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THE IMPACT OF FOUNDERS ON INFORMATION ASYMMETRY VIS-À-VIS OUTSIDE INVESTORS: EVIDENCE FROM CARIBBEAN OFFSHORE TAX HAVENS

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Highlights

- Caribbean firms with retained founder director ownership have lower transaction costs of attracting outside funds.
- Benefits of founder director ownership are further increased for firms with an affiliate within a tax haven.
- Benefits of founder director ownership are higher for firms with strong shareholder rights.

Abstract

Ceding ownership to outside investors provides a control dilemma for founders. In less developed capital markets with weaker formal institutions, we argue that retained founder director ownership can lower the transaction costs of external capital. Our argument rests on incomplete contracting and institutional theory, particularly highlighting the elevated status of the founding entrepreneur. Based on a longitudinal study of 179 listed Caribbean firms, we find that retained founder ownership reduces information asymmetry vis-à-vis outside minority investors. The reduced information asymmetry is even stronger for firms with a related party/subsidiary within a tax haven, and for firms with strong shareholder rights

Keywords: Founders; Ownership; Bid Ask Spreads; Institutions; Caribbean

JEL: D53, F23, G12, G15, G32, G34

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1. INTRODUCTION

Past research has highlighted how entrepreneurial founders can provide a beneficial influence over their firms as they bring clarity of vision to organizational objectives (Jain and Tabak, 2008; Preller et al., 2020), as well as establishing a culture of altruism amongst the upper echelons of leadership (Criaco et al., 2021). The necessity of supplementary external resources precipitates a ceding of founder control to outside investors, accompanied by a realignment of the leadership's strategic goals to those of the external resource providers. This process amounts to the founders' "control dilemma" (Wasserman, 2017) surrounding the decision to attract additional external resources: to maintain control or to cede it in placating outside minority investors, where this leads to firm growth and performance. In this way, founders' retained ownership can be viewed as a governance structure used to mitigate minorities' ex-post hazard or transaction costs (Schnatterly et al., 2008). Our study evaluates the impact of variation in founder ownership on firm transactions costs, where these are measured through the spread between the firm's traded stocks' quoted bid (buy) and ask (sell) prices.

Our study adopts an incomplete contracting theoretic approach (Aghion and Bolton, 1992), specifically accommodating environmental contingencies in the contextual embeddedness of firms, founders, investors and transactions. These contingencies reflect the underlying institutional framework. This view provides a specific focus on the distribution of control rights between founder and minority outside investors as an optimal governance structure (Aghion and Bolton, 1992; Wasserman, 2017), mitigating uncertainties regarding the inherent contractual incompleteness of equity ownership contracts. In contrast, agency theory is severely constrained to a singular focus on the potential downside risks (Jensen and Meckling, 1976) arising from disenfranchised dispersed ownership in relation to empowered agents within the firm (e.g., Ang et al., 2000). It also assumes institutions to be a "thin veil" in merely supporting the external contracting model, where this lacks any deeper consideration (Aguilera and Jackson, 2010). Our strategy yields a distinctive theoretical approach that is appropriate and fitting with the founder's control cession dilemma and forms our first contribution.

We emphasize the fundamental importance of environmental contingencies in terms of the firm's and its participant actors' embeddedness within the underlying social fabric. Conceptually, this draws extensively from the nascent comparative corporate governance literature of Aguilera and Jackson (2003, 2010) in terms of the contextual influences on firms' governance and ownership arrangements within different institutional frameworks. Usefully, contingencies related to underlying institutional frameworks are accommodated in incomplete contracting theory. This motivates our application of North's (1991, 1994) political economy perspective in elaborating on Caribbean institutional frameworks, that region being unique insomuch that it includes both some of the biggest offshore tax havens in the world (Damgaard et al., 2019) and small developing states (Hines, 2010). A commonality across them all is their hegemonic dominance by extended oligarchic familial institutions (Fichtner, 2016). Our second contribution lies in our theoretical accommodation of distinctive institutional contingencies in the understudied Caribbean region.

Finally, we contribute to the burgeoning literature on firm lifecycle and the attainment of corporate milestones within it. This literature is almost entirely comprised of studies centred on Western and predominantly US economies (e.g., Boeker and Karichalil, 2002; Wasserman, 2003, 2017), which at best assume background institutional frameworks singularly supporting external contracting in the acquisition of resources. The same is true of founder-CEO succession event studies, such as Jain and Tabak (2008) and more recently Wasserman (2017), which focus on the determinants of succession, typically associated with junctures in the lifecycle and with external resource providers. However, findings from a recent founder-CEO succession study in African developing economies by Hearn and Filatotchev (2019) show the opposite to those for Western economies centred on external contracting. Here, the communitarian culture places huge importance on the founder as a basis for credibility, in social contracting and in being associated with elevated social status, which constitutes an intangible asset for the nascent firm. Our third contribution lies in extending these insights in respect to the estimation of minority transaction costs, reflected in lower traded bid ask spreads associated with higher founder-retained ownership-based control in the firm.

Of particular importance when focusing on Caribbean firms is our consideration of the unique governance contingencies within offshore tax havens, in terms of the founder's common usage of related parties and affiliates located in offshore centres, as well as the level of adoption of shareholder value governance, which is prevalent in the international capital market's investment norms. We argue that the Caribbean forms a unique laboratory within which to undertake our study, owing to the region being entirely comprised of offshore and developing jurisdictions, with no developed frameworks present. These are almost wholly dominated by extended family institutions emphasizing opacity, with handfuls of indigenous family dynasties having historically shaped formal institutional development, which has led to the development of offshore jurisdictional frameworks. There has been a meteoric rise in the use of offshore centres during the last twenty years, accounting for an estimated US$1-1.6 trillion per year in illicit cross-border financial flows, dwarfing the approximately US$135 billion in annual global foreign aid receipts (Tax Justice Network, 2019). Moreover, the IMF estimates that offshore centres located in the Caribbean are acting as conduits in over 40% of all foreign direct investment (FDI) globally (Damgaard et al., 2019). Given this importance of offshore jurisdictions to business, we focus on the governance attributes of Caribbean firms, which constitute ideal moderators for our main association between minority investors' transaction costs in buying into firms and founders in respect of their retained ownership. Firms' governance is characterized by a juxtaposition between that associated with opaque familial contexts and the shareholder value model embedded within international capital market institutions. This provides a unique opportunity for us to study the degree of shareholder value governance protections afforded to firms within offshore jurisdictions.

In our empirical analysis we use unique, hand-collected and comprehensive data for a sample of 146 listed firms from eight Caribbean nations over a 14-year sample period (January 2003 to July 2017). We apply ordinary least squares (OLS) regressions, supplemented by two-stage least squares for robustness in relation to endogeneity. We find that retained founder ownership reduces information asymmetry vis-à-vis outside minority investors, as reflected in markedly lower quoted bid ask spreads. This is in contrast to past findings on Western-based firms. The reduction in

informational asymmetry costs associated with founder ownership in the Caribbean is also more pronounced in firms which have a related party/subsidiary within a tax haven. This seems to reveal the importance of founders within contexts of potentially severe informational asymmetries, given the duplicity of such a subsidiary in acting as an optimal tax management device on the one hand, yet a powerful expropriation vehicle on the other. We also find the reduction in transaction costs - the bid ask spread - associated with founder ownership to be much more pronounced in firms with higher levels of adoption of shareholder value governance than in those with more opaque governance. This too is supportive of the pronounced importance of founders in the non-Western institutional context of Caribbean countries.

The paper is organized as follows. In section 2 we present theory and hypotheses. In the section thereafter we present our unique dataset. Section 4 contains a presentation of our methods, while section 5 contains our empirical results. In section 6 we discuss our findings, while section 7 contains our conclusions.

2. THEORY AND HYPOTHESES

Prior literature has established that entrepreneurial founders generally lack the resources needed to fully realize the performance goals of the firm (Stevenson and Jarillo, 1990). Studies such as Evans and Jovanovic (1989) estimate that founders are over sixty times more likely to be resource constrained than unconstrained. Nascent organizations' access to resources is a critical contingency, upon which their further development and growth are dependent. This argument builds on seminal views of March and Simon (1958) and Pfeffer and Salancik (1978), who argue that an organization's most critical activity concerns the establishment of a coalition large enough to ensure survival. In so doing, organizations need to provide inducements to incentivize external constituencies to contribute to the organization. However, the trade-off for such resource contributions is the demand for "the ability to control and direct organizational action" (Pfeffer and Salancik, 1978: 27). As the entrepreneurial firm progresses through its lifecycle, achieving performance goals is critical to its progression path, though doing so is contingent on procuring

sufficient resources. The attainment of such goals, such as infusions of financial capital, first product launches, and founder-CEO succession, are all representative of critical milestones for the nascent firm in which the need for supplementary resources for the wider organization is balanced against the cession of more individualized founder control.

A hitherto overlooked issue in the burgeoning lifecycle literature (e.g., Brav and Gompers, 2003; Wasserman, 2003, 2017) is that of the environmental contingency of firms, and their constituent actors and transactions, which are inextricably contextually embedded within an underlying institutional framework. Such consideration has stimulated the nascent comparative corporate governance literature of Aguilera and Jackson (2003, 2010). However, the preceding lifecycle studies are rooted in the assumption of an institutional framework supporting arm's length, external contracting, with a resulting emphasis on external resource provision and the cession of control to outside investors and constituencies. This assumption is used in studies such as Wasserman (2003), focusing on the paradox of entrepreneurial success, as defined by the precipitation of succession events, and covering the relationship between a firm in its early stages of development and a number of external constituencies and resource providers. Wasserman (2017) undertakes a similar study to ours, both theoretically in applying the incomplete contracting theory of Aghion and Bolton (1992) but also in focusing on the founder's balancing of competing needs for external resources against a subsequent loss of control rights.

In a similar vein, Boeker and Karichalil (2002) explore factors influencing founder succession, based on the premise that the firm's organizational structure and environmental contingencies have superseded the founder's own managerial capabilities, necessitating their replacement by professionalized management. However, both studies - Wasserman (2017) and Boeker and Karichalil (2002) - lack consideration of the idiosyncrasies of the institutional environment within which actors, organizations and transactions are all embedded. Moreover, the assumption is of an external contracting environment with external stakeholders and constituencies providing resources and expecting some ceding of control rights over the firm.

