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The Impact of Indigenous Culture and Business Group Affiliation on Corporate Governance of African Firms

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THE IMPACT OF INDIGENOUS CULTURE AND BUSINESS GROUP AFFILIATION ON

CORPORATE GOVERNANCE OF AFRICAN FIRMS

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Research Question/Issue: This is a study of the relationship between business group ownership and constituent firms' adoption of Anglo-American shareholder value governance in African firms at the undertaking of an initial public offering (IPO).

Research Findings/Insights: We find business group ownership to be associated with lower Anglo-American corporate governance adoption by constituent firms. However, this association is reversed in the institutional context of higher tribalism, while correspondingly being exacerbated in the context of lower tribalism.

Theoretical/Academic Implications: We theorize that the influence of business group ownership on firms' adoption of Anglo-American corporate governance is better understood when considering the institutional context. We highlight how informal cultural institutions are heterogeneous and thus shape the indigenous political economy and impact business groups. Specifically, we argue institutional contexts with higher tribalism are associated with more in-group favouritism and nepotism. This association makes it critical for business group constituent firms to escape the constraints of the political economy of tribalism when attracting outside funding, leading to a higher inclination to adopt Anglo-American governance. Contrastingly, in lower tribalism contexts there is more universal trust across societies and an increased availability of domestic funding.

Practitioner/Policy Implications: Given the proliferation of business group ownership within economies worldwide, the study provides a useful framework with which to gauge the influence of business group ownership on a constituent firm's adoption of Anglo-American governance best practice. In particular, the study emphasizes that the interdependence of formal institutional architecture and tribalism - both fundamentally associated with the demographic shape and with the incentive structures embedded within the underlying national political economy - calls for careful considerations when making national corporate governance recommendations.

INTRODUCTION

Emerging economies are characterized by institutional voids, and an accompanying reliance on social networks and business groups (BGs) as essential elements of informal, internalized intermediation of resources (Tajeddin & Carney, 2019; Ge, Carney & Kellermanns, 2019). While networks and BGs are distinctively shaped by the indigenous cultural context from which they originate and hold cognitive legitimacy (Suchman, 1995), the need for expansion and growth in BGs stimulates their seeking supplementary external funding (Masulis, Pham & Zein, 2011). This leads to a juncture occurring between the legitimacy sought and resources procured from opaque indigenous networks, versus the increased legitimacy from and conformity with international capital market norms, essential in external funding (Luo, Chung & Sobczak, 2009). However, a largely overlooked issue in the literature is that the underlying "national" cultural configuration of societies is rarely uniform, but rather shaped by varying degrees of socio-cultural fragmentation, recently labelled tribalism (Hearn & Filatotchev, 2019). Therefore, we explore the impact of BG ownership on constituent firms' adoption of Anglo-American shareholder value corporate governance and how this relation is moderated by the level of tribalism in the country.

Our theoretical approach is centred on the institutional perspective which accommodates the contextual embeddedness of economic actors and firms within underlying social frameworks (Filatotchev, Chahine & Bruton, 2018). This perspective is of particular importance given our focus on BGs, where these sociologically emanate from within the cultural fabric of society and are reflected by a coalescence of constituent firms centred on a socially cohesive entity such as an extended family, but also on corporate, state and individual business interests (Khanna & Palepu, 2000). In our empirical analysis, we focus on Africa, where the latter are exemplified by Nigeria's *Dangote* and Egypt's *Sawiris* extended family groups (The Economist, 2019). In order to attain expansionary and/or growth goals, BGs necessarily require supplementary external capital, with this leading to a trade-off in the adoption of two opposing forms of corporate governance – one associated with the indigenous socio-cultural context and the other with international capital market

norms. Corporate governance in the former context is typified by opacity and the dominance of insider welfare and property rights protection, usually in the form of culturally imbued relational contracting. Contrastingly, in the latter context, minority welfare and property rights protection are emphasized, as enshrined in the shareholder value corporate governance model (Aguilera & Jackson, 2010). Our theoretical model implicitly assumes the transition between the two frameworks as being mirrored by a continuum in the level of adoption of shareholder value governance elements by individual constituent firms. In this way, we capture the role played by the change in the institutional framework. We also capture the dominant actors embedded in this framework, from which BG-controlled constituent firms seek legitimacy and conformity in their corporate governance arrangements. Our emphasis on contextual embeddedness and legitimacy underscores our first theoretical contribution, which differentiates our approach from that of agency-based and neoclassical studies. The agency-based studies are restricted in considering institutions as a "thin veil" in contractual enforcement (e.g., Jensen & Meckling, 1976; Aguilera & Jackson, 2010), while neoclassical studies are constrained by their singular view emphasizing convergence of firms' governance (e.g., Coffee, 2001) to a dominant Anglo-American shareholder value model.

We draw upon the concept of tribalism and highlight its relevance to corporate governance research on emerging market firms. Specifically, we utilize a novel index which captures tribalism as a continuum (Jacobson & Deckard, 2012), thereby overcoming shortfalls in prior typological categorizations of national institutional frameworks based on variations of this phenomenon (Fainshmidt, Judge, Aguilera, & Smith, 2018). Our definition of tribalism relates to the concept of ethno-cultural fragmentation which leads to powerful institutionalized within-group social cohesion and loyalties, where these are often controversially associated with varying degrees of favouritism and nepotism (Areneke, Adegbite & Tunyi, 2022). Tribal or clan-based lineages are common worldwide and especially within emerging and developing economies (Grief & Tabellini, 2010). Countries across Africa in particular, but also in Asia and the Middle East, exhibit often high and

varying degrees of tribalism, where related institutions are subverted beneath modern and essentially incongruous state bureaucracy (Nunn & Wantchekon, 2011). While this pattern reflects institutionalized fault lines within many emerging economies, it is representative of a powerful phenomenon in terms of societal organization. The role of tribalism is almost entirely overlooked in studies on culture and corporate governance (Mintz, 2005; Hooghiemstra, Hermes & Emanuels, 2014), where aggregated "national" cultures are considered determinants of Anglo-American shareholder value corporate governance adoption. Moreover, existing studies mostly focus on the more static nature of ethnic, linguistic and religious fractionalization (Alesina, Devleeschauwer, Easterly, Kurlat & Wacziarg, 2003). Thus, past research captures fragmentation within a given society but overlooks a deeper appreciation of the institutionalized influences arising from this fragmentation.

Our empirical analysis is based on a hand-collected dataset of 189 firms that underwent initial public offerings (IPOs) in 22 markets across the African continent between January 2000 and August 2016. We find that the degree of tribalism significantly moderates the negative relation between the BG's ownership of a constituent firm and the degree of adoption of Anglo-American corporate governance practice. Our study makes two methodological contributions. The first is our adaptation of the New York Stock Exchange manuals' governance criteria (NYSE, 2016) to form a firm-level Anglo-American shareholder value index appropriate for emerging market firms. The new index is adjusted for data availability and institutional limitations on corporate governance. The adjustment implies that the index is simple to construct, tractable and has universal applicability. The second methodological contribution is our novel application of a tribalism index (Jacobson & Deckard, 2012), which addresses shortcomings associated with static fractionalization metrics by providing a more dynamic measure. The index also considers interactions between ethnic groups and the institutionalized means of operationalizing culture embedded within relational contracting systems. Our tribalism index provides a plausible means to account for informal diversity within

national frontiers, thereby addressing some of the shortcomings of traditional aggregate measures of "national culture" (Tung & Stahl, 2018).

