moral duty to protect the interests of these stakeholders.

Besides CEO-blockholders in particular in their role as socially-responsible blockholders, CEOs in general also seem to display affinity bias, especially when it comes to their receptivity to activism by socially-responsible blockholders. This becomes apparent from our finding that the stake of responsible blockholders that are compatriots of their firm's CEO has a more negative effect on a firm's relocation propensity than the stake of responsible blockholders with a different nationality than the CEO's. However, our results also make clear that this finding is driven by firms with a domestic CEO, as the relocation propensity of firms with a foreign CEO does not decrease with the stake of responsible blockholders, not even when the foreign CEO is a compatriot of these blockholders. The likely cause of the latter finding is that responsible blockholders that are compatriots of their firm's foreign CEO are themselves foreign as well, causing them to experience a weak moral obligation to protect the interests of their firm's domestic stakeholders and, thus, to show low activism towards their firm's foreign CEO in the first place.

Contributions

Overall, our study thus suggests that nationality-oriented affinity bias among socially-responsible blockholders as well as CEOs substantially affects the occurrence of a key form of shareholder-oriented firm behaviour. It thereby contributes to CSR research by highlighting the importance of taking into account social identification by corporate actors in explaining this type of behaviour. To the best of our knowledge, prior CSR studies did not account for such identification, implicitly assuming instead that corporate actors such as shareholders and managers are fully objective in their drive and efforts to foster socially-responsible corporate policies.

In a recent study, Bertrand et al. (2021) also explored the effect of nationality-oriented affinity bias on firms' social responsibility. Arguing that local stakeholders generally identify more strongly with domestic CEOs than with foreign ones and therefore bestow lower legitimacy on firms with foreign CEOs, they found that such firms tend to invest more heavily in CSR, presumably in order to compensate for their lower legitimacy. Our study complements these findings by suggesting that, besides stakeholders engaging in nationality-oriented identification towards corporate actors such as CEOs, corporate actors also engage in such identification towards stakeholders, indicating that social identification in the business-society sphere is a multifaceted, complex process with important implications for CSR-related decisions.

The apparent existence of nationality-oriented affinity bias among socially-responsible blockholders and CEOs is consistent with earlier work that has shown that both shareholders and CEOs tend to have behavioural biases (Ardalan, 2019; Baker and Nofsinger, 2002; Das and Teng, 1999; Hodgkinson et al., 2023), including biases that relate to their affinity with others. For instance, McDonald and Westphal (2010) found that CEOs that become subject to more stringent board control become less willing to provide strategic advice to other CEOs because they start to identify less with the corporate elite, whereas Morse and Shive (2011) found that the degree to which domestic stocks are overrepresented in financial investment portfolios, a phenomenon known as the 'home bias' (for a review, see Ardalan, 2019), is larger among investors from more patriotic countries. Our study extends this line of inquiry by showing that affinity biases also appear in decisions on CSR and, as such, constitutes a response to Hodgkinson et al.'s (2023) recent call to further explore the role of affect in the development of biases and their effects on corporate decision-making.

Finally, our study adds to international business research on HQ relocations, which so far paid scant attention to the role of shareholders and CEOs. The sparse studies that did analyse this role to some degree only tested some general shareholder characteristics as determinants of HQ relocations, finding that ownership concentration lowers the chance that firms relocate HQ personnel abroad whereas foreign ownership increases that chance (Baaij et al., 2015; Birkinshaw et al., 2006). We complement these studies by focusing on HQ relocations that are primarily tax motivated and showing that such relocations are less likely among firms characterized by higher ownership by socially-responsible blockholders, especially when these blockholders are domestic ones facing a domestic CEO.

Limitations and Avenues for Future Research

Our findings suggest that responsible domestic blockholders identify more strongly with the domestic stakeholders harmed by tax-motivated HQ relocations and therefore oppose such relocations more forcefully than responsible foreign blockholders. Although this insight is consistent with studies that have shown that shareholders differ in their level of activism (David et al., 2007; Neubaum and Zahra, 2006), responsible blockholders' level of activism may not only depend on how strongly they identify with the stakeholders whose interests they have at heart, but also on other factors, such as whether they are self-funded or externally financed and how long they have been blockholders in the firm. Future studies could shed light on the role of these other factors in shaping responsible blockholders' activism, both in the context of HQ relocations and in other contexts. They could also attempt to measure that activism directly, for instance by collecting data on the number of resolutions that individual blockholders filed on social responsibility issues or the number media articles in which they voiced concerns over irresponsible firm behaviour.