We argue that an overlooked feature of incomplete contracting theory is its consideration of wider institutional contingencies that shape the bounded rationality of actors that participate in transactions (see Williamson, 1979, 1988). This then relates the governance attributes of financial instruments, for example equity, debt, preference shares, debt convertibles etc, to the division of control rights (see Aghion and Bolton, 1992) between the incumbent founder and the outside investors purchasing these instruments. Specifically, the distribution of control rights is an effective means of mitigating the ex-post hazards and related costs arising from contractual incompleteness (Aghion and Bolton, 1992), in terms of unspecified terms and conditions over the full range of future outcomes. Unlike in large, developed economies, emerging and developing countries are characterized by voids (Khanna and Palepu, 2000) or deficiencies in the institutionalized protections afforded for minority property rights. Here, property rights lack the facile verifiability and subsequent enforcement by state formal institutional architecture such as impartial legal and judicial systems that goes on elsewhere. As a consequence, there is a far greater emphasis on the role of culturally defined attributes, dense socialized networks and extended families (e.g., Khayesi et al., 2014) in providing customary protections and social and economic welfare. We argue that this is true in particular in offshore tax havens, which constitute a unique subset of developing economies. This leads to our reappraisal of the underlying institutional context which forms the basis of firms' environmental contingencies.

As our starting premise, we take a seminal political economy perspective (North, 1991, 1994) in considering environmental contingencies that ultimately contribute to the incompleteness of contracts in emerging and developing national frameworks. North (1991, 1994) argues that these are largely the outcome of a combination of the legacy of predominantly European colonial heritage and the demographic narrowness of indigenous polity, which is typically dominated by empowered social elites. An effective reform of formal institutional architecture to facilitate a more equitable distribution of economic opportunities would be wholly reliant on indigenous political processes, themselves subverted under the hegemonic control of the elites and their family and kin interests. Morck and Yeung (2004) also argue that a high concentration of trust within a narrow group of

elites and their families, at the behest of the rest of society, is detrimental since it facilitates political rent seeking, which is associated with retarded national growth. In a similar vein, Morck et al. (2005) argue that "controlling owners of pyramids have greatly amplified political influence relative to their actual wealth", which "distorts public policy regarding property rights protection, capital markets, and other institutions". They link the distribution of corporate control and national institutional development together, in perpetuating entrenched national economic equilibrium in the longer term. Drawing on these preceding arguments, Morck et al. (2011) find suboptimal capital allocation and a perpetuation of income inequalities in economies with banking systems controlled by oligarchic families and their associated elites, which amounts to an embedding of "crony capitalism". Similarly, Fogel (2006) finds oligarchic familial control in economies to be associated with wide-ranging social and human capital inequalities, alongside more bureaucratic, expended and interventionalist states. Together, these studies argue that oligarchic family domination of national polity leads to pervasive structural inequalities across society, and the perpetuation of voids in external contracting protections and enforcement.

A shortcoming in the preceding burgeoning literature associating oligarchic familial control of economies to institutional voids, and a variety of suboptimal social and economic outcomes, is that it does not explicitly consider the geographic size of economies. We argue this is a critical omission that necessitates a reappraisal given our focus on the Caribbean regional economies. Moreover, larger economies and electorates are markedly more likely to have undergone independence from European colonial heritage, and to have institutional frameworks subsequently reliant on national polities. While they are subject to capture by elite and oligarchic family interests (Fogel, 2006; La Porta et al, 1999), we maintain that an altogether more powerful definition of family control is prevalent in smaller territories. Their smallness leads to the near total hegemonic dominance of a handful of families (Fichtner, 2016; Freyer and Moriss, 2013) whose influence permeates all areas of nascent society and economy. Families are extended and multi-branched in nature, with dynasties intricately interwoven with nascent institutional development in the island territory. A handicap of smaller territories is the prohibitively high costs of the provision of public

goods and services (Fichtner, 2016), as well as the reform of institutional frameworks necessary to ensure their effectiveness. These features have motivated many to either retain colonial relationships with European metropoles (and forego independence) or adopt restrictive macroeconomic and trading arrangements with a dominant regional partner and its currency (Fichtner, 2016; Freyer and Moriss, 2013), exemplified by the use of US dollars across much of the Caribbean.

Paradoxically, this has led to a huge regulatory competitive advantage (Hines, 2010). Local authorities have used their autonomy to exercise discretion (e.g., Fichtner, 2016) in selectively assimilating formal institutional architecture originally evolved in European and US metropoles. The discretion has led to uniquely bifurcated institutional frameworks (Damgaard et al., 2019), providing some of the highest protection of minority investor property rights worldwide, while simultaneously accommodating some of the biggest infringements against them vis-à-vis promoting insider and family welfare. This has resulted in regions such as the Caribbean hosting some of the world's largest offshore tax havens (Damgaard et al., 2019; Hines, 2010). However, their success hinges on the credibility and reputation bestowed on them through their maintained colonial associations, whereby European metropoles act as effective "regulators of last resort" (Fichtner, 2016). This facilitates the avoidance of association with the more nefarious aspects of opacity (Hines, 2010). It also underscores that these institutional frameworks are superficially modern and developed, while underneath being fundamentally collusive via a handful of oligarchic families.

The dominance of family institutions across both large and small Caribbean territories underscores their central importance in resource intermediation. This draws on extensive socialized trust, a common shared identity amongst members and altruism, while routinely transcending the nominally impartial state institutional architecture (Morck, Wolfenzon & Yeung, 2005). While family is an essential source of social and economic welfare, the altruism upon which these attributes are based is also associated with the emphasis of the concentration of resources under familial control as a means to a more equitable distribution across society. The hegemonic control of oligarchic families within many emerging and developing economies is associated with mutual

assurance provision of resources (Khanna and Yafeh, 2007) and protection for firms that are constituent to extended familial conglomerates. In this way, firms that would otherwise be nearing maturity in their lifecycles, or those experiencing economic downturns, are in effect shored up by the support of the internal capital markets (Almeida and Wolfenzon, 2006; Morck and Yeung, 2004), under the control of the controlling families. Such mutual assurance also extends to familial-state influence through regulatory barriers inhibiting potential competition, stifling entrepreneurship and associated potentially disruptive innovations (Morck and Yeung, 2004). The former is associated with wide-ranging barriers to entry in certain markets, which shelters the local monopolies of family firms. Such barriers and their associated economic monopolies are prolific throughout regions such as the Caribbean, naturally arising from the relative isolation and autonomy of statelets.

Given the distinctive influence of family resource intermediation and related family institutions on the social fabric within a society, we argue this constitutes a range of contingencies overlooked in prior lifecycle research applications of incomplete contracting theory (e.g., Wasserman, 2017). The social dexterity of entrepreneurial founders in terms of their adeptness in handling and negotiating with powerful local family interests is a fundamentally important resource for the firm, and constitutes an intangible asset (Fogel et al., 2008). This is visible in the elevated social status of the founder, where the social recognition and credibility attained through association with all-powerful dynastic families is essential to mitigate potential hazards from the latter seeking to protect their own firms against potential undercutting by new innovative ventures. Such protection includes the mitigation of potentially adverse regulatory barriers (Fogel et al., 2008), such as prohibitively high tariffs or additional costly bureaucratic measures, as well as access to resources controlled by families. These resources range from local labour, to capital infusions, to markets for products and supplies of factors (Khanna and Yafeh, 2007), the latter two indirectly involving tariffs, and costs associated with logistics - controlled by families - in island economies such as those across the Caribbean region. We argue that such social status and dexterity constitutes an intangible wealth of social capital for the founder, of far greater importance than the

consideration of non-pecuniary private benefits of control prevalent in studies focusing on large, developed Western economies.

Finally, a trait associated with the communitarian culture prevalent amongst emerging and developing countries is that of relational contracting. This embodies definitions of property rights based on socialized dimensions (e.g., Berger et al., 2015), as opposed to those of an impartial third-party nature prevalent in Western external contracting (Kuran, 2004), while providing a coherent framework governing the transaction. Such relational contracting can also be thought of as an institutional "bridge" between atomistic market transactions and those necessitating a more formal organizational structure. The norms and values shaping permissible behaviours within relational contracting are contingent on historical definitions of extended family (Barnett et al., 2013; Bhappu, 2000; Todd, 1985), which are reflected in vertical dimensions of subordination to patriarchal authority, and horizontal dimensions associated with mutual reciprocity (Berger et al., 2015). The norms and values underpin the central emphasis within relational contracting on the social status of the individual participant in the transaction. The participant's credibility is here determined by a combination of their own past actions, those of their immediate family and the historical reputability of their broader extended family and kinship group (Barnett et al., 2013; Berger et al., 2015). Consequently, this emphasizes both the role of the individual as well as the importance of the wider familial background in constituting the basis of socialized trust essential to any transaction.

The Caribbean region can be viewed as a microcosm of communitarian cultures, where relational contracting systems are in effect a substratum of the cultural values embedded within the major ethnic groups that form indigenous societies. These include the African (Ubuntu) (Sarpong et al., 2016), Chinese & East Asian (Guan'xi), and Arabian & South Asian (Wasta) (Barnett et al., 2013) and while they have been subject to some erosion owing to their geographic remoteness and having been subject to extensive Western cultural influences, they still constitute the basis of socialized trust (Moscana et al., 2017). Moreover, they act as a substitute for formal institutional architecture in the acquisition of resources and the mitigation of adverse selection and moral hazard

risks in transactions (Barnett et al., 2013; Berger et al., 2015). A common theme across all relational contracting systems is the institutionalized importance of the histories of the individual, as well as their families and kinship networks, in determining the credibility of the actors participating in a given transaction (Barnett et al., 2013; Berger et al., 2015). This pattern is much more far-reaching than in comparative Western contracting, where only that of the individual's personal history is relevant. However, the founder's institutionalized social status is also of critical importance, given the collective notions of communal ownership of assets and cash flow revenues prevalent in communitarian cultures. Khavul et al. (2009) elaborate that African families are much larger than their Western counterparts, with distant cousins having the same social status, obligations and rights as those attributed to immediate kin in Western families. This leads to a unique welfare conundrum in communitarian societies. On the one hand, extensive family networks yield considerable access to information and resources (Sydow et al., 2020) that together constitute economic opportunities for entrepreneurial exploitation. Conversely, on the other hand, the founder's presence is solely sufficient in mitigating competing claims against accumulated assets, revenues and capital from a multitude of welfare claims (Khayesi et al., 2014) from across the wider familial and kin network. In summary, the duplicity of extended family networks in communitarian cultures such as those embedded within African, Asian and Arabian ethnicities emphasize an institutionalized importance for founders.