Our study proceeds in the next section by outlining the theory and hypotheses. The third section outlines data considerations. The fourth section focusses on empirical methods, while the fifth presents the empirical results. The paper ends with concluding remarks and policy recommendations.

THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Our theoretical model focusses on how the level of BG ownership in a constituent firm determines its overall corporate governance. Specifically, we argue that an emerging economy firm can conform to one of two corporate governance models: an opaque indigenous model or an Anglo-American model. We further extend our theorization on alternative corporate governance models by addressing the moderating impact of the informal institutional framework in the form of tribalism.

Central to our argumentation is the concept of emerging economies being dominated by dense, overlapping social networks (Armitage, Hou, Sarkar & Talaulicar, 2017) which almost wholly subsume all social and economic activity. Moreover, this myriad of social networks hosts BGs alongside powerful local actors, whose interrelationships both between one another and within themselves are governed by relational contracting schemas (Barnett, Yandle & Naufal, 2013). Importantly, all these social networks have common sociological origins (Bizer & Hamann, 2015), deep within the cultural fabric of the indigenous society. Consequently, while BGs are defined as constellations of nominally independent constituent firms subordinate to the strategic control of an ultimate owner (Granovetter, 1995: 95), they are synonymous with relational contracting schemas which govern and regulate social and economic transactions between and within them.

Consequently, we emphasize, contrary to much of the prior literature (e.g., Khanna & Palepu, 2000; Khanna & Rivkin, 2001), that BGs should be viewed as integral to a wider network economy, with

relational contracting schemas playing a central role in governance. Moreover, while the ultimate owners are heterogeneous, in ranging from entrepreneurs to corporate interests, to the state, or more typically families, the cultural resources they draw upon (e.g., Bhappu, 2000) emanate from the indigenous society's social fabric. This also underpins the powerful legitimacy claims accorded to BGs and the relational contracting schemas regulating their activity.

The importance of such relational contracting schemas and networks is profound in terms of their provision of a socially legitimate blueprint of appropriate means of engagement. By being relevant between BGs and other actors within an economy, as well as within the groups themselves (Barnett et al., 2013), these contracting schemas provide an institutionalized means of both enabling and constraining socially appropriate interactions amongst BGs and should be viewed as synonymous with them. The schemas are centred on social trust (Barnett, Yandle & Naufal, 2013) in an individual's credibility. They enable contractual exchanges of resources with others in the network, defined by their personal track record, as well as those of their immediate and extended family, and their clan, ethnic lineage or tribal group. Moreover, they are centred on mutual reciprocity and on the intertemporal exchange of favours (Berger, Silbiger, Herstein & Branes, 2015), where future exchanges are guaranteed based on reciprocity for exchanges in the current period. A proliferation of such mutually reciprocal exchanges over time is a powerful underpinning of social trust and shared norms between actors. Importantly, such relational contracting schemas are upheld through the threat of social ostracism of actors who breach contractual terms and/or expropriate their transacting partners (Granovetter, 1973; Greif, 2012). The threat of such ostracism effectively constitutes a positive externality, in reinforcing the wider network and the BGs which function within it.

The preceding arguments emphasize the inherent association between BGs and overarching social networks prevalent in emerging economies where BG interactions are assumed to be governed by relational contracting schemas emanating from the indigenous society's social fabric.

BGs are therefore synonymous with network types of corporate governance (Visser, Greve & Chen, 2010). Moreover, while BGs may benefit from quasi-monopolies and a concentration of wealth and economic opportunities at a national level (Young, Peng, Ahlstrom, Bruton, & Jiang, 2008), at the same time they coexist with one another in a competitive yet inherently collaborative system.

Importantly, interactions amongst BGs entail the ultimate owners acting in a more intercessory or intermediary capacity, in competitively seeking to acquire resources into their BGs for further internal redistribution (Young et al., 2008). On balance, this implies a more benevolent scheme of engagement amongst BGs, resulting in a relatively equitable coordination or intermediation of capital or resources at a national level. These traits of a collaborative network economy, which is more typical of emerging economies, emphasize the prominent role of BGs, with their acquisition and intermediation of capital or resources being both enabled and constrained by culturally imbued relational contracting schemas. We argue this constitutes a powerful and opaque indigenous network-orientated corporate governance system, centred on BGs.

Contrastingly, Anglo-American corporate governance is embedded within international investment norms which have evolved from within the socio-cultural framework of the US and the UK. Following Mair & Marti (2009), we define institutions as "multifaceted, durable social structures, made up of symbolic elements, social activities and material resources" resistant to change and transmitted across generations (Scott, 2001: 49). We argue that, following the demise of the Cold War, the far-reaching reforms across emerging economies, including those of Africa, were precipitated by state-led intervention (Joireman, 2001, 2004). Nascent states used their pre-existing European colonial heritage in fostering institutional complementarities and synergies with macroeconomic trading and economic associations based on European institutional frameworks (Joireman, 2004). States' attainment of legitimacy from these macroeconomic institutional arrangements is essential to their attraction of foreign investment and funding, which supplements domestic savings-investment schedules (Tobin, 1982). Moreover, the necessity of states' attainment of international legitimacy exerts a powerful institutional pressure to replace isomorphic conformity

of national regulatory frameworks and accompanying architecture with international norms of "best practice" (Haxhi & Aguilera, 2017). This has led indigenous states to initiate and influence the establishment of new national securities exchanges, as well as to reform existing financial institutions. These initiatives have exerted isomorphic pressures for conformity with "best practice", within subordinate national economies (Haxhi & Aguilera, 2017). We argue that this development of the national formal institutional architecture involves the balancing of opposing claims of legitimacy at an international level, versus those at a local indigenous level (e.g., Aguilera, Judge, & Terjesen, 2018). The local indigenous legitimacy is essential for the formal architecture to be assimilated within the national cultural context (e.g., Nakpodia, Shrives, & Sorour, 2020). Moreover, indigenous legitimacy is accorded through the social networks that transcend the publicprivate sector boundaries of the economy (e.g., Liedong, Aghanya, Jimenez, & Rajwani, 2023). This pattern underscores the influence of powerful local actors such as boundary-spanning BGs, beyond that of "lobbying" (e.g., Khanna & Rivkin, 2001) highlighted in prior literature. Therefore, while national polities may be demographically narrow and dominated by an empowered social elite (North, 1990, 1991, 1994), at the same time they are permeated by extensive social networks and powerful indigenous legitimacy claims, centring on BGs and family. Such powerful legitimacy claims of BGs and their ability to transcend formal institutional architecture underscore their capabilities in acquiring additional external capital to supplement that internally available within the group.

Hypotheses

Constituent firms of a BG may undertake an IPO on national securities exchanges for a variety of reasons, such as to widen the distribution of their ownership, to attain domestic political legitimacy, or to raise new external financial capital (e.g., Areneke, Adegbite, & Tunyi, 2022; Areneke & Kimani, 2019). Importantly, all these motivations entail the firm seeking to improve outside

investors' perceptions of its value (e.g., Adegbite, 2015) in an environment dominated by high uncertainty and informational asymmetry. Consequently, it is imperative for firms to demonstrate their ability to conform with investors' expectations, including those regarding corporate governance (Certo, 2003; Sanders & Boivie, 2004). The governance mechanisms adopted hinge not only on enhancing regulatory and economic efficiency but also on perceptions of the firm's legitimacy in the capital markets where the IPO in question takes place (Carruthers & Kim, 2011). In this way, firms are motivated to adapt their corporate governance to conform with the international investment norms within which the Anglo-American corporate governance model is inextricably embedded.