As explained earlier, the HQ relocations initiated by our sample firms were primarily motivated by the worldwide taxation system and 35 per cent corporate income tax rate that the US had in place until 2018. Although the US then introduced a territorial taxation system and a lower corporate income tax rate of 21 per cent (Financial Times, 2017), these reforms have not rendered our findings irrelevant or outdated, since the current US administration has announced plans to increase the US corporate income tax rate to 28 per cent and start re-taxing US firms' foreign income at a rate of 21 per cent (Financial Times, 2023). As these rates exceed the global minimum tax rate of 15 per cent that 139 countries recently agreed upon, they are likely to trigger new tax-motivated HQ relocations even after the introduction of that rate.

Nevertheless, our empirical focus on US firms is a limitation because it has prevented us from analysing cross-country differences in the role of socially-responsible blockholders and CEOs in tax-motivated HQ relocations. Besides the US, several other countries such as Brazil, India, and Japan also had a worldwide taxation system during our sample window and therefore also experienced tax-motivated outbound HQ relocations (KPMG, 2016; Voget, 2011), yet the role of socially-responsible blockholders and CEOs in relocations by firms from these countries may have been different, owing to their non-Anglo-Saxon corporate governance systems (Aguilera and Jackson, 2003). Future studies may therefore attempt to compile and analyse multi-country samples to shed light on the generalizability of our findings to firms from other countries.

Finally, future studies could replicate our analyses for strategic decisions other than tax-motivated HQ relocations, such as decisions on foreign direct investments in highly polluting activities or in countries characterized by systematic human rights violations. Such studies would contribute to the development of a more holistic view on the role of socially-responsible blockholders and CEOs in CSR-related strategic decisions.

ACKNOWLEDGMENTS

We thank General Editor Jonathan Doh and two anonymous reviewers for their insightful comments on earlier versions of this manuscript. We also thank René Belderbos, Filip de Beule, Igor Filatotchev and other participants in WU Vienna's 8th IB and Finance Paper Development Workshop, and participants in the seminars at the Leuven Center for Irish Studies and the Nazarbayev University Graduate School of Business for their valuable comments and suggestions. The first and third author gratefully acknowledge the financial support of FWO (grant number G082619N). An earlier version of this paper won the 'Best Paper in each Track' award at the 2021 EIBA conference and was nominated for the Temple/AIB Best Paper Award at the 2021 AIB conference. We also thank Dave Besch and Roman Shevchenko for their research assistance.

CONFLICT OF INTEREST STATEMENT

None.

NOTES

[1] For the sake of brevity, we refer to these non-shareholder stakeholders as 'other stakeholders' from here onwards.
[2] For the sake of brevity, from here onwards the term 'socially-responsible blockholders' encompasses their human representatives (e.g., managers of pension funds).
[3] We acknowledge that a firm's CEO may be among its responsible blockholders and account for this possibility in our test of the below hypothesis.
[4] Among the CEOs for which we had data on multiple nationality indicators, their country of citizenship matched their country of birth in 90 per cent of the cases and the country where they obtained their lowest tertiary degree in 94 per cent of the cases.
[5] This scheme distinguishes between the following categories of shareholders: banks and trusts, brokerage firms, corporations, endowment funds, finance companies, foundations, funds all, government agencies, hedge funds, hedge fund portfolios, holding companies, independent research firms, individual investors, insurance companies, investment advisors, investment managers, mutual funds, pension funds, private equity, research firms, sovereign wealth funds, strategic entities, and venture capital.
[6] By design, a CEO-blockholder's stake is never part of the fraction held by responsible blockholders with a *different* nationality than the CEO's.
[7] We used Dharmapala and Hines's (2009) list of tax havens.
[8] We were unable to estimate the coefficients of all four resulting stakes using our original, narrow operationalization of socially-responsible blockholders, since that operationalization caused the stake of responsible external foreign blockholders to perfectly predict the dependent variable.
[9] These models were based on 380 observations, as the use of ordered logit enabled us to add five observations that were omitted from our regular logit models because they perfectly predicted the binary outcome variable.
[10] We also obtained highly similar results when we estimated the ordered logit models using the above-described broader operationalization of socially-responsible blockholders.
[11] We again used Dharmapala and Hines's (2009) list of tax havens.
[12] Here too we also obtained very similar results when we used the broader operationalization of socially-responsible blockholders.