In summary, the preceding arguments emphasize that a founder's personal identity within both their ethnic group and indigenous society is a critical resource within a wider web of dense socialized networks based on extended reciprocity (Nahapiet and Ghoshal, 1998). Moreover, these arguments are in line with organizational imprint research that emphasizes how a firm's strategic choices are influenced by its historical evolution in terms of building knowledge-related, intangible resources, as well as changing financial constraints (Hannan, 1998; Helfat, 1997; Stinchcombe, 1965). Given this profound importance attributed to the founder within a societal fabric based on communitarianism, we posit that their elevated ownership-based control rights are essential in mitigating ex-post contractual hazards, given the inherent incompleteness of formalized contracting

in such networked institutional frameworks. As such, higher ownership by founders is theoretically associated with a reduction in transactions costs associated with minority investor equity participation within the firm, given the importance of elevated founder control as a form of governance.

We argue that the local stockbroker communities, who form the indigenous stock market, utilize their intimate knowledge of the local environment in conjunction with their understanding of international capital market norms in setting the quoted bid (buy) and ask (sell) prices of the traded stock. Local stockbrokers have access to considerable knowledge and information about firms and the local environment through the powerful social ties that transcend the nascent securities market infrastructure. At the same time, they face considerable institutionalized pressure to conform to international capital market norms of "best practice" (Suss et al., 2002). This is because of the need to maintain the wider reputability and credibility of the territory's formal institutions, essential to maintaining its competitive regulatory advantage as an offshore centre. We contend these pressures constitute a form of market discipline, with stockbrokers providing accurate quoted bid and ask prices for the listed firm's stock in order to ensure the market for the stock clears. Consequently, stockbrokers reflect the changes in transaction costs, attributable to minority investor equity participation within founder-owned firms, in the spread between the bid and ask prices. This is reflective of the perceived quality of governance related to elevated founder ownership-based control rights over the firm. Given these arguments, we propose the following hypothesis:

Hypothesis 1: *Founder ownership is negatively associated with the firm's information asymmetry vis-à-vis outside investors.*

2.1. Governance contingencies

Next, we explore tensions in the main theoretical association, by looking at moderation by two aspects of governance. The first aspect is the presence of a related party, or subsidiary, located

within an offshore tax haven. The second aspect is the degree of adoption of shareholder value governance.

The establishment of a related party or subsidiary located within an offshore tax haven effectively internalizes the duplicity of this entity within the broader corporate network. On the one hand, such a related party is a potent vehicle in the reduction of tax liabilities (e.g., Jones and Temouri, 2016; Kohlhase and Pierk, 2019) while, paradoxically, it is also a powerful potential expropriation tool for the appropriation of corporate rents (Chernykh and Mityakov, 2017; Doidge et al., 2007). This draws on the two central characteristics of offshore tax havens, secrecy and low tax rates, forming the basis of regulatory arbitrage that is exploitable by firms with an international scope of operations. This loophole is exemplified by entrepreneurial founder-owned firms transferring the ownership rights over innovative technologies or tangible production assets to a related party or subsidiary located within an offshore jurisdiction. Chernykh (2008) exemplifies the complexity, in tracing the ultimate control of Russian corporations that use Cyprus as an opaque offshore tax haven. Royalties can be levied against the focal founder-owned firm for its use of patented technologies, and these royalties can be overly high. This exploits the fact that national taxation authorities have little means to gauge the true "market" or "arm's length" value of such a transaction, while their ability to prove that the offshore entity is a related party is impeded by opacity. The royalties are classed as deductibles in the focal firm's income statement, reflecting the opaque transfer of potentially taxable profits away from the firm.

While the preceding example is representative of one tax management strategy common to entrepreneurial firms, a bewildering array of offshore-tailored corporate organizational forms exist, differing in opacity and tax exemption. The former is exemplified by a non-exhaustive range of corporate structures such as offshore trusts, closed-end funds and offshore partnerships. The incorporation of these structures within control pyramids (Atanasov et al., 2010) amplifies the control alongside the opacity (Chernykh, 2008). Additionally, there is significant variety in the exemption form of organization, being associated with exemption from earnings-based taxation on domestic, regional or international operations. This is in addition to minimal or zero dividend and

capital gains taxes. Therefore, the combination of opaque control and various low-tax regimes forms the basis for a potentially huge range of innovative aggressive tax management strategies. Paradoxically, they can also be used as effective expropriation vehicles in which both income and control are obfuscated (Atanasov et al., 2010).

Given the duplicity of the presence of an offshore-located subsidiary within a firm, minority investors buying into the firm's ownership are exposed to even greater residual risks. Consequently, there is even greater potential opacity and incompleteness in contracts (Aghion and Bolton, 1992) given the presence of such a potentially powerful expropriation technology within the focal firm. This in turn leads to an even greater emphasis on the enhanced role of the founder's ownership-based control rights, as a means of governance that can plausibly mitigate the elevated expropriation risks. Therefore, the presence of such an offshore related party precipitates increased sensitivity of minority investor transactions costs, reflected in the bid ask spread, to founder ownership. Stockbrokers evaluate these attributes beneficially in terms of minority investor risks, reflected in an increased rate of reduction of the bid ask spread in response to increases in founder ownership.

Contrastingly, in firms with no such offshore subsidiary, there is a lack of access to powerful expropriation technology (Doidge et al., 2007), which leads to less sensitivity in the rate of decline of stockbrokers' quoted bid ask spreads to increases in founder ownership. Here, consideration of contractual incompleteness fails to take into account the additional risks associated with known and visible tunnelling technology (Atanasov et al., 2010). These theoretical arguments lead to our moderating hypothesis:

Hypothesis 2: *The negative association between founder ownership and information asymmetry vis-à-vis outside investors is further negatively moderated by firms having a subsidiary/affiliate located in a tax haven.*

Next, we consider the moderating impact of the level of a firm's adoption of shareholder rights governance on our main association. This form of governance is associated with the enhanced protection of minority property rights, which underpin arm's length contracting between transacting parties and the external acquisition of resources (Aguilera and Jackson, 2003). Notably, these norms are embedded within the institutional frameworks governing international capital markets. Consequently, we argue that higher adoption of shareholder rights governance reflects a change in firm strategy towards seeking increased engagement with external constituencies (e.g., Aoki, 2001) in order to acquire supplementary resources. This is reflective of a shift in the demographic audience from whom the firm seeks isomorphic conformity and legitimacy (DiMaggio and Powell, 1983). Moreover, from a minority investor's viewpoint, the firm comprises two powerful governance characteristics, mitigating the vulnerabilities stemming from the incompleteness of the contractual terms of ownership (Aghion and Bolton, 1992). The first is that of elevated founder ownership-based control, which mitigates the environmentally contingent risks – principally derived from potential tunnelling. The second occurs through the firm's adoption of shareholder rights governance, which reflects deeper managerial discourse (see Hoskisson et al., 2002) within the firm in terms of a visible motivation for and commitment towards the protection of minority property rights. The combination of the two implies that, as shareholder rights governance adoption increases, transaction costs in the form of the bid ask spread are expected to decrease.

Conversely, in contexts where there is low firm adoption of shareholder rights governance, this is reflective of the firm seeking legitimacy and therefore conformity in governance with underlying opaque familial institutional frameworks. However, this non-adoption of shareholder rights governance and associated protections for external minority investors is also reflective of a very different motivation emanating from underlying managerial discourse within the upper echelon of the firm. Given the increased contextual embeddedness of the firm within the communitarian cultural context, the role of the founders' increased ownership as optimal governance is more questionable. Founders are more susceptible to collective notions of property rights amongst distant kin than to firms' cash flow and assets, which erodes firm value. Hence, the adoption of shareholder

rights governance is just as much a gauge of underlying founder motivation to protect minority property rights, given the relatively high absolute costs associated with governance conformity. Therefore, at lower levels of shareholder rights governance adoption, increasing founder ownership may increase minority transaction costs through an increase in the bid ask spread. This theoretical argument leads to our final moderating hypothesis:

Hypothesis 3: *The negative association between founder ownership and information asymmetry vis-à-vis outside investors is further negatively moderated by firms having strong shareholder rights governance.*

To summarize our theoretical arguments, we propose a contingency model with a base effect and two contingency (moderating) effects, as outlined in Figure 1.

Figure 1

3. DATA

Our Caribbean sample comprises formal securities markets, which attract domestic alongside foreign listed firms. We omitted the informal *Saint Vincent and the Grenadines securities exchange*, which lacks recognition by national regulators, and the *Haitian stock exchange*, in the francophone République d'Haïti, and the *Bolsa de Valores de la República Dominicana*, in the Hispanic (Spanish-speaking) República Dominicana, neither of which have attracted any equity listings since their inception. Our final omission was the *Dutch Caribbean securities exchange*, in Curaçao, Netherlands Antilles, which is designated as an offshore market focusing solely on the attraction of international listings[1]. This led to a final sample comprising the eight established equity markets of Bermuda, the Bahamas, Barbados, the Cayman Islands, Jamaica, the regional Eastern Caribbean securities exchange, Trinidad & Tobago, and Guyana.

[1]The websites for these exchanges are Saint Vincent and the Grenadines (https://www.svgex.com/), Dutch Caribbean (https://www.dcsx.cw/), República Dominicana (https://bvrd.com.do/), and Haïti (http://www.haitianstockexchange.com/hsm/).