However, indigenous firms are confronted with isomorphic pressure to conform with the opaquer network corporate governance model (e.g., Liedong et al., 2023) prevalent within emerging economies. Such constituent firms within a BG possess "linkage legitimacy" (Bitektine, 2011: 156), or legitimacy based on the firms' linkages with the BG overall, which constitutes a powerful legitimate social actor in its environment (Deephouse & Suchman, 2008). Constituent firms with higher BG ownership are more central within the BG network and therefore subject to powerful legitimacy claims emanating from the indigenous society's cultural fabric. This emphasizes conformity with the network's corporate governance model. Such higher BG ownership also implies an elevated importance of the constituent firm within the extended BG constellation of firms in terms of an enhanced intermediary and intercessory role in the acquisition and subsequent coordination of capital (Masulis, Pham & Zein, 2011). This is reflective of the ultimate owners of the BG having a higher direct ownership stake, thereby putting more of their wealth at potential risk rather than relying on indirect methods, such as pyramiding and cross shareholdings, to exacerbate control vis-à-vis cash flow ownership (Morck, Wolfenzon, & Yeung, 2005). Together, these arguments allude to higher BG ownership being associated with increased conformity with opaque indigenous network corporate governance, mirrored in the shunning or reduction of conformity with the Anglo-American model. To sum up, we propose the following hypothesis:

Hypothesis 1: BG ownership is negatively associated with a constituent firm's degree of adoption of Anglo-American corporate governance.

Contingencies related to tribalism

Tribal and ethnic lineages owe their distinctive origins and powerful underlying social cohesiveness to the common genealogical and ancestral origins of members, where these are reinforced through consanguineous marriages and social interdependencies. These social ties reinforce notions of common identity, patronage and loyalty to the tribal or ethnic lineage (Grief & Tabellini, 2010). Conversely, disciplining of behavioural infringements involves social exclusion and disenfranchisement (Grief, 2012), with an individual's consequent loss of access to social and economic resources. Such tribal or ethnic lineages constitute the basis for expansive social networks with powerful claims to underlying social legitimacy, which strongly impact business relations within nascent societies.

Based on institutional theory, we predict that higher tribalism is associated with a warping of the otherwise equitable and benign relational contracting system. This system emphasizes a balance between inward tribal loyalties and outward benevolence towards others within the clan or tribal-based system. Amplification of these loyalties is reflected in a transition from benign benevolence to nepotism and favouritism (Berger, Silbiger, Herstein & Branes, 2015; Liedong, Aghanya, Jimenez, & Rajwani, 2023). Moreover, such warped relational contracting systems tend to show durability despite largely superficial reforms aimed at countering such corruption (Heidenreich, Mohr & Puck, 2015). We also expect national polities to be demographically narrower and more dominated by social elites drawn from the dominant ethnic lineage(s) with hegemonic control (North, 1994). This will be reflected in national polities that are more predatory in nature (North, 1994), emphasizing extraction of economic rents by elites in accordance with their privileged social status.

This pattern has two important implications for BG constituent firms. The first is that national factor and resource markets are almost entirely subverted under the hegemonic control of elites (Hearn & Filatotchev, 2019) drawn from a handful of empowered ethnicities within a predatory polity (e.g., Liedong, Aghanya, Jimenez, & Rajwani, 2023). Given correspondingly high levels of cronyism, nepotism and favouritism embodied in institutionalized corruption (Heidenreich, Mohr & Puck, 2015), these form impenetrable barriers, inhibiting political and social lobbying for access to resources. This pattern underscores a necessity to acquire resources, including capital, from external, predominantly international, resource markets.

The second is that – given the extremely demographically skewed nature of highly tribal polities (e.g., Greif, 2012; North, 1991, 1994), with these polities hegemonically controlled by one or a handful of nepotistic tribal lineages – their associated state bureaucracy and formal institutional architecture almost wholly lack wider social legitimacy. Consequently, BGs and their constituent firms are forced to seek legitimacy from external resource markets which adhere to the international system of investment norms within which the Anglo-American corporate governance model is embedded (e.g., Areneke, Adegbite & Tunyi, 2022). This too facilitates access to additional resources to supplement meagre domestically available resources, including funding.

Conversely, for societies with low tribalism, we predict that relational contracting systems will retain their essentially benevolent character, with the associated society's institutional fabric being intermediary and intercessory in nature (Barnett et al., 2013). Therefore, the state bureaucracy and formal institutional architecture transplanted from the former European colonial era are more easily assimilated and absorbed within the society since it is markedly less prone to hegemonic "capture" by the vested interests of one or a handful of ethnicities (Hearn & Filatotchev, 2019). State bureaucracy essentially supplants the pre-existing indigenous institutional architecture (Nunn & Wantchekon, 2011) in adopting a more benign, intermediary role in the equitable distribution of resources and resolution of potential conflicts. This more intermediary character of assimilated state

and formal architecture is at least comparable to the impartiality of its original design, this being philosophically centred on European definitions of property rights (Nunn & Wantchekon, 2011). BG constituent firms would be anticipated to seek legitimacy and resources more from domestic resource and factor markets, these falling under the control of the state, which is altogether more equitable in its distribution of economic opportunities and resources. Moreover, these firms are also subject to the influence of more equitable intermediary social networks, with these networks exerting isomorphic pressures towards the adoption of opaque indigenous network-centred corporate governance (e.g. Aguilera, Judge & Teresen, 2017). Consequently, there is less imperative to solicit capital from external capital markets and so a markedly lower need to adopt Anglo-American corporate governance practices. Our theoretical arguments lead us to propose, for firms in emerging economies, the following *tribalism moderation hypothesis*.

Hypothesis 2: The negative association between the BG's ownership of a constituent firm and that firm's degree of adoption of Anglo-American corporate governance practice is positively moderated by tribalism.

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

Insert Figure 1

DATA

The unit of analysis of our study is a firm undertaking an IPO in an African economy. We chose to study IPO firms since transparency and reporting is much stronger in such firms in a region characterized by generally underdeveloped financial markets and related institutions.

The dataset was constructed in three stages. After omissions of the national stock exchanges of Libya, Angola, Lesotho, Gabon, Somalia and Sudan owing to a lack of listings during the sample

timeframe or their indefinite closure, we then compiled a list of IPOs between January 2000 and August 2016, as identified in a comprehensive selection of African markets. Our primary source here was the national stock exchanges and their associated websites. This resulted in a preliminary population of 380 stock listings.

At the second stage, to ensure that our population covered IPOs and not private placements, the IPO prospectuses were obtained. The IPOs included at this stage were offerings that produced a genuine diversification of ownership amongst a base of minority shareholders (as opposed to private placements involving the preferential allocation of stock with institutional or corporate block holders in pre-arranged quantities and prices). Equally, care was taken to avoid misclassifications of registrations, introductions and seasoned (secondary) offerings, as these are often also officially referred to as IPOs. Furthermore, IPOs are defined as offerings of ordinary shares with single class voting rights, that is, excluding preferred stock, convertibles, unit and investment trusts, as well as readmissions, reorganizations and demergers, and transfers of shares between main and development boards. As a result of these efforts to solely focus on IPOs, our final population was reduced to 276 genuine IPO firms.

In the third stage, we focussed on domestic private-sector firms, which led to the exclusion of state privatizations and joint ventures, whose governance structures are quite different from those of conventional firms. Notably, both observations from Cameroon were omitted at this stage, since both were joint venture entities between the state and a foreign MNE, their listings in effect being privatizations. This brought the total number of genuine private-sector IPOs down to 201.