REFERENCES

Aguilera, R. V. and Jackson, G. (2003). 'The cross-national diversity of corporate governance: Dimensions and determinants'. *Academy of Management Review*, **28**, 447–65.

Aguilera, R., Rupp, D., Williams, C. and Ganapathi, J. (2007). 'Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations'. *Academy of Management Review*, **32**, 836–63.

Ardalan, K. (2019). 'Equity home bias: A review essay'. *Journal of Economic Surveys*, **33**, 949–67.

Ashforth, B. and Mael, F. (1989). 'Social identity theory and the organization'. *Academy of Management Review*, **14**, 20–39.

Ault, H. J. and Arnold, B. J. (2013). *Comparative Income Taxation: A Structural Analysis*, 3rd edition. New York: Aspen Publishers.

Baaij, M., Mom, T., Van den Bosch, F. and Volberda, H. (2015). 'Why do multinational corporations relocate core parts of their corporate headquarters abroad?'. *Long Range Planning*, **48**, 46–58.

Baker, H. K. and Nofsinger, J. R. (2002). 'Psychological biases of investors'. *Financial Services Review*, **11**, 97–116.

Baudot, L., Johnson, J., Roberts, A. and Roberts, R. (2020). 'Is corporate tax aggressiveness a reputation threat? Corporate accountability, corporate social responsibility, and corporate tax behaviour'. *Journal of Business Ethics*, **163**, 197–215.

Berg, F., Koelbel, J. F. and Rigobon, R. (2022). 'Aggregate confusion: the divergence of ESG ratings'. *Review of Finance*, **26**, 1315–44.

Berle, A. and Means, G. (1932). *The Modern Corporation and Private Property*. New York: Commerce Clearing House.

Berrone, P., Cruz, C., Gomez-Mejia, L. and Larraza-Kintana, M. (2010). 'Socioemotional wealth and corporate responses to institutional pressures: do family-controlled firms pollute less?'. *Administrative Science Quarterly*, **55**, 82–113.

Bertrand, O., Betschinger, M.-A. and Moschieri, C. (2021). 'Are firms with foreign CEOs better citizens? A study of the impact of CEO foreignness on corporate social performance'. *Journal of International Business Studies*, **52**, 525–43.