The dataset is unique and was constructed in three stages. The first involved a compilation of a comprehensive list of domestic firms with listed ordinary shares, obtained from each national stock exchange. Thus, we avoided foreign firms and funds attracted in considerable numbers due to seeking an offshore listing as part of their financial strategy. Such ordinary shares have single class voting rights, namely one share – one vote. Thus, entities with primary listings of dual or multiple class shares, preference shares or convertible instruments were removed from this study. Lists of listed firms were compiled for each Caribbean stock exchange from the year 2000 or inception, whichever date was earlier. These lists also considered new listings, suspensions and de-listings that occurred during the period 2000-2017 inclusive, to account for potential survivorship bias in the final dataset. Appendix Table 1 lists the data sources. This process resulted in 179 listed firms.

The second stage in the construction of the dataset involved the procurement of individual listed firms' annual reports from across the Caribbean region.[2] Some firm annual reports were obtained directly from the national stock exchange websites of the Bahamas, Bermuda, Jamaica and Trinidad & Tobago. Other firms' annual reports were obtained directly from the exchanges of Barbados, and the Eastern Caribbean securities exchange, while additional data were directly procured from the national regulator (GASCI) in the case of Guyana. Individual listed firms' websites were used in the case of the Cayman Islands, being relatively time efficient given the handful of listings there. Additional recourse to individual listed firms was also undertaken across the Caribbean region to supplement the original data collection and augment any missing values. This led to an unbalanced panel sample of 179 listed firms' annual reports. However, there is some variation in the availability of annual reports; typically, before 2004, there are many omissions. All firm-specific balance sheet and governance variables were then sourced directly from the collected annual reports. All data were converted to US dollar end-of-period equivalent values to facilitate

[2] The exchanges in Haiti and Suriname were left out due to being too small and inactive to even produce bid ask prices. Also, the stock exchange in Dutch Curacao was left out since it is purely used for offshore secondary listings of "only foreign", mostly Chinese, companies. The market in St Vincent & the Grenadines – which is an unrecognized and unregulated offshore exchange was also left out of consideration.

comparison in a multi-country sample. This led to a final sample of a cross-section of 179 listed firms with a time series of up to 17 years for each firm.

The third and final step in constructing the dataset consisted of the procurement of secondary-market financial trading data. This entailed the systematic collection of daily bid, ask, and closing prices, daily traded volumes, and number of shares issued and outstanding. These data were sourced from Bloomberg exclusively in the case of Jamaica and Trinidad & Tobago. However, they were collected directly from the exchanges of Guyana, the Bahamas, Barbados, the Cayman Islands, Bermuda and Eastern Caribbean. Again, all data were converted to US dollar end-of-period equivalent values to facilitate comparison in the multi-country sample. This led to a final sample of 146 listed firms with such secondary trading data across 14 years in a reduced sample time frame of 2003 to 2017. The 33 firms omitted due to data unavailability were randomly distributed between the largest markets of Jamaica and Trinidad & Tobago. This gave a final unbalanced panel sample of 1,339 firm-year observations.

4. METHODS

4.1. Dependent variable

We measure the transaction costs associated with a single buy or sell order submission in the trading system, as compared to the full spread, which is representative of a "round trip" of both buy and sell legs in buying into then liquidating a trading position (see Stoll, 2000). This is calculated by the average of the current month's average bid ask spread and that of the preceding month. The average monthly bid ask spread is estimated by subtracting the monthly average of the end-of-day closing bid (buying) prices from their ask (selling) price equivalents, and then dividing this by the midpoint of those monthly average bid-ask prices. Our use of averages minimizes outliers and averages out highs and lows in quotes that result from monthly sampling.

4.2. Explanatory variable

Our main explanatory variable is the percentage ownership of the entrepreneurial founders. The figures are identified from director biographies and the company history sections of annual reports, while the non-founder-director counterparts are sourced from the director biography sections alone. This corresponds to *Hypothesis 1*. To facilitate an additional robustness test, we also use the percentage ownership of non-founder directors who are not affiliated or tied to any dominant block owner.

4.3. Moderating variables

Our study utilizes two moderating variables regarding our main effect identified above. The first, corresponding to *Hypothesis 2*, is a firm-level binary effect adopting the value of one if the listed firm has a traceable subsidiary or affiliate entity located in an offshore tax haven and zero otherwise. Upon closer analysis of the firm annual reports and additional information sources outlined in Appendix Table 1, a number of founders established the focal firms while participating in more opaque networks of firms and entities under their control. This includes several Jamaican entrepreneurial founders with links to other firms through their spouses. Some of these firms had been established in Castries, St Lucia and the Turks & Caicos Islands, which are dedicated offshore financial centres.

The second moderating variable is the firm-level adoption of shareholder rights governance, which corresponds to *Hypothesis 3*. We adopt the rights of shareholders sub-index of the OECD's (2004) principles of good governance[3], formed from the equally weighted average of nine elements and sub-indices (A.1 to A.12 in Appendix Table 2). The nine elements are drawn from 33 individual governance elements, identified annually for each individual firm from the annual reports. The focus of this specific index is on capturing the quality of minority informational rights protections, annually, for each firm. Constructing such a firm-level index is highly labour-intensive and involves unrestricted access to all annual reports for each firm in each year of listing. For this study, it alone resulted in 2,506 firm-year observations for each of the 33 governance elements. Our

[3] https://www.oecd.org/corporate/principles-corporate-governance.htm.

construction of this index represents an extension of the inaugural firm-level governance "G-index" comprising 24 provisions, of which 22 were firm-level, in the seminal study by Gompers et al. (2003), which was restricted in application to the US setting. To mitigate collinearity concerns, the firm shareholder rights index was centred and normalized, while the variance inflation factors (VIFs) were found to be less than ten in all models.

4.4. Control variables

We adopt three sets of controls. The first is a single *ownership control*, which is the total of all other block ownership in the listed firm outside of that supporting the main effect, namely business angels. This is included to mitigate potential omitted variable bias and is reported in annual percentage terms. The values are extracted from the ownership holdings statement or the notes/appendices section within the annual report.

The second group of controls consists of *institutional controls*, where the first is state-level, or formal, institutional quality. This is formed from the equally weighted average of the six World Governance Indicator (WGI) metrics (Kaufman et al., 2009). The six dimensions are (1) Voice and Accountability, (2) Political Stability and Absence of Violence/Terrorism, (3) Government Effectiveness, (4) Regulatory Quality, (5) Rule of Law and (6) Control of Corruption. Detailed definitions of the six metrics alongside their sources are provided in Appendix Table 2. They range in value from -2.5 to +2.5 but here have been rebased to a 0 – 10 scale before aggregation. The second institution control is the ratio of aggregate stock market capitalization to GDP, expressed as an annual percentage and obtained from the World Bank database.

The third group consists of *microstructural controls*, which capture four dimensions of market microstructure, and are all converted to their natural logarithms in line with Stoll (2000). *Price* is measured as the monthly average of the daily closing prices for each stock, calculated across the preceding trading month. Prior microstructure literature uses this to control for discreteness, which is where prices, rather than being a natural continuum, are reported in discrete levels or to a number of decimal points. This results in continuous streams of orders being clustered

at several discrete price intervals (see Christie and Schulz, 1994). This will have an impact on spreads (Harris, 1994). Such a price-related impact on the bid ask spreads from using the trading system would be incorporated within the order processing costs of our theoretical model. *Volatility* is measured as the daily standard deviation of stock price returns, formed from differences between daily closing stock prices as expressed in local currency terms. While the preceding microstructure literature states that this can be used to control for holding premiums related to the inventory costs of market makers (Bollen et al., 2004), in our simplified microstructural model, it controls for the risks of brokers mispricing the limit orders submitted to the trading system for matching on behalf of client investors. The price of newly placed limit orders (buy and sell sides) is contingent both on the previous optimal bid/ask price, which is assumed to capture all previously available information, but also additionally on any new information. Hence, the risk of mispricing, and hence volatility or uncertainty, arises through the updating of information sets with new information reflected in bid ask spreads.

Traded Volume is measured as the total shares traded daily for each listed stock, averaged over each month. This, alongside the prior two variables, is then averaged across the preceding year. Transactional volumes are related to order processing risks, with lower volumes incurring higher order processing costs, in turn reflected in spreads (Stoll, 1978). However, lower and more erratic order volumes can also disguise information asymmetries, as those with insider information seek to fragment orders into multiple smaller orders to conceal the superior information. Hence, volume is related to adverse selection and bid ask spreads. *Size* is our final control. Following Schnatterly et al. (2008) we drop market capitalization and adopt total assets, which mitigates concerns over collinearity with the stock price, while being relatively constant during the entirety of the preceding year. Larger firms have more transparent informational environments, owing to higher analyst coverage stemming from their being included in blue chip indices, and media and press coverage owing to their size and complexity of operations. While the opposite is true for smaller firms, at the same time they are less compliant with the dispersed ownership model and more likely to be governed by dominant block owners, such as a family. This exacerbates information asymmetries,

leading to higher spreads. Individual closing stock prices and traded volumes are obtained daily, directly from each national stock exchange. The total number of shares issued and outstanding for each firm, and the total assets, are obtained directly from individual annual reports.

4.5. Empirical model

We construct pooled OLS regression models, based on unbalanced panels with the firm-year as the unit of observation. The pooled estimators draw on both cross-sectional (firms) and time-series dimensions, in line with Schnatterly et al. (2008), and addressing a shortfall in the prior literature in which only individual cross-sections are considered (e.g., Stoll, 2000). However, this presents two modelling concerns. The first stems from the presence of stochastic martingales within the data-generating processes of price time series. This is mitigated by our use of low-frequency annual data and our sample group which comprises highly illiquid and price-static markets. The second relates to potential autocorrelation and heteroskedastic issues regarding the time-series component in the errors. To circumvent these issues, we adopt country, industry[4] and time (year) binary effects. These binary effects also help us to control for latent or unobservable differences between firms, such as differences in industry, levels of regulation, governance or ownership, in line with Schnatterly et al. (2008). Then, we apply White cross-sectional standard errors and covariance, which take account of potential period (time-series) clustering, while clustering by country in the standard errors.