Finally, we experienced missing values in terms of published age or year of IPO firm establishment in the prospectuses of eight firms; missing values for the number of shares issued to foreign investors for two firms; and missing executive tenure values for a further two firms. Missing values reduced the final sample to 189 IPOs, which formed the basis of the empirical analysis. The 12 missing observations were evenly distributed through the sample.

Data on IPOs were collected from the financial market regulator websites, prospectuses, third party websites, stock exchanges and from direct contact with IPO firms. These sources are listed in Appendix Table 2.

METHODOLOGY

Dependent variable. To focus on Anglo-American corporate governance, we have developed a new firm-level index, adapted from the provisions outlined in the New York Stock Exchange manual (NYSE, 2016). This is formed from the average of 16 elements (see Table 1), which are identified from each individual firm's listing prospectus. All elements are binary coded, with the final sixteenth element relating to nonexecutive director independence and equalling one if at least one independent nonexecutive director is present on the board. The final index ranges from zero to one.

The choice of the 16 elements is based on the adaptation of the provisions relating to minority shareholder welfare, or Anglo-American corporate governance, as outlined in the New York Stock Exchange manual. Critical limitations regarding the viability of more detailed shareholder value indices include the indigenous cultural aptitude towards the adoption of such corporate governance elements, which are costly to firms and typically lack deeper resonance or cultural compatibility. This is exemplified by culturally based concerns over detailed communication of individual director and managerial compensation and personal ownership of firms, as well as inhibitions towards financial contracts such as options and derivatives, with the latter scarcely existing anywhere across Africa and the Middle East. Moreover, there is a wholesale lack of regulated financial derivatives markets and pension scheme coverage in most emerging economies, which curtails governance elements relating to executive compensation and some golden parachute and poison pill anti-takeover provisions. Also omitted are clauses related to mechanisms such as greenmail, which are a reflection of the significantly less developed capital

markets and weaker regulation prevalent in emerging economies. All elements are based on a corporate governance model underpinned by third party, arm's length contracting.

These contextual inhibitions of firms' adoption of Anglo-American corporate governance elements are visible in Table 2. The table allows a regional comparison of the average adoption of each of the 16 corporate governance elements comprising the new index, across South Africa, the continent's biggest economy, neighbouring states in Southern Africa, a combination of East and West African sub-regions and North Africa. Firms located in North Africa have the least adoption of any of the corporate governance elements, while those in South Africa have the highest, with those in Southern Africa having the next highest adoption rate. This mirrors the dominance of families, as well as cultural inhibitions towards external, arm's length contracting, emanating from a prevalence of Islamic shari'ya across North Africa. Conversely, South Africa's economy is the continent's largest and also the most outwardly integrated with the global economy, underscoring its susceptibility to isomorphic influences emphasizing conformity with the dominant Anglo-American governance and tenets of external contracting. There are equally pervasive differences in the adoption of Anglo-American corporate governance between firms located in English common law and those in civil code law jurisdictions, with the former generally having higher adoption rates across all sixteen elements. Given the lack of effective reforms since original colonial-era transplantation, we argue these differences are fundamentally reflective of the differences in legal philosophy underpinning common versus civil code law. The former notably provides greater protections of minority rights vis-à-vis the state or dominant block owners, while the opposite is true of the latter.

Insert Tables 1 and 2

The construction of our firm-level index addresses a number of shortfallsⁱ. Much of the prior literature on shareholder rights relates to the anti-director index developed in the seminal work of

La Porta, Lopez-de-Silanes, Schleifer, & Vishny (1998). However, that index is restricted to provisions in the overarching national legal codes as opposed to relating to individual firms. More recently, to address this shortfall, Gompers et al. (2003) introduced the "G-index", comprised of 24 governance provisions, of which only 22 were firm level. A further limitation of that index is that it only applies to the US setting. Our construction of a shareholder rights index introduces a parsimonious construct that captures the protection of minority owners' property rights within a much broader remit of emerging and developing economies.

Explanatory variables. Our study uses the percentage cash flow ownership, by BGs and their affiliates, in IPO firms, as the main effect outlined in *Hypothesis 1*. This is in line with studies such as Hu, Cui & Aulakh (2019). Following Masulis et al. (2011), we trace ultimate owners, and then define a BG as two or more nominally independent firms under the control of a common ultimate owner. The tracing of ultimate owners involves both consideration of direct lines of ownership, and indirect and more opaque lines of indirect control, evidenced by a common family identity or extensive use of mutually interlocking directorates. This involves detailed perusal of a variety of additional information sources, as outlined in Appendix Table 2, in order to fully appreciate the often-complex evolution of firms, their interlinkages and their varying degrees of dependency on a family or entities such as the state. Such depth of consideration is essential given the more opaque lines of control within often expansive BGs which may also have had transitions in their ultimate owners, such as the 2008 takeover of Malian Bank of Africa group by Morocco's Benjelloun family, or that of the expansive group centred on former Tunisian premier Ben Ali and spouse Trabelsi by the Tunisian state. The complexity of the former, namely Bank of Africa group, is demonstrated in Figure 2, which shows this BG dominating financial sectors of indigenous economies across the continent. Such identification is consistent with prior BG literature (e.g., Khanna & Palepu, 2000; Khanna & Yafeh, 2007; Singh & Gaur, 2009).

Insert Figure 2

As a robustness measure, we also adopt the ratio of BG representatives on the board of directors of the constituent firm since a prominent feature of BGs is control rights in excess of cash flow ownership entitlements. This measure provides a means to circumvent thorny issues in the family literature, where there is a general reliance on the definition of a family-controlled firm as being at a threshold percentage of ownership, typically 20%, or more liberally 10%, with such a restrictive definition failing to take account of wedges between direct ownership and control. This is particularly pertinent given our focus on the contrast between direct and indirect pyramidal financing strategies, and a sliding scale of direct cash flow ownership in relation to progressively elevated control being central to our theoretical model.

Moderating variable: We follow Kim, Hoskisson & Wan (2004) in moderating our main association by an index. Our moderating index is that of tribalism, as originally developed by Jacobson & Deckard (2012). It is built upon five variables and centred and normalized to mitigate the potential effects of collinearity. It corresponds to *Hypothesis 2*. The tribalism index is defined below in expression (2):

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Tribalism = Corruption\ measure + 0.5 * Ethnic\ fractionalization + 0.5 * Indigenous\ population + 2 * Gender\ equality + Group\ grievance  (2)
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Jacobsen & Deckard (2012) attribute the weights (as in the "2" or "0.5") of each variable in conjunction with the relative importance of the variable in constituting "tribalism", which in aggregate is scaled from 0 (lowest) to 1 (highest). They argue that, as the internal reliability of the

scale is high, shifting the weightings of specific variables within the index does not significantly change the rankings of individual nations or meaningfully alter its ability to predict the dependent variable in models (Jacobsen & Deckard, 2012: 10). The five constituent variables are defined as followsⁱⁱ. The first, *corruption*, is measured by the corruption perceptions index of Transparency International, which measures survey participants' perceptions of corruption. Corruption mirrors the impact of nepotism, favouritism and cronyism in preferentially facilitating transfers between kinship, clan and tribal groups.