Birkinshaw, J., Braunerhjelm, P., Holm, U. and Terjesen, S. (2006). 'Why do some multinational corporations relocate their headquarters overseas?'. *Strategic Management Journal*, **27**, 681–700.
Blackwell, M., Iacus, S., King, G. and Porro, G. (2009). 'cem: Coarsened exact matching in Stata'. *The Stata Journal*, **9**, 524–46.
Bloomberg. (2015). *Tracking Tax Runaways*. 13 April.
CFO Magazine. (2002). *Love It and Leave It: The Hue-and-Cry Over Inversions may Change the Way Overseas Income is Taxed*. 30 July.
Chandler, C. (2014). 'Investor relations from the perspective of CEOs'. *International Journal of Strategic Communication*, **8**, 160–76.
Chatterji, A. K., Durand, R., Levine, D. I. and Touboul, S. (2016). 'Do ratings of firms converge? Implications for managers, investors and strategy researchers'. *Strategic Management Journal*, **37**, 1597–614.
Chen, X., Harford, J. and Li, K. (2007). 'Monitoring: which institutions matter?'. *Journal of Financial Economics*, **86**, 279–305.
Chorvat, E. (2013). *'Looking through' Corporate Expatriations for Buried Intangibles*. Public Law and Legal Theory Working Paper 445. Chicago, IL: University of Chicago.
Cloyd, C. B., Mills, L. F. and Weaver, C. D. (2003). 'Firm valuation effects of the expatriation of US corporations to tax-haven countries'. *Journal of the American Taxation Association*, **25**, 87–109.
Cox, P., Brammer, S. and Millington, A. (2004). 'An empirical examination of institutional investor preferences for corporate social performance'. *Journal of Business Ethics*, **52**, 27–43.
Dai, L., Dharwadkar, R., Shi, L. and Zhang, B. (2017). 'The governance transfer of blockholders: Evidence from block acquisitions and earnings management around the world'. *Journal of Corporate Finance*, **45**, 586–607.
Das, T. K. and Teng, B. S. (1999). 'Cognitive biases and strategic decision processes: An integrative perspective'. *Journal of Management Studies*, **36**, 757–78.
David, P., Bloom, M. and Hillman, A. (2007). 'Investor activism, managerial responsiveness, and corporate social performance'. *Strategic Management Journal*, **28**, 91–100.
Davis, J., Schoorman, D. and Donaldson, L. (1997). 'Toward a stewardship theory of management'. *Academy of Management Review*, **22**, 20–47.
Desai, M. A. (2012). 'A better way to tax US businesses'. *Harvard Business Review*, **90**, 134–39.
Desai, M. A. and Hines, J. R., Jr. (2002). 'Expectations and expatriations: Tracing the causes and consequences of corporate inversions'. *National Tax Journal*, **55**, 409–40.
Devinney, T., Schwalbach, J. and Williams, C. (2013). 'Corporate social responsibility and corporate governance: comparative perspectives'. *Corporate Governance: An International Review*, **21**, 413–19.
Dharmapala, D. and Hines, J. (2009). 'Which countries become tax havens?'. *Journal of Public Economics*, **93**, 1058–68.
Economist. (2015). *Tax Inversions: All My Bags are Packed*. 15 August.
Edmans, A. and Holderness, C. (2017). 'Blockholders: A survey of theory and evidence'. In Hermalin B. and Weisbach M. (Eds), *The Handbook of the Economics of Corporate Governance*. Amsterdam: Elsevier, 541–636.
Filatotchev, I. and Nakajima, C. (2014). 'Corporate governance, responsible managerial behavior, and corporate social responsibility: Organizational efficiency versus organizational legitimacy'. *Academy of Management Perspectives*, **28**, 289–306.
Financial Times. (2017). *Senate Passes Landmark US Tax Bill*. 20 December.
Financial Times. (2023). *Joe Biden Proposes Big Tax Rises in Budget to Shave $3tn off US Deficit*. 9 March.
Finkelstein, S. (1992). 'Power in top management teams: Dimensions, measurement, and validation'. *Academy of Management Journal*, **35**, 505–38.
Flammer, C. and Kacperczyk, A. (2015). 'The impact of stakeholder orientation on innovation: Evidence from a natural experiment'. *Management Science*, **62**, 1982–2001.
Forbes. (2014). *The Tax Inversion Rush – In One Handy Graphic*. 10 September.
Fox, M. and Hamilton, R. (1994). 'Ownership and diversification: Agency theory or stewardship theory'. *Journal of Management Studies*, **31**, 69–81.
Freeman, R. E. (1984). 'Strategic management: A stakeholder theory'. *Journal of Management Studies*, **39**, 1–21.
Gilson, S. (1990). 'Bankruptcy, boards, banks, and blockholders. Evidence on changes in corporate ownership and control when firms default'. *Journal of Financial Economics*, **27**, 335–87.
Halbritter, G. and Dorfleitner, G. (2015). 'The wages of social responsibility – where are they? A critical review of ESG investing'. *Review of Financial Economics*, **26**, 25–35.