5. EMPIRICAL RESULTS

The distinctive attributes of founder involvement in firms are visible in a number of observations from Table 1. The first is that by far the highest number of founder-led and owned firms is found in Jamaica, the largest economy within the region. However, despite the apparent smallness of indigenous economies within the very small territories and archipelagos of Bermuda, the Bahamas

[4] We use a binary 1/0 dummy accounting for the country or jurisdiction of the primary listing and a binary 1/0 dummy for 24 industry categories as defined in the Global Industry Classification (GICS) codes developed by MSCI (see https://www.msci.com/gics). Four of these industries are not present in our sample, resulting in 20 industry categories being used in our study.

and the Cayman Islands, all three have at least some founder-owned firms within the formal economy as compared to their burgeoning informal counterparts. Trinidad & Tobago also has one founder-owned firm amongst its listed firms which, in conjunction with the findings for the preceding smaller territories, is evidence of entrepreneurial activity within largely moribund formal economies dominated by oligarchic families. A total of 34 firms out of 179 are founder-owned, indicating a significant presence of entrepreneurial activity in the formal economies.

The second observation is that a further 13 firms have founder involvement on their board of directors, where the founder has succeeded from the leadership position but remained predominantly in a nonexecutive director role. While this signifies that the founder has retained some influence in the firm, an altogether more important consideration is that the firm retains access to legitimacy and resources derived from the founder's presence, which is of central importance in network economies. The third observation is that, while average founder ownership is 36.16% across the sample, this is subject to huge variation, from 0.01% in Barbados to 51.88% in Jamaica. This is in contrast to non-founder director ownership (not reported here), which is visibly much smaller at an average of 2.07%, with a standard deviation of 7.29%. These figures provide an indication of the minimal equity participation of non-founder directors, owing largely to the overwhelming dominance of other forms of governance practiced across the Caribbean, such as extended family business groups. The fourth observation is that the average bid ask spreads across the region are amongst the highest worldwide, at 12.17%, accompanied by equally high variation as seen by a standard deviation of 17.83%, indicative of considerable heterogeneity. Our final observation is the very high proportion of firms (79.14%) with related party affiliates or subsidiaries located within designated offshore tax havens.

Table 1

5.1. Bivariate analysis

There are minimal correlations amongst the variables, as is visible from Table 2, despite many being highly statistically significant. The notable exception is that between the stock price and its

traded volume (-0.6876, $p \leq 0.005$), indicative of the opposite association to that reported in the literature (e.g., Stoll, 2000). Here, higher trading volumes in a given stock are associated with a lower, as opposed to a higher, price. One explanation for this counter-intuitive association is that larger firms have higher stock prices, associated with their being better known, yet at the same time are largely moribund, given they carry significant tunnelling risks from being controlled by families or the state, such ultimate owners being ubiquitous in developing economies. These risks lead to lower interest from investors, resulting in lower traded volumes and reflecting information asymmetries regarding tunnelling risks.

While the minimal correlations mitigate concerns over potential collinearity, we further verify this through extensive employment of VIFs in each estimated model, using this to guide our selection of variables to be included, and finding the VIFs for all the variables in the models to be under ten.

Table 2

5.2. Multivariate results

The results of our hypothesis tests are detailed in Table 3. The evidence statistically supports our three proposed hypotheses. In terms of our main association between founder ownership and the bid ask spread, we find in model 1 a negative association which is also statistically significant (-0.112, $p \leq 0.005$). In economic terms, this implies that an increase of one standard deviation in founder ownership results in a -11.2% reduction in the bid ask spread. This statistically supports *Hypothesis 1*. This association is inversely moderated in model 2 by the binary variable for a subsidiary located in a tax haven (-0.083, $p \leq 0.005$). In economic terms, following moderation by a tax haven subsidiary, the combined effect of founder ownership is a reduction of -15.8% in the bid ask spread. This result provides statistical support for *Hypothesis 2*. The main association is further moderated in model 3 by the degree of shareholder value governance adoption. This further negatively moderates the main association for founder ownership, statistically significantly (-0.049, $p \leq 0.05$).

In economic terms, the combined effect is a reduction of -14.3% in the bid ask spread. This result provides statistical support for *Hypothesis 3*.

In terms of the controls, there is consistency in size and direction (sign) across the control variables for all of the models, which provides further reassurance regarding the mitigation of potential collinearity. Higher bid ask spreads are associated with weaker formal institutional quality ($p \leq 0.01$), lower levels of firm adoption of shareholder value governance ($p \leq 0.01$) and firms having a subsidiary or related party located in an offshore tax haven ($p \leq 0.01$). Elevated bid ask spreads are also seemingly counter-intuitively associated with higher block ownership ($p \leq 0.01$) and lower stock market capitalization to national GDP ratios ($p \leq 0.005$). Finally, higher bid ask spreads are associated with higher stock prices ($p \leq 0.10$) and volatility ($p \leq 0.005$) and lower traded volume ($p \leq 0.005$) and total assets or firm size ($p \leq 0.005$).

Finally, the adjusted R^2s across all six models are in the region of 29%-30%, in line with prior literature using cross-sectional methods (e.g., Stoll, 2000) or similar pooled methods (e.g., Schnatterly et al., 2008). A visible, if incremental, increase in the adjusted R^2s for the moderating models (both tax haven subsidiary and shareholder value index) compared to that of the main association in model 1 is evident, substantiating the moderating effects.

Table 3

As a final exercise, using estimated model parameters, we input a range of values for founder ownership, first to account for the binary change regarding whether or not the investee firm has a subsidiary located in a tax haven (Figure 2), and then over a range of index values of firm adoption of shareholder rights governance (Figure 3).

The two-dimensional interaction plots in Figure 2 reveal increasing founder ownership to be associated with a decreasing bid ask spread. Moreover, the profile of investee firms with a subsidiary in an offshore tax haven is shown by a dotted line for the association between the presence of founder ownership and the bid ask spread. The dotted line is decreasing at a steeper rate than the solid line showing the relationship for firms without such a subsidiary. Together, these loci

reveal that, in the presence of a powerful potential expropriation technology (a subsidiary located in an offshore tax haven), the socialized trust associated with the founder plays an even greater role in mitigating information asymmetries vis-à-vis outside investors. Evidence from the separation of error bars reveals this relationship increases in statistical significance as founder ownership increases, as revealed by progressively bigger gaps between the lower and upper respective error bars.

Moderation by firm shareholder rights governance results in a three-dimensional probability surface, shown in Figure 3, where an inflexion point is clearly visible. With increases in founder ownership, and at low levels of adoption of shareholder value governance, there are very slight rises in the bid ask spread, while at high levels of adoption of shareholder value governance there is a substantial reduction in the bid ask spread. This is in line with the theoretical expectations outlined in our hypotheses.

Figures 2 and 3

Additionally, we undertook an extension of our main study in considering the association between non-founder director ownership and the bid ask spread, and its subsequent moderation by the same variables as in the preceding analysis. These results are not displayed, for brevity reasons, but are available from the authors upon request. All empirical associations, including interactive terms, were the opposite, in terms of direction (sign), of those for founder ownership. Notably, the moderating associations were over twice as large and in the opposite direction, leading to aggregate economic effects more than double those of the preceding founder ownership analysis. As a further extension, using estimated model parameters, we input a range of values for non-founder ownership, first to account for the binary change regarding whether or not the investee firm has a subsidiary located in a tax haven, and then over a range of index values of firm adoption of shareholder rights governance. The profiles of both graphs were the opposite of those in the preceding analysis for founder ownership. In the former, increases in non-founder ownership led to progressively higher bid ask spreads in firms without subsidiaries located in offshore tax havens, and this was further

accentuated in firms with such subsidiaries. In the latter, at a low level of shareholder value governance adoption by firms, increasing non-founder ownership led to sharp reductions in the bid ask spread while the opposite was true at corresponding high levels of shareholder value governance adoption. These findings are the opposite of those for founder ownership and indirectly provide support for all three of our hypotheses in terms of underscoring the profound difference between founders and their non-founder counterparts who serve on boards of directors.

5.3. Robustness checks

Finally, we undertook two additional robustness checks on our models. The results of these are again omitted for brevity reasons but available from the authors upon request. The first involved the re-estimation of all six models for founder and then non-founder ownership using two-stage least squares (2SLS) with instruments being the number of founders serving on the board of directors and then the total number of directors on the board[5]. This model corrected for potential endogeneity and reverse causality between the bid ask spreads and both founder and non-founder ownership. The empirical results further substantiated our initial results from the OLS models and supported our three hypotheses. The second robustness check involved tests for the monotonicity of ownership. We introduce an additional ownership-squared term into the model for both founder and non-founder ownership[6]. In the case of founder ownership, the squared term lacked statistical significance at any discernible confidence margin, implying that the main associations between founder ownership and the bid ask spread were linear and monotonic. Contrastingly, in the case of non-founder ownership, the squared term was highly statistically significant (-0.001, $p \leq 0.005$). When this was plotted, it resulted in a quadratic maximum at 26% ownership, corresponding to a 24.56% bid ask spread, while thereafter the curve descended with further increases in non-founder ownership.

[5]These are available in Supplementary Appendix Table 1 of the online version.
[6]These are available in Supplementary Appendix Table 4 of the online version.

6. DISCUSSION

Developing economies are commonly characterized as having institutional "voids", defined loosely as deficiencies in the protection afforded to external contracting (e.g., Khanna and Palepu, 2000). This produces frictions in the market resource allocation mechanism (Morck and Yeung, 2004) and creates a wedge between the internal and external opportunity costs of capital. This emphasizes a greater role for informal institutions, such as culture, in facilitating contracting and the acquisition of resources, while additional sociological literature (e.g., Arregle et al., 2019) proposes alternative resource intermediation by entities such as extended families, whereby voids are circumvented by social trust. Together, these background institutional characteristics underscore the very different environmental contingencies of firms in developing economies vis-à-vis their developed economy counterparts (e.g., Aguilera and Jackson, 2010). Such contingencies exert a profoundly important influence in shaping the governance of firms and their transactions, which are contextually embedded within this underlying institutional framework. Our study takes an incomplete contracting theoretic approach by emphasizing how, for entrepreneurial founders, retaining ownership is shaped by the environmental contingencies of firms.