The second variable is *ethnic fractionalization*, which is defined as in expression (3) below:

Ethnic Fractionalization_j =
$$1 - \sum_{i=1}^{N} s_{ij}^2$$
 (3)

where s_{ij} denotes the proportion of the total population of group i in country j, and N denotes the total number of groups in the population. The measure scores 0 in a perfectly homogeneous population and reaches its theoretical maximum value of 1 when an infinite population is divided into an infinite number of groups of one member. The measurement of ethnicity is fraught with complexity. Alesina et al. (2003) provide a comprehensive list of sources for ethnicity data, along with the assumptions used in its interpretation and then subsequent inclusion in the preceding expression (3) for fractionalization. The first comprehensive attempt to develop a metric effective worldwide was undertaken in 1964 by a team of Soviet ethnographers and documented in *Atlas Narodev Mira* (Fearon, 2003; Luiz, 2015). This metric formed the basis of ethnic fractionalization used in Easterly & Levine's (1997) study of how ethnicity constrained African development. It was subsequently updated in 2001 by Encyclopaedia Britannica and formed the basis of a Herfindahl index of ethnic diversity used in Fearon (2003) and the metrics of ethnic, linguistic and religious fractionalization developed by Alesina et al. (2003). Alesina et al.'s fractionalization measures, as used in this study, were developed using definitions presented by Encyclopaedia Britannica and augmented by the CIA World Factbook, World Directory of Minorities and national census data.

The third variable is *indigenous population*. This mitigates sensitivity in the measurement of ethnic fractionalization owing to its contingency on the level of ethnicity. This is exemplified by countries such as the US and Canada having quite high diversity scores comparable to countries such as Pakistan and Sub-Saharan Africa (SSA). However, the tribalism metric circumvents these issues through an additional term capturing the proportion of *indigenous population*. Indigenous populations in US and Canada are relatively low, in contrast to those in Pakistan and SSA for example, which substantially reduces their tribalism scores (see Appendix Table 2).

The fourth variable is *gender equality*. This utilizes the gender gap index, which covers four sub-units of inequality: economic participation and opportunity, educational attainment, health and survival, and political involvement. Disparities between countries worldwide are relatively minimal in terms of education and health but rise significantly in terms of labour force participation and earnings, as well as political participation. Gender inequality is central to tribalism inasmuch that male gender roles provide security while their female counterparts are defined by the notion of reproduction of family, kin and culture.

The fifth and final variable is *group grievance*, which notably has double the weight of both the ethnic fractionalization and indigenous population variables. This is sourced from the group grievance index, which is one of ten constituents of the Fund for Peace's Fragile States Index¹.

Jacobsen & Deckard (2012: 9) argue "...the variable captures the history of aggrieved communal groups, public scapegoating of those groups with or without nationalistic political rhetoric, any patterns of atrocity committed with impunity or with support or participation of government groups and institutionalized political exclusion". Conceptually, it is linked to anthropological "balanced opposition" where the fear of violence in tribal societies between kinship groups paradoxically acts as a fundamental organizing principle (Jacobson & Deckard, 2012). This acts to reinforce a spectrum of loyalties from tight-knit immediate familial units to extended family, clans and

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¹ See: https://fragilestatesindex.org/indicators/c3/

ultimately ethnicity, where social ties are vulnerable to rival familial, clan or tribal interests (Jacobson & Deckard, 2012). Group grievance formally captures such tribal rivalries in operationalizing a variable rather than relying on assumptions regarding motivations for conflict. This advances the preceding Reynol-Querol (RQ) measure of polarization. That measure focusses on a smaller number of tribal groups making up larger fractions of a population, where the smaller number of groups provides greater incentive for conflict (Montalvo & Reynal-Querol, 2005)ⁱⁱⁱ.

Together, these variables capture influences on the political economy from tribalism. This marks an improvement over and a significant departure from solely considering the more static measure of ethnic fractionalization. This way, a number of yet unresolved complexities in measuring culture have been avoided. First of these complexities is the assumption that dimensions need to be mathematically orthogonal to one another (e.g., Hofstede's four-dimensional measures have recently been augmented by a further two dimensions; see Beugelsdijk, Kostova & Roth, 2017). Conceptually, this is problematic since cultural dimensions are often interrelated in institutionally pluralist settings (Tung & Stahl, 2018), where this interrelatedness stems from complementarities within institutional frameworks. Mathematically, this interrelatedness causes additional problems connected to the measurement of institutional, psychic and cultural "distance" between countries (Tung & Stahl, 2018; Beugelsdijk et al., 2018). This relates to the common method of measuring distance in Euclidean terms between aggregated mean points formed from orthogonal dimensions in Cartesian statistical space (Cuypers, Ertug, Heugens, Kogut & Zou, 2017; Beugelsdijk et al., 2018).

Second, and by far the most profound complexity and criticism of existing representations of cultural dimensional measurement, is the notion of multiple cultures existing within notional "national" boundaries (Tung & Stahl, 2018). This too has been argued to contribute to serious constraints in the application of existing cultural measurement techniques, as well as related distance metrics, owing to the risk of spurious estimations (Luiz, 2015). However, this emergent

literature has so far been limited to the introduction of ethnic fractionalization measures and the elaboration of their elevated explanatory power in explaining a range of macroeconomic, political and social outcomes (e.g., Fearon, 2003; Alesina et al., 2003).

As a descriptive exercise, these variables are displayed per market across the African sample in Table 3. There are some notable observations. The first is that ethnic fractionalization is extremely low across North Africa, yet extremely high across much of SSA. While these extreme differences in diversity have been cited previously (e.g., Nunn & Wantchekon, 2011; Moscana et al., 2017), this reveals a critical limitation in the universal application of measures based on ethnolinguistic fractionalization. Contrastingly, this extreme variation is offset by the generally high gender inequality, which has a double weighting, and to a lesser extent by the lower-weighted measures of corruption, the proportion of population that is indigenous and group grievance. The extremely high ethnic fractionalization in SSA, alongside the extreme variation throughout Africa, including North Africa, also underscores the utility of the region for testing new measures whose efficacy is based on their generalizability.

Insert Table 3

Control variables: We adopt four sets of control variables. Our first set is *Environmental controls*, consisting of two variables. One is a binary effect accounting for English common law jurisdictions as opposed to their civil code law counterparts. This variable not only accounts for documented differences in legal and juridical philosophy between the two overarching legal families – with common law emphasizing jurisprudence while civil code relies on state legislators and "bright line" rules – but also for more reaching cultural differences, whereby civil code parallels the Dirigiste (state-led) capitalist model. In the African context, civil code law includes both the French and Portuguese legal systems. As our second environmental control variable, we control for income and

wealth inequalities through the inclusion of the natural logarithm of a jurisdiction's GDP per capita, denominated in US\$.

Board controls account for firm-level variations. The first is logarithmically transformed board size, defined as the total number of both nonexecutive and executive directors, which accounts for size-related differences in board communication and effectiveness in decision making as well as free riding (Boyd, 1994), while at the same time accounting for the need to accommodate more diverse environmental contingencies through the co-optation of directors, such as those from the extended family and important stakeholders (Khanna & Yafeh, 2007). Our second board control variable is the logarithmically transformed average executive tenure, which accounts for entrenchment effects impinging on optimality in executive risk taking and decisions. The third variable is the board independence ratio – defined as the proportion of independent nonexecutives on the board, which accounts for the separation between nonexecutives and their executive counterparts in terms of optimal monitoring (Jensen & Meckling, 1976). The fourth variable is a binary effect, accounting for the entrepreneurial founder being retained as CEO as opposed to their succession having been initiated. This accounts for the longevity of the founder's investment horizon and the upper-echelon culture-setting altruism of the founder, together with their social capital derived through personal networks acting as a critical resource for the firm (Hearn & Filatotchev, 2019). The fifth variable is the ratio of directors drawn from social elites within indigenous political economies to total board size. This captures the degree to which indigenous social elites have been co-opted on to the board of directors (e.g., North, 1991, 1994). They are defined as those with senior roles in government, commerce and civil society, and sourced from the director biography sections of annual reports.