Hall, P. and Soskice, D. (2001). *An Introduction to Varieties of Capitalism*. Oxford: Oxford University Press.
Hambrick, M. (2007). 'Upper echelons theory: An update'. *Academy of Management Review*, **32**, 334–43.
Haunschild, P. and Miner, A. (1997). 'Modes of interorganizational imitation: The effects of outcome salience and uncertainty'. *Administrative Science Quarterly*, **42**, 472–500.
Henisz, W. and Delios, A. (2001). 'Uncertainty, imitation, and plant location: Japanese multinational corporations, 1990–1996'. *Administrative Science Quarterly*, **46**, 443–75.
Henry, D. (2011). 'Ownership structure and tax-friendly dividends'. *Journal of Banking & Finance*, **35**, 2747–60.
Hicks, H. (2003). 'Overview of inversion transactions: Selected historical, contemporary, and transactional perspectives'. *Tax Notes International*, **30**, 899–925.
Hodgkinson, G., Burkhard, B., Foss, N., Grichnik, D., Sarala, R., Tang, Y. and Van Essen, M. (2023). 'The heuristics and biases of top managers: Past, present, and future'. *Journal of Management Studies*, **60**, 1033–63.
Holderness, C. (2003). 'A survey of blockholders and corporate control'. *Economic Policy Review*, **9**, 1–14.
Holderness, C. and Sheehan, D. (1988). 'The role of majority shareholders in publicly held corporations'. *Journal of Financial Economics*, **20**, 317–46.
Huang, H. H., Sun, L. and Yu, T. R. (2017). 'Are socially responsible firms less likely to expatriate? An examination of corporate inversions'. *Journal of the American Taxation Association*, **39**, 43–62.
Jensen, M. C. and Meckling, W. H. (1976). 'Theory of the firm: Managerial behavior, agency costs and ownership structure'. *Journal of Financial Economics*, **3**, 305–60.
Johnson, R. and Greening, D. (1999). 'The effects of corporate governance and institutional ownership types on corporate social performance'. *Academy of Management Journal*, **42**, 564–76.
Johnson, J. and Holub, M. (2003). 'Questioning organizational legitimacy: The case of US expatriates'. *Journal of Business Ethics*, **47**, 269–93.
Kahneman, D., Knetsch, J. L. and Thaler, R. H. (1986). 'Fairness and the assumptions of economics'. *Journal of Business*, **59**, Part 2, 285–300.
Kostova, T. and Zaheer, S. (1999). 'Organizational legitimacy under conditions of complexity: The case of the multinational enterprise'. *Academy of Management Review*, **24**, 64–81.
KPMG. (2016). *Asia-Pacific Tax Profiles*. Available at: https://home.kpmg.com/xx/en/home/services/tax/regional-tax-centers/asia-pacific-tax-centre/guides-resources.html (accessed 18 January 2017).
Kun, O. (2004). 'Corporate inversions: The interplay of tax, corporate, and economic implications'. *Delaware Journal of Corporate Law*, **29**, 313–75.
Laamanen, T., Simula, T. and Torstila, S. (2012). 'Cross-border relocations of headquarters in Europe'. *Journal of International Business Studies*, **43**, 187–210.
Lee, D. (2020). 'Corporate social responsibility of US listed firms headquartered in tax havens'. *Strategic Management Journal*, **41**, 1547–71.
Li, C., Arikan, I., Shenkar, O. and Arikan, A. (2020). 'The impact of country-dyadic military conflicts on market reaction to cross-border acquisitions'. *Journal of International Business Studies*, **51**, 299–325.
Liu, C., Chung, C., Sul, H. and Wang, K. (2018). 'Does hometown advantage matter? The case of institutional blockholder monitoring on earnings management in Korea'. *Journal of International Business Studies*, **49**, 196–221.
Logsdon, J. and Van Buren, H. (2009). 'Beyond the proxy vote: dialogues between shareholder activists and corporations'. *Journal of Business Ethics*, **87**, 353–65.
Logsdon, J. and Wood, D. J. (2002). 'Business citizenship: From domestic to global level of analysis'. *Business Ethics Quarterly*, **12**, 155–88.
Long, M. and Krause, E. (2017). 'Altruism by age and social proximity'. *PLoS One*, **12**, e0180411.
Marples, D. J. and Gravelle, J. G. (2016). *Corporate Expatriation, Inversions, and Mergers: Tax Issues (CRS Report No. R43568)*. Washington, DC: Congressional Research Service.
Marti, E., Fuchs, M., DesJardine, M. R., Slager, R. and Gond, J.-P. (2023). 'The impact of sustainable investing: A multidisciplinary review'. *Journal of Management Studies*, 1–31. https://doi.org/10.1111/joms.12957.
McDonald, M. and Westphal, J. (2010). 'A little help here? Board control, CEO identification with the corporate elite, and strategic help provided to CEOs at other firms'. *Academy of Management Journal*, **53**, 343–70.
Mell, J. N., Dechurch, L. A., Leenders, R. T. A. J. and Contractor, N. (2020). 'Identity asymmetries: An experimental investigation of social identity and information exchange in multiteam systems'. *Academy of Management Journal*, **63**, 1561–90.
Miller, D., Le Breton-Miller, I. and Scholnick, B. (2008). 'Stewardship vs. stagnation: An empirical comparison of small family and non-family businesses'. *Journal of Management Studies*, **45**, 51–78.
Morse, A. and Shive, S. (2011). 'Patriotism in your portfolio'. *Journal of Financial Markets*, **14**, 411–40.
Mueller, E. and Flickinger, M. (2021). 'It's a family affair: How social identification influences family CEO compensation'. *Corporate Governance: An International Review*, **29**, 461–78.