The singular emphasis of prior literature (Boeker and Karichalil, 2002; Wasserman, 2003, 2017) has been on founders seeking to retain control owing to their consumption of non-pecuniary private benefits associated with their status. As firms grow, this stimulates the need for the strategic realignment of the firms' leadership in line with the performance-based emphasis of minority outside investors. This is accompanied by an increasing necessity for externally sourced resources (capital) so that the firm can meet its longer-term strategic development objectives, precipitating a number of natural junctures at which organizational reshuffles can be undertaken, with the founder ceding ever more control (Aghion and Bolton, 1992). This process is indicative of a liability associated with maintained and elevated founder control, from the viewpoint of outside investors (Wasserman, 2017), albeit within an underlying institutional framework supporting external arm's length contracting. Contrastingly, our findings reveal that the founders' importance does not diminish for prolonged periods following a firm's establishment as a publicly traded firm. Instead,

we find that founders remain of central importance to the optimal governance of the firm, from the viewpoint of minority outside investors.

The results of this study indicate that, as founder ownership increases, there is a sharp reduction in minority owners' transactions costs, captured in the spread between stockbrokers' quoted bid (buy) and ask (sell) prices of the traded stock. This evidence alludes to the maintained importance of founders in mitigating the hazards associated with a variety of socialized contingencies in the underlying institutional frameworks within which firms and actors are embedded. Moreover, we propose and find support for a *reversal* of the "control dilemma" associated with maintained founder control in Western firms (Wasserman, 2017), as our empirical evidence supports that minority outside investors value maintained founder control within their investee firms, as shown by the reduced bid ask spreads.

The strength of a positive association between founder ownership and control is further investigated through our moderation of the main association by the binary condition of whether (or not) the firm has a related party, or subsidiary, located within an offshore tax haven. This is as much of a potent technology facilitating optimal tax management (Kohlhase and Pierk, 2019) as it is an expropriation vehicle (Chernykh, 2008). Our findings in relation to this moderating variable are that firms with such an offshore subsidiary experience an even greater reduction in bid ask spread than those that lack such a related party. This evidence is particularly supportive of the profound importance of founders' ownership in reducing outside minority investors' transaction costs under conditions of extreme uncertainty. The presence of such a related party located in an offshore jurisdiction is simultaneously a powerful means to reduce tax liabilities and an expropriation vehicle, with this duplicity underscoring the incompleteness in financial contracting.

One of the most important financial milestones for developing-economy firms is the decision to seek supplementary external resources (i.e., capital), as this can fuel expansionary growth and value creation. It precipitates a transition in the institutional framework from which legitimacy and governance conformity is sought, as the firm shifts its demographic focus from indigenous to international capital markets. At a firm level, this is typically accompanied by the

increasing adoption of costly governance that supports stronger minority shareholder property rights protections. Our findings point to a significant reduction in minority outside investors' transaction costs, or the bid ask spread, as a result of Caribbean firms' increased adoption of enhanced shareholder-rights-centred governance in conjunction with elevated founder ownership. Conversely, at lower levels of shareholder rights adoption, increasing founder ownership is accompanied by a marginal increase in bid ask spread. This is reflective of the risks associated with founders' questionable commitment to credible governance protections affording minority investors protection from tunnelling.

The managerial implications of our study are that the importance of the institutional framework within which the firm and all participant actors are embedded is not to be overlooked. Consideration of environmental contingencies are of profound importance in terms of a reappraisal of the "fit" of idealized governance outcomes, taken from studies in large, developed Western economies and merely applied to their developing counterparts. Our evidence cautions against such "one size fits all" managerial insights honed from studies from Western settings. This is especially true in terms of the institutionalized role of entrepreneurial founders within firms, which completely changes between underlying environments centred on external contracting versus those centred on family institutions, as are prevalent in many developing economies. Our findings also point to firms' costly adoption of shareholder value governance, providing a revealing insight into the underlying motivations of founders towards the tunnelling of value from their firms. In particular, governance adoption is indicative of motivations counter to nefarious appropriation, while the opposite is true for firms with at best minimal governance adoption.

The broader policy implications from our study arise from development policy initiatives within many developing countries, and especially those across the Caribbean region (Caribbean Development Bank, 2016), designed to stimulate the entrepreneurial rejuvenation of essentially small, isolated and moribund economies (UN-OHRLLS website, 2021). Our findings point to a greater consideration of the indigenous institutional framework in policy formation. In particular, caution should be applied in enacting policies influencing entrepreneurial founders' cession of

ownership-based control, such as those promoting the attraction of outside venture capital investment within developing economies. This process is formal in nature and therefore focused on the cession of control rights to facilitate resource provision.

Our study has several limitations and potential extensions. The first is that it is constrained in geographic scope to the mostly English-speaking part of the Caribbean region, and it would be useful to widen its scope to encompass the non-Anglophone Caribbean. The second is that we do not measure any firm performance attributes nor the monetary value of the founder's elevated holdings. The third is that we do not address how the founder effect could be moderated by the configuration of the top management team, as recently addressed by Grilli et al. (2020). However, a major constraint related to these limitations is the severe impediments in obtaining data, particularly onerous in offshore tax havens such as the Caribbean. One way around this obstacle would be the application of qualitative methodologies by undertaking a "finer grained" analysis to complement the quantitative methods applied here (Harrigan, 1983). This approach could focus on founder motivations influencing the control versus value-creation dilemma, and in providing a greater depth of insight into the moderating influence of contingencies related to the institutional environment and culture.

7. CONCLUSIONS

Our study underscores the fundamental importance of founders' retained involvement within firms as a means of partially mitigating uncertainties concerning post-investment contractual incompleteness. This suggests that founders' retained ownership of and involvement in Caribbean firms creates lower transaction costs in the attraction of outside funds, which is opposite to the effect typically found in developed Western-based economies. Moreover, this lower transaction cost due to founder retained involvement in the Caribbean nations is highly contingent on the institutional framework within which the firm operates, including aspects such as shareholder rights and subsidiary structures. The results of this study point to the importance of considering the size of the nation in which a firm is domiciled, as well as the environmental contingencies surrounding the

firm, in order to properly understand how information asymmetries are valued by outside minority investors.

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Table 1. Descriptive statistics – ownership, governance and bid ask spreads for sample period 2000 to 2017

This table presents the descriptive statistics for our sample. N is the sample size of firms per country and includes all firms currently listed, alongside all firms that were listed and subsequently delisted or suspended their listings during the sample time frame. This mitigates survivorship bias.

Market	**N**	Founder ownership in firms with founder retained involvement			Founder-CEO	No. firms with founder board involvement	Bid ask spread	Shareholder rights	Subsidiary in tax haven
	#	% [Std. dev.]	Max, %	Min, %	#	#	% [Std. dev.]	% [Std. dev.]	% [Std. dev.]
South East Atlantic									
Bermuda	14	12.19 [25.30]	63.00	0.00	2	3	21.68 [24.32]	15.09 [5.04]	100.00 [0.00]
North West Caribbean									
Cayman Islands	3	6.18 [14.66]	39.12	0.00	1	2	….	18.45 [3.92]	100.00 [0.00]
Bahamas	18	23.16 [32.71]	100.00	0.00	2	5	9.95 [17.57]	19.57 [14.43]	100.00 [0.00]
Jamaica	72	51.88 [31.71]	100.00	0.00	28	32	12.97 [17.79]	50.98 [19.36]	64.62 [6.77]
Windward Islands									
Barbados	17	0.01 [0.00]	0.01	0.00	0	2	11.29 [11.12]	51.64 [19.61]	86.39 [7.70]
Eastern Caribbean	13	.. ..	.. ..	.. ..	.. ..	.. ..	12.11 [13.90]	34.59 [19.67]	86.60 [10.51]
Leeward Islands									
St Kitts & Nevis	5	.. ..	.. ..	.. ..	.. ..	.. ..	11.65 [12.50]	42.25 [17.73]	77.65 [7.31]
Windward Islands									
St Lucia	3	.. ..	.. ..	.. ..	.. ..	.. ..	10.19 [6.85]	13.60 [10.20]	100.00 [0.00]
Dominica	1	.. ..	.. ..	.. ..	.. ..	.. ..	19.71 [21.59]	16.67 [0.00]	100.00 [0.00]
Grenada	3	.. ..	.. ..	.. ..	.. ..	.. ..	7.09 [6.07]	34.80 [18.57]	100.00 [0.00]
St Vincent & Grenadines	1	.. ..	.. ..	.. ..	.. ..	.. ..	….	54.00 [0.00]	100.00 [0.00]
South West Caribbean									
Guyana	12	15.75 [0.00]	15.75	15.75	0	1	18.22 [25.73]	55.61 [15.77]	28.73 [20.85]
Trinidad & Tobago	30	13.24 [15.87]	41.00	4.70	1	2	2.85 [2.23]	49.36 [18.28]	66.79 [14.24]
Sample average	179	36.15 [34.65]	100.00	0.00	34	47	12.17 [17.83]	40.94 [22.67]	79.14 [7.51]

Table 2. Descriptive statistics and correlations

Table outlining Pearson correlations between all variables as well as individual variables' means and standard deviations. State-level institutional quality and firm-level shareholder rights indices have both been normalized.