Firm controls are drawn from prior empirical governance studies (Sanders & Carpenter, 1998; Finkelstein & Boyd, 1998). As our first firm control variable, we use the natural logarithm of a firm's pre-tax revenues (or sales) as a proxy for size, assumed to control for the complexity of the firm's operations and thus mirroring the complexity of the task environment, in turn reflective of an

enhanced need for the adoption of shareholder value governance in order to successfully cope with increasing information-processing requirements and complexities in decision making. As our second firm control variable, we adopt the accounting return on assets (ROA) as a measure of firm performance, in line with Finkelstein & Boyd (1998). As our third variable, we control for firm age, with older firms anticipated to have larger, more complex operations mirroring more complex task environments. It also accounts for the "liability of newness" and the considerable information asymmetries generated by a lack of operational and performance history (Arthurs, Hoskisson, Busenitz & Johnson, 2008). As our fourth firm control variable, we adopt a capital control, the ratio of debt to total assets, which is the total long and short-term liabilities divided by the total asset value of the firm and provides a measure of the gearing or leverage of the employment of debt. This avoids potential issues in relating debt directly to equity, due to equity's variability over the business cycle (see Bruton, Filatotchev, Chahine & Wright, 2010).

Finally, we adopt *IPO controls*. Our first IPO control variable is the ratio of shares offered at IPO to total shares issued and outstanding (e.g., Hearn & Filatotchev, 2019), both obtained from the appendices of financial statements. This captures the costs in public flotations of shares (Ritter, 1997). It also captures the degree of dilution in insider ownership and control during the IPO process and accounts for the diversification of the ownership structure of the firm, which necessitates increased governance protections for minority property rights. Our second IPO control variable is a binary effect accounting for whether the lead manager handling the listing process is foreign, which accounts for the lead manager's familiarity with overseas regulatory regimes and awareness of minority property rights protections through shareholder value governance adoption.

Empirical model

To test our hypotheses, we adopt pooled OLS models with random effects applied to the crosssection (between firms). Three regression models are estimated. The first model only contains controls. The second solely has as an explanatory variable the proportion of BG ownership, with this corresponding to an empirical test of *Hypothesis 1*. The third corresponds to our moderating hypothesis, concerning the interaction of tribalism and BG ownership in explaining the degree of adoption of shareholder value corporate governance – which is the subject of our *Hypothesis 2*.

We do not include country binary fixed effects since their addition would lead to perfect collinearity with both formal institutional quality and the common law binary legal control. This way, we avoid falling into the dummy variable trap (Wooldridge, 2009)^v. Industry and time (year) fixed effects are applied across all models. Industry definitions vary by country, while compliance with ISIN and SEDOL industry category codification is not universal across the continent, reflecting the underdeveloped nature of financial institutions. Consequently, we follow Khanna & Rivkin (2001) in handling similar issues; that is, we adopt Bloomberg's basic industry definitions^{vi}.

EMPIRICAL RESULTS

Bivariate analysis

Correlations (in Table 3) between variables are low and statistically insignificant for the most part. Further inspection of the variance inflation factors for all independent variables reveals that all are below 10, while the mean variance inflation factor for all independent variables together is 2.89 and mitigates concerns over multicollinearity (Vittinghoff, Glidden, Shiboski & McCulloch, 2012). However, in order to mitigate concerns over our institutional index being included in models twice during the moderation of the independent variables, it is centred and normalized. The variance inflation factors for both institutional quality and the tribal index are acceptable, being below 10.

Insert Table 3

Multivariate analysis

The empirical evidence regarding the *main effect* is detailed in model 2 (in Table 4). There is a large, negative and statistically significant association (-0.076, p = 0.040) between BG ownership and the (non)adoption of Anglo-American corporate governance. This strongly supports *Hypothesis* 1. It has economic significance too, with a one percentage point change in BG ownership leading to a 7.6% decrease in Anglo-American corporate governance adoption.

Our evidence regarding the moderation of our main effect by tribalism can be seen in model 3. Here, the main effect between BG ownership and shareholder value governance adoption (-0.076, p = 0.038) is positively moderated by informal tribalism (+0.061, p = 0.052). This supports *Hypothesis* 2. In terms of economic significance, the moderation causes the main effect to be offset by the firm being located in a high (as opposed to low) tribal framework. This leads to a one percentage point change in BG ownership causing a 7.6% decrease in Anglo-American corporate governance, on the one hand, to be partially offset in magnitude by a 6.1% increase in Anglo-American governance adoption contingent on the percentage level of tribalism present within the local informal institutional framework in which the firm is embedded.

The empirical evidence regarding the association of the controls with the dependent variable is consistent across all models. In terms of institutional controls, a firm's adoption of shareholder value governance is associated with higher formal institutional quality, common law jurisdictional heritage and higher GDP per capita. There is only one significant association between the board controls and the dependent variable; a higher ratio of nonexecutives on a board is associated with a higher adoption of shareholder value governance. In terms of firm controls, shareholder value governance adoption is associated with higher firm gross revenues, indicative of greater complexity of task environments and a necessity to adopt formalized governance structures in order to attain legitimacy in various differentiated product markets. In terms of IPO controls, counter-intuitively, shareholder value governance adoption is associated with a lower dispersion of shares offered in

proportion to total shares outstanding. This may be explained by deep-seated inhibitions over dilution of control and detrimental conflict being introduced into the firm through "conflicting voices" of minority owners, empowered by shareholder welfare protections in the firm's own governance framework. Finally, firms adopt more shareholder value governance when the lead managers assisting in their flotations are foreign, which emphasizes the importance of isomorphic conformity and pragmatic legitimacy, associated with appropriate notions of governance in international capital markets.

The diagnostic statistics associated with all four models reveal there is a consistent increase in overall adjusted R^2 explanatory power, as well as in the Wald χ^2 statistics, from model 1, which considers controls only, to the progressive addition of, first, BG ownership (model 2), then its moderation by tribalism (model 3). This observation provides support for the strength of the effects of both formal institutional quality and tribalism as moderators of the association between BG ownership and the BG constituent firm's shareholder value governance adoption.

Insert Table 4

As a final support for our findings, using model parameter estimates, we provide in Figure 3 a three-dimensional probability surface with respect to the likelihood of shareholder value governance adoption. Figure 3 visualizes the moderating role of tribalism. At higher levels of tribalism, increasing BG ownership is associated with increasing adoption of shareholder value or Anglo-American governance, while the opposite is true in progressively lower tribalism contexts.

Insert Figure 3

Supplementary and robustness tests

We undertake two supplementary analyses in order to further substantiate our main findings. The first supplementary analysis involves re-running our regression models using Alesina et al.'s (2002) ethnic as well as linguistic fractionalization metrics as substitutes for our original use of a tribalism metric. The resulting coefficients are comparatively small in size and lack statistical significance. The second involves moderation of the main effect by worldwide governance indicators (WGI) formal institutional quality, and the resulting interactive coefficient is negative, statistically significant and has the opposite sign to that for tribalism. We disaggregate the WGI measure into its six dimensions, which are recursively included in the moderation, and find those with statistically significant interactive coefficients are government effectiveness, regulatory quality, rule of law, and democratic voice and accountability. Both supplementary tests support our findings.