Neubaum, D. and Zahra, S. (2006). 'Institutional ownership and corporate social performance: The moderating effects of investment horizon, activism, and coordination'. *Journal of Management*, **32**, 108–31.
Pisani, N., Kourula, A., Kolk, A. and Meijer, R. (2017). 'How global is international CSR research? Insights and recommendations from a systematic review'. *Journal of World Business*, **52**, 591–614.
Proffitt, W. and Spicer, A. (2006). 'Shaping the shareholder activism agenda: Institutional investors and global social issues'. *Strategic Organization*, **4**, 165–90.
Reid, E. and Toffel, M. (2009). 'Responding to public and private politics: Corporate disclosure of climate change strategies'. *Strategic Management Journal*, **30**, 1157–78.
Schaefer, B. (2008). 'Shareholders and social responsibility'. *Journal of Business Ethics*, **81**, 297–312.
Seale and Associates (2014). 'So-long Uncle Sam, hello tax inversions'. *Business Insights*, 1–3.
Seida, J. A. and Wempe, W. F. (2004). 'Effective tax rate changes and earnings stripping following corporate inversion'. *National Tax Journal*, **57**, 805–28.
Slangen, A., Baaij, M. and Valboni, R. (2017). 'Disaggregating the corporate headquarters: Investor reactions to inversion announcements by US firms'. *Journal of Management Studies*, **54**, 1241–70.
Strike, V., Gao, J. and Bansal, P. (2006). 'Being good while being bad: Social responsibility and the international diversification of US firms'. *Journal of International Business Studies*, **37**, 850–62.
Tajfel, H. (1982). 'Instrumentality, identity and social comparisons'. In Tajfel, H. (Ed.), *Social Identity and Intergroup Relations*. Cambridge: Cambridge University Press, 483–507.
Tajfel, H. (2010). *Social Identity and Intergroup Relations*. Cambridge: Cambridge University Press.
Tajfel, H. and Turner, J. C. (1985). 'The social identity theory of intergroup behavior'. In Worchel S. and Austin W. G. (Eds), *Psychology of Intergroup Relations*, 2nd edition. Chicago, IL: Nelson-Hall, 7–24.
US General Accounting Office. (2002). *Information on federal contractors that are incorporated offshore*. 1 October.
Voget, J. (2011). 'Relocation of headquarters and international taxation'. *Journal of Public Economics*, **95**, 1067–81.
Wall Street Journal. (2014). *US stands to lose billions from corporate tax inversion: One estimate puts lost tax revenue at close to $20 billion over a decade*. 14 July.
Wang, J. and Coffey, B. (1992). 'Board composition and corporate philanthropy'. *Journal of Business Ethics*, **11**, 771–78.
Ways and Means Committee Democrats. (2014). *New CRS Data: 47 Corporate Inversions in Last Decade*. 7 July.
Webber, S. (2011). 'Escaping the US tax system: From corporate inversions to re-domiciling'. *Tax Notes International*, **63**, 273–95.
Wells, B. (2014). 'Corporate inversions and whack-a-mole tax policy'. *Tax Notes*, **143**, 1429–34.
Wickert, C. (2021). 'Corporate social responsibility research in the journal of management studies: A shift from a business-centric to a society-centric focus'. *Journal of Management Studies*, **58**, E1–E17.
Wright, P., Ferris, S., Sarin, A. and Awasthi, V. (1996). 'Impact of corporate insider, blockholder, and institutional equity ownership on firm risk taking'. *Academy of Management Journal*, **39**, 441–63.
Young, S. and Marais, M. (2012). 'A multi-level perspective of CSR reporting: The implications of national institutions and industry risk characteristics'. *Corporate Governance: An International Review*, **20**, 432–50.