		Mean	Std. Dev.	Max	Min	1	2	3	4
1	Quoted bid ask spread	0.1211	0.1701	2.0000	0.0001	1.0000			
2	Non-founder director ownership	0.0207	0.0729	0.5729	0.0000	0.0514*	1.0000		
3	Founder ownership	0.0912	0.2350	0.9395	0.0000	-0.0065	-0.0120	1.0000	
4	Institutional quality	0.4577	0.5280	1.3115	-0.5267	0.0548*	0.0888***	-0.2071***	1.0000
5	Shareholder rights index	0.0328	1.0000	2.3653	-1.8061	-0.1408***	-0.0223	0.1046***	-0.4566***
6	Subsidiary in tax haven	0.7244	0.4470	1.0000	0.0000	0.0027	-0.1208***	-0.2622***	0.3636***
7	Log (Price, US$)	-0.5748	2.3463	4.0238	-7.6993	-0.0497*	0.0569**	-0.4341***	0.6127***
8	Log (Volatility)	-4.2650	1.1398	1.4007	-9.9572	0.2914***	-0.0319	0.1407***	-0.0225
9	Log (Volume)	11.4208	3.0059	19.6598	1.6094	-0.1685***	-0.1027***	0.2821***	-0.5000***
10	Log (Total Assets)	18.3236	2.1806	23.2007	9.3481	-0.2713***	-0.1120***	-0.4580***	0.1528***
11	Market Cap/GDP ratio	0.4776	0.5653	4.6971	0.0210	-0.0075	0.0346†	-0.0890***	0.2942***

†p<0.10; *p<0.05; **p<0.01

Table 2 continued

		5	6	7	8	9	10	11
1	Quoted bid ask spread							
2	Non-founder director ownership							
3	Founder ownership							
4	Institutional quality							
5	Shareholder rights index	1.0000						
6	Subsidiary in tax haven	-0.1125***	1.0000					
7	Log (Price, US$)	-0.3633***	0.3249***	1.0000				
8	Log (Volatility)	-0.0305	0.0250	-0.3562***	1.0000			
9	Log (Volume)	0.4413***	-0.1109***	-0.6876***	0.2396***	1.0000		
10	Log (Total Assets)	0.0878***	0.2980***	0.4273***	-0.1941***	0.0158	1.0000	
11	Market Cap/GDP ratio	-0.1318***	0.0864***	0.2753***	-0.0508*	-0.1148***	0.0617**	1.0000

†p<0.10; *p<0.05; **p<0.01

Table 3. Firm-level quoted half spread with entrepreneurial founder's OLS regression results [a, b, c]

Table reporting OLS regression results (fixed effects in time periods) from unbalanced panel of dependent variable (bid ask spread) against explanatory and control variables on a sample of 146 firms with up to 14-year time periods leading to 1,339 firm-year observations. [a] White cross-section standard errors and covariance (d.f. corrected) are in parentheses. [b] Fixed effects in time periods and robust standard errors. [c] Country, industry and time fixed effects included.

	Dependent variable: bid ask spread		
	Main effect	Moderated effect	Moderated effect
	Model 1	Model 2	Model 3
Intercept	0.967 [0.10]***	0.886 [0.11]***	0.903 [0.11]***
Explanatory variables			
Founder own	-0.112 [0.03]***	-0.075 [0.03]**	-0.094 [0.03]***
x Tax haven subsidiary	-- --	-0.083 [0.03]***	-- --
x Shareholder rights	-- --	-- --	-0.049 [0.03]*
Tax haven subsidiary	+0.018 [0.01] †	+0.031 [0.01]**	+0.021 [0.01]*
Shareholder rights	-0.013 [0.01]**	-0.012 [0.01]**	-0.009 [0.01]*
Ownership control			
All other block-holders own	+0.001 [0.00] †	+0.001 [0.00]*	+0.001 [0.00] †
Institutional control			
Market cap/ GDP	-0.022 [0.01]***	-0.022 [0.01]***	-0.022 [0.01]***
Institutional quality	-0.090 [0.04]**	-0.093 [0.04]**	-0.088 [0.04]*
Microstructural controls			
Log (Price, US$)	+0.009 [0.01] †	+0.008 [0.01]	+0.009 [0.01] †
Log (Volatility)	+0.038 [0.01]***	+0.038 [0.01]***	+0.038 [0.01]***
Log (Volume)	-0.015 [0.00]***	-0.014 [0.00]***	-0.014 [0.00]***
Log (Total assets)	-0.026 [0.00]***	-0.026 [0.00]***	-0.026 [0.00]***
N (Obs)	1,339	1,339	1,339
F-statistic (prob.)	11.26 [0.00]	10.92 [0.00]	11.03 [0.00]
Root MSE	0.14501	0.14482	0.14484
Adjusted R^2	0.2996	0.3020	0.3018

Table reporting sample of 146 firms with up to 14-year time periods leading to 1,339 firm-year observations. [a] White cross-section standard errors and covariance (d.f. corrected) are in parentheses. [b] Fixed effects in time periods and robust standard errors. [c] Country, industry and time fixed effects included †p<0.10; *p<0.05; **p<0.01; ***p<0.005.

Figure 1 Theoretical associations

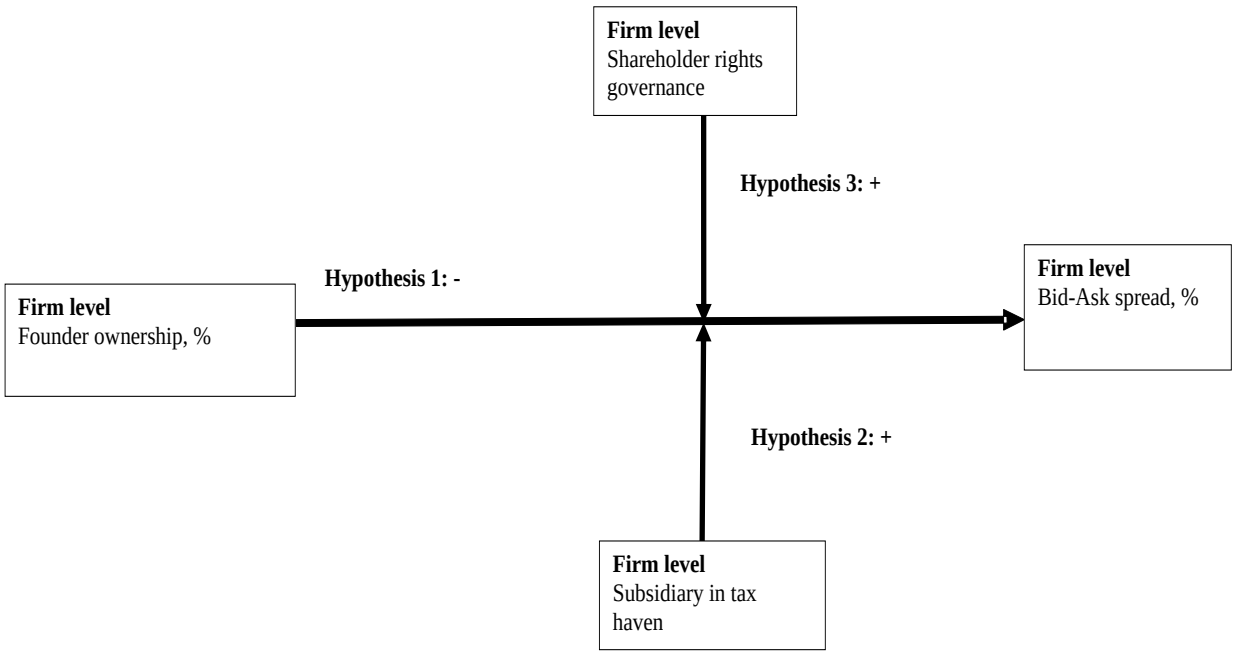


Figure 2 Founder ownership and moderation by firm subsidiary in tax haven

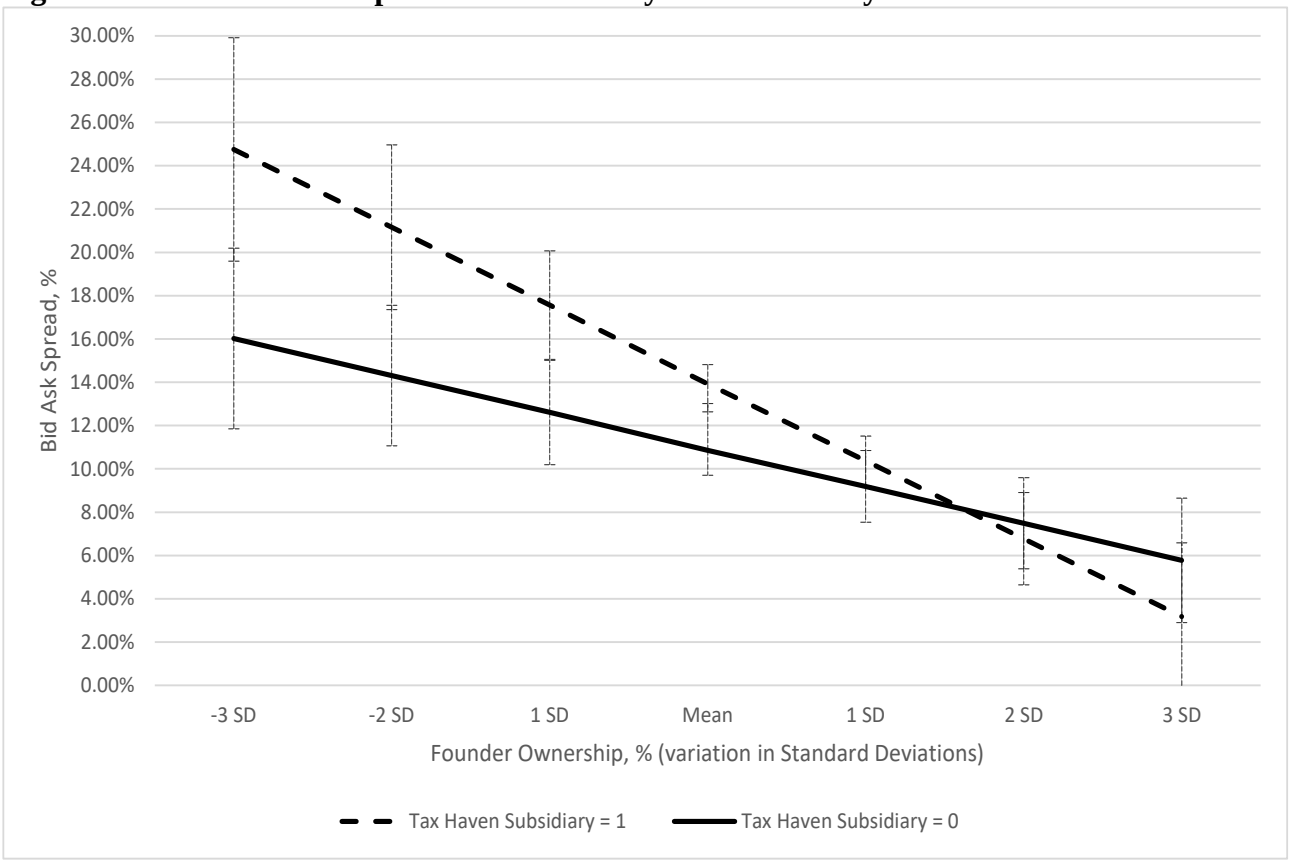
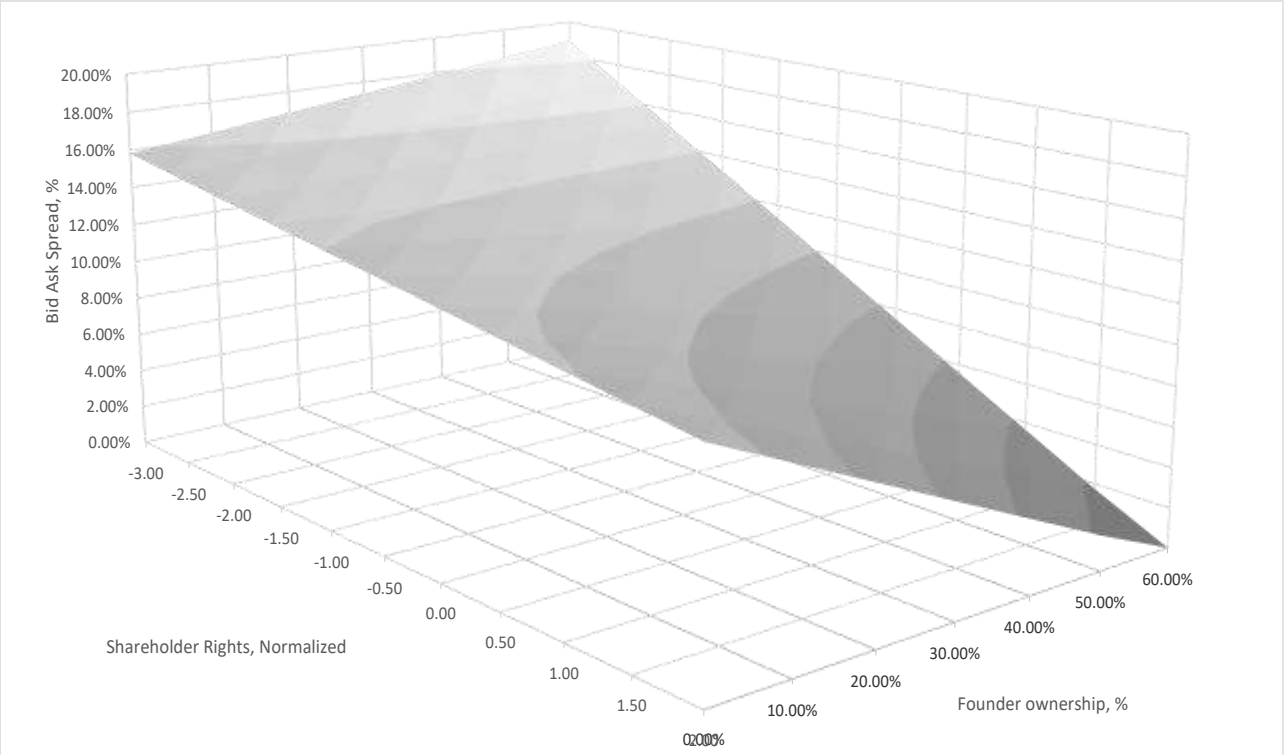