Next, we undertake five robustness tests to verify our initial results. The first involves a revised Anglo-American index, where we replace the binary condition of at least one independent nonexecutive director being present on the board with an alternative that there be a minimum proportion of 50% of independent nonexecutive directors on the board. The second involves replacing BG ownership with the ratio of BG representation on the board of directors, and applying random effects OLS regressions, where we obtain qualitatively identical results. The third involves creating four equally sized ordinal categories for Anglo-American governance adoption. We repeat this exercise twice to account for the two different Anglo-American governance indices, as outlined in the preceding first step. At this stage, we undertake three series of tests, with a variety of empirical models, and find all empirical results to be in line with those of our original analysis. The fourth involves a hierarchical linear Poisson count model, which addresses shortcomings in terms of informational loss in probit models and potential alternative modelling specifications arising from our dependent variable. The results using both variants of the Anglo-American index and both BG ownership and the ratio of BG representatives on the board of directors largely corroborate all of our prior results from the main analysis. The *fifth* and final robustness test involves our omitting any countries/markets with less than five IPO firms from our sample. This implies the dropping of

markets such as Sierra Leone, Malawi, Mozambique and Namibia, which have very few IPO firm observations and these often not having any BG involvement. The resulting sub-sample comprising only the more populous markets contains 171 IPO firms, which then form the basis of our reestimation of all our models. The empirical results from these provide further support for our main analysis, with coefficients which have stronger statistical significance (even lower p values). Taken together, all five robustness tests support our original findings.

DISCUSSION

This study is motivated by a lack of corporate governance research incorporating the latent cultural factors shaping emerging economy firms. Specifically, we address African firms' propensity to adopt Anglo-American corporate governance. We also motivate this research by the fact that Anglo-American corporate governance is embedded within international capital markets or investment norms. Our approach subscribes to the view that the corporate governance of a firm is essential in defining a firm's strategic orientation, in terms of its seeking to attain goals. These goals are the acquisition of external capital, accompanied by conformity in corporate governance with, and legitimacy from, a given institutional framework. We focus on BGs, which are ubiquitous in emerging economies and especially across Africa and Middle Eastern regions. Our argument is that BGs capitalize on formal institutional voids, in conjunction with the powerful influence of indigenous cultural institutions, predominantly centred on extended family.

Our findings advance a conceptualization of the life cycle of firms (see Brav & Gompers, 2003) within emerging economies. We propose a single major juncture – the transit from indigenous relational contracting and network reliance to externally seeking funds from unrelated providers. Importantly, this is reflected in the duplicity evident within many emerging economies, between informal cultural institutions and typically incongruous formal institutional architecture. The former is overwhelmingly powerful in providing the social fabric within which all economic

relations and actors are embedded. This also includes the formal institutional architecture which — while retaining its European heritage — is at least partially assimilated within the indigenous social fabric. This pattern leads to the visible bifurcation existing in many emerging economies and especially those of Africa and the Middle East.

Our application of institutional theory addresses shortcomings in the traditional agency approaches prevalent in prior literature (e.g., Morck, Wolfenzon & Yeung, 2005; Masulis et al., 2011). Specifically, we address the association between a BG's ownership of constituent firms and these firms' propensity to acquire external supplementary capital. Such agency-based approaches view decreasing BG direct ownership of a constituent firm as associated with an increase in its riskiness, which necessitates supplementary, externally sourced finance and resources. This is conceptualized by an increase in the riskiness of a BG-constituent firm being accompanied by a need for these risks to be borne by outside, unrelated investors, while the BG itself should ideally leverage elevated indirect control over the focal BG constituent firm. Contrastingly, our findings corroborate our theoretical arguments that increased BG ownership of a given constituent firm is associated with the elevated importance of that firm within the BG's network, with this akin to the firm seeking increased legitimacy from the wider BG. Given the BG's embeddedness within the cultural foundation of a country, this implies elevated cognitive legitimacy from opaque indigenous corporate governance and therefore lower adoption of Anglo-American shareholder value governance — which is essential to the attraction of outside, unrelated investors.

We also challenge the neoclassical and agency-based literature that has emphasized the adoption of Anglo-American corporate governance as a means to enhance firm efficiencies and productivity (e.g., Coffee, 2001). Likewise, we challenge the corporate governance convergence thesis by questioning the progressive transition and convergence of national corporate governance regimes into a globally dominant Anglo-American model. Our institution-theoretic legitimacy-based view emphasizes – in line with Luo et al. (2009) – the importance of corporate governance as

a means for a given firm to seek conformity with a particular institutional framework in order to secure access to external capital essential for its survival. Our view is accommodative of heterogeneity both between and within national boundaries – something visible across emerging economies as well as their developed counterparts. Our approach also accounts for the significant variation in firm-level corporate governance and the often-overlooked influence of the underlying cultural heritage of countries in determining firm-level corporate governance adoption.

Our consideration of the cultural heritage of countries extends to the impact of cultural fragmentation, through the sociological lens of tribalism, on BG constituent firms' degree of adoption of Anglo-American shareholder value corporate governance. We address a shortcoming in the use of static measures such as ethnic fractionalization, by introducing a more dynamic theorization of tribalism, or cultural fractionalization, through the contortion or warping of relational contracting schema. Our approach emphasizes the institutionalized nature of relational contracting schema, their contextual embeddedness within indigenous social networks and the huge cognitive legitimacy accorded to them. This usefully accounts for high tribalism contexts, being culturally fragmented, with a detrimental warping of relational contracting schemas to emphasize in-group favouritism and nepotism. This in turn detrimentally impacts incentive structures within the "national" social and cultural fabric, leading firms subject to higher BG control to be increasingly reliant on external capital, given the significant impediments to being able to contract relationally and gain social trust within the indigenous cultural context. Similarly, our theorization based on relational contracting schemas also accounts for low tribalism contexts which beneficially lack the fragmented favouritism of their high tribal counterparts, with relationships being more intercessory and intermediary in character. Such traits lead to a more equitable system of resource distribution across a national economy and importantly support formal institutional architecture tasked with the equitable redistribution of resources nationally. Here, BG constituent firms focus on resource acquisition and seeking legitimacy from informal cultural frameworks, implying lower Anglo-American shareholder value governance adoption. Our findings are of particular importance

given the proliferation of sub-national fault lines in the form of tribal and ethnic lineages across many emerging economies and especially those of Africa and the Middle East. Furthermore, we highlight a parsimonious linkage between the institutional fabric of a given nation-state and firms' relative adoption of formal Anglo-American corporate governance. In doing so we address a common shortfall in emerging markets research as it typically focuses on the impact of formal institutional frameworks or more static, overarching national definitions of culture.

Theoretically, our findings address shortfalls in prior literature that have largely focussed on how interactions between institutions and organizational factors might shape adoption of Anglo-American corporate governance norms (e.g., Westphal & Zajac, 2001; Westphal & Graebner, 2010), where this has not focussed on the nature of these interactions across distinct national institutional contexts. This shortfall has limited scholarly understanding of why firms seek to avoid adopting international investment norms based on Anglo-American corporate governance. We highlight how African firms' choice of corporate governance is contingent on underlying institutional and cultural foundations within the society's social fabric. With this lacuna in mind, we advance a theoretical perspective focussed on the actor-centred model of corporate governance, where rival actors draw on political power from within the underlying institutional context. This perspective has a profound outcome in shaping the managerial discourse and the corporate governance model adopted by the firm.