Figure 3 Founder ownership and moderation by shareholder rights



Appendix Table 1. Data sources

Table documenting a non-exhaustive representation of data and information sources from across Caribbean region

Market	Information source
Caribbean	Databases: Bloomberg LLP; Thomson Perfect Information portal & Datastream
Bermuda	Bermuda stock exchange library, Hamilton, Bermuda and website: http://www.bsx.com/ Hamilton-based interviews (11/2016 & 05/2019): Bermuda stock exchange: James S. McKirdy (Chief Compliance Officer) Bermuda Monetary Authority (BMA): Tessa Ingham (Analyst) Bermuda Chamber of Commerce: Kendaree Burgess (Executive Director) Bermuda Government: Victoria Taylor, Executive Officer Listed firm: Ozics Holdings Ltd (Auvo Kaikkonen, CEO); Cohort Ltd (Tracey Packwood); Bermuda Commercial Bank Ltd (Charlene Gilbert)
Barbados	Barbados stock exchange, Bridgetown, Barbados and websites: http://www.bse.com.bb/ Bridgetown-based interviews (07/2011 and 11/2016): Barbados exchange: Marlon E. Yarde (GM); Barry Blenham (Operations); Donna Hope (Operations Manager) Central Bank of Barbados: Financial Division
Bahamas	Bahamas stock exchange, Nassau, The Bahamas and websites: http://bisxbahamas.com/ Nassau-based interviews (05/2019): Bahamas international securities exchange [BISX]: Keith Davies (CEO); Holland Grant (COO) Chamber of Commerce: Jeffrey N. Beckles (CEO) Securities Exchange Commission of the Bahamas (Senior Analysts) Bahamas Venture Capital Fund c/o Baker Tilly Managers: Joan Octaviano (Head of Audit) Bahamas Development Bank: Director (Mme Pelicanos) University of the Bahamas Graduate School of Business: Remelda Moxley (Dean) Listed firm: Bank of Bahamas (Leashawn McPhee); Emera (Dina Bartolacci Seely); Commonwealth Bank (Gina Greene); ICBL (Jenifer Clarke); Doctors Hospital (Joanne Lowe)
Cayman Islands	CISX, Cayman Islands exchange, Georgetown, Grand Cayman and websites: http://www.csx.ky Georgetown, Grand Cayman-based interviews (05/2019): Cayman Islands exchange: Sandy McFarlane (Operations Manageress) Cayman Islands Development Bank: Tracy Ebanks (General Manager/CEO) Cayman National Securities: Erol Babayigit (Vice President)
Jamaica	JSE, Jamaican stock exchange, Kingston, Jamaica and website: https://www.jamstockex.com/ Kingston-based interviews (07/2016): Jamaican stock exchange: Marlene J. Street Forrest (General Manager); Sandra Shirley (Principal e-campus); Charlette Eddie-Nugent (Listings Manager); Neville R. Ellis (Operations Manager) JSE electronic media marketing event (07/2016): Spanish Court Hotel Annex, Kingston, Jamaica Bank of Jamaica: Financial services division interviews
Eastern Caribbean	ECSE, Basseterre, St Kitts & Nevis and website: http://www.ecseonline.com/ Basseterre-based interviews (11/2011): Eastern Caribbean stock exchange: Trevor E. Blake (GM); Sherizan Mills (Operations Officer) Eastern Caribbean Central Bank visit (11/2011) Telephone-based interviews (06/2016 - 08/2016): Eastern Caribbean stock exchange: Trevor E. Blake (GM); Sherizan Mills (Operations Officer) Nevis, Charlestown-based interviews (11/2011): Financial district in Charlestown, Nevis; St Lucia-based interviews (11/2011): Financial district, Castries, St Lucia
Guyana	GASCI, Guyana Securities Council, Georgetown and website: http://www.gasci.com/ Telephone-based interviews (08/2015 – 01/2017): Cheryl Ibbott (CEO, Guyana Securities Council c/o Bank of Guyana); Vick (Compliance Officer, Guyana Securities Council)
Trinidad & Tobago	TTSE, Trinidad & Tobago stock exchange, Port of Spain and website: http://ttsec.org.tt/ Trinidad, Port of Spain based procurement (06/2016 - 07/2016): Trinidad, Ministry of Finance: Melissa Mattoo and Christine Frank (Communications Officers) Trinidad, Central Bank of Trinidad & Tobago: Candice Dilbar (Research Economist) Trinidad, Listed firm: National Enterprises Limited (Keisha Armstrong, Head of Secretariat) Tobago: Scarborough and Canaan-based interviews in financial district (06/2016 - 07/2016)

Appendix Table 2. Institutional measures

†p<0.10; *p<0.05; **p<0.01; ***p<0.005

Shareholder rights index	Founder own > 0%	Founder own = 0%
Index - Rights of shareholders	47.79†	42.84
A.1 Does the company offer other ownership rights beyond voting?	16.13	20.80
(i) Preference shares	9.68	12.80
(ii) Convertible bond/shares & options	3.23	0.80
(iii) Multiple share classes	6.45	12.00
A.2 Is the decision on the remuneration of board members or executives approved by the shareholders annually?	83.87†	71.20
A.3 How is the remuneration of the board presented?	87.10	88.80
(i) Are individual directors' basic cash salaries disclosed?	12.90	12.90
(ii) Are individual directors' bonuses disclosed?	3.23	1.61
(iii) Are individual directors' long-term incentives (options, pension etc) disclosed?	0.00†	6.45
(iv) Are benefits paid to directors?	0.00†	7.26
(v) Are benefits enumerated/evaluated?	0.00†	6.45
(vi) Is salary aggregated into one lump sum paid?	77.42	82.40
(vii) Are director fees aggregated into lump sum emolument?	80.65	79.20
A.4 Quality of notice to call a shareholders' meeting in the past one year.	80.65†	70.16
(i) Appointment of directors, providing their names and background	80.65	72.00
(ii) Appointment of auditors, providing their names and fees.	80.65†	69.60
(iii) Dividend policy, providing the amount and explanation.	77.42†	63.20
A.5 Has the Chairman of the Board attended at least one AGM in the past two years?	100.00***	58.65
A.6 (i) Has the CEO/Managing Director attended at least one AGM in the past two years?	84.21**	58.65
Board effective monitoring	50.64**	29.21
(i) Is a list of names of board attendance available?	54.84*	34.40
(ii) How many directors did not attend 100% of meetings?	2.24†	3.41
(iii) How many directors did not attend 70% of meetings?	0.59†	1.22
E.11 What is the size of the board?	7.77**	8.98
A.7 Do AGM minutes record that there was an opportunity for shareholders to ask questions/raise issues in the past one year?	9.68	16.00
A.8 Does the company have anti-takeover defences?	96.77†	88.80
(i) Cross shareholding	64.52**	84.00
(ii) Pyramid holding	64.52**	84.00
(iii) Board members hold more than 25% of shares outstanding	77.42**	14.40
A.9 Company dual listed?	3.23†	10.40
(i) Company dual listed on OECD stock exchange	0.00	1.60
(ii) Controlling parent listed on OECD stock exchange	0.00***	22.40