The managerial implication of our findings is that "culture matters" for choice of corporate governance. This implies that management and boards should focus on the dynamic measure of cultural integrity embodied in the concept of tribalism, rather than static measurements of institutional distances between homogeneous national cultures. In particular, rather than being a static construct, communitarian culture is "operationalized" through institutionalized relational contracting systems, which form the basis for tribalism. We argue tribalism not only captures unidimensional ethno-linguistic fractionalization but also mirrors the potential institutionalized

corruption associated with it. Managers and boards are then better able to execute firm strategy through the selective adoption of Anglo-American governance, depending on the specific external constituencies whose resources are preferentially sought. In this way, they are faced with a trade-off between conformity with indigenous institutional frameworks and the need for increased legitimacy from their foreign counterparts in order to circumvent constraints in the national context.

Our study has limitations that offer opportunities for further research. The first is that it only considers IPO firms, as publication of firm data is argued to be better in flotation documents. However, the study should benefit from being extended to a longitudinal perspective. As a second suggestion for further research, it would be valuable, data limitations notwithstanding, to also extend our study across all African listed firms, as well as emerging economies worldwide.

CONCLUSIONS

Our findings emphasize that the degree of national tribalism should be considered when analysing the firm-level adoption of corporate governance in Africa. The study underpins the importance of considering rival environmental contingencies in emerging market contexts, when organizations in general and BGs, in particular, seek supplementary external funding.

We argue that a high level of tribalism impedes the efficient coordination of resources within indigenous economies. Moreover, it requires BG constituent firms that seek external funding to accommodate Anglo-American corporate governance in order to conform with international investment norms. Specifically, the interdependence of formal institutional architecture and tribalism – both fundamentally associated with the demographic shape and with the incentive structures embedded within the underlying national political economy – calls for careful considerations when policymakers are formulating national corporate governance recommendations.

REFERENCES

- Adegbite, E. (2015). Good corporate governance in Nigeria: Antecedents, propositions and peculiarities. *International Business Review*, 24(2), 319–330
- African Financials website. (2014). African Financial Statements and Annual Reports.

 http://www.africanfinancials.com/ Accessed 15 September 2014
- Aguilera, R. V., & Jackson, G. (2010). Comparative and international corporate governance.

 **Academy of Management Annals*, 4, 485–556*
- Aguilera, R. V., Judge, W. Q., & Terjesen, S. (2018). Corporate governance deviance. *Academy of Management Review*, 43, 87–109.
- Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S. & Wacziarg, R. (2003). Fractionalization. *Journal of Economic Growth*, 8(2), 155–194
- Areneke, G., Adegbite, E., & Tunyi, A. (2022). Transfer of corporate governance practices into weak emerging market environments by foreign institutional investors. *International Business Review*, 31 (5), 101978
- Areneke, G., & Kimani, D. (2019). Value relevance of multinational directorship and cross-listing on MNEs national governance disclosure practices in Sub-Saharan Africa: Evidence from Nigeria. *Journal of World Business*, 54(4), 285–306
- Armitage, S., Hou, W., Sarkar, S. & Talaulicar, T. (2017). Corporate governance challenges in emerging economies. *Corporate Governance: An International Review*, 25(3), 148-154
- Arregle, J-L., Hitt, M. A., & Mari, I. (2019). A missing link in family-firms internationalization research: Family structures. *Journal of International Business Studies*, 50(5), 809–825

- Arthurs, J., Hoskisson, R., Busenitz, L. & Johnson, R. (2008). Managerial agents watching other agents: multiple agency conflicts regarding underpricing in IPO firms. *Academy of Management Journal*, 51(2), 277–294
- Barnett, A., Yandle, B., & Naufal, G. (2013). Regulation, trust, and cronyism in Middle Eastern societies: The simple economics of "wasta". *The Journal of Socio-Economics*, 44, 41-46
- Berger R, Silbiger A, Herstein R, & Branes, B. R. (2015). Analyzing business-to-business relationships in an Arab context. *Journal of World Business*, 50(3), 454-464
- Beugelsdijk, S., Kostova, T. & Roth, K. (2017). An overview of Hofstede-inspired country-level culture research in international business since 2006. *Journal of International Business Studies*, 48, 30-47
- Beugelsdijk, S., Ambos, B. & Nell, P. C. (2018). Conceptualizing and measuring distance in international business research: recurring questions and best practice guidelines. *Journal of International Business Studies*, 49, 1113-1137
- Bhappu, A. D. (2000). The Japanese Family: An Institutional Logic for Japanese Corporate Networks and Japanese Management. *Academy of Management Review*, 25(2), 1-30
- Bitektine, A. (2011). Towards a theory of social judgments of organizations: The case of legitimacy, reputation and status. *Academy of Management Review*, 36(1), 151-179
- Bizer, V. & Hamann, R. (2015). The business of social and environmental innovation. In Bizer, V., Hamann, R., Hall, M., and Griffin El, E.W. (Eds.). *The business of social and environmental innovation*: 3-24. New York: Springer International publishing
- Boyd, B. K. (1994). Board control and CEO compensation. *Strategic Management Journal*, 15(5), 335-344

- Brav, A. & Gompers, P. (2003). The role of lockups in initial public offerings. *Review of Financial Studies*, 16(1), 1–29
- Bruton, G. D., Filatotchev, I., Chahine, S. & Wright, M. (2010). Governance, ownership structure, and performance of IPO firms: The impact of different types of private equity investors and institutional environments. *Strategic Management Journal*, 31(5), 491-509
- Carruthers, B. G., & Kim, J-C. (2011). The sociology of finance. *Annual Review of Sociology*, 37, 239-259
- Certo, S. T. (2003). Influencing initial public offering investors with prestige: Signalling with board structures. *Academy of Management Review*, 28(3), 432-446
- Coffee, J. C. Jr. (2001). The Rise of Dispersed Ownership: The Roles of Law and the State in the Separation of Ownership and Control. *Yale Law Journal*, 111(1), 2-82
- Cuypers, I. R. P., Ertug, G., Heugens, P. P. M. A. R., Kogut, B., & Zou, T. (2018). The making of a construct: Lessons from 30 years of the Kogut and Singh cultural distance index. *Journal of International Business Studies*, 49(9), 1138-1153
- Deephouse, D. L., & Suchman, M. C. 2008. *Legitimacy in organizational institutionalism*. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), Sage handbook of organizational institutionalism: 49-77. Thousand Oaks, CA: Sage
- Easterly, W., & Levine, R. (1997). Africa's Growth Tragedy: Policies and Ethnic Division. *Quarterly Journal of Economics*, 112(4), 1203-1250
- Fainshmidt, S., Judge, W. Q., Aguilera, R. V., & Smith, A. (2018). Varieties of institutional systems: A contextual taxonomy of understudied countries. *Journal of World Business*, 53(3), 307-322

- Fearon, J. D. (2003). Ethnic and cultural diversity by country. *Journal of Economic Growth*, 8(2), 195-222
- Filatotchev, I., Chahine, S., & Bruton, G. D. (2018). Board Interlocks and Initial Public Offering

 Performance in the United States and the United Kingdom: An Institutional Perspective. *Journal*of Management, 44(4), 1620–1650
- Finkelstein, S., & Boyd, B. K. (1998). How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation. *Academy of Management Journal*, 41(2), 179-199
- Ge, J., Carney, M., & Kellermanns, F. (2019). Who Fills Institutional Voids? Entrepreneurs' Utilization of Political and Family Ties in Emerging Markets. *Entrepreneurship: Theory and Practice*, 43(6), 1124–1147
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics*, 118(1), 107-155
- Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78(6), 1360-1380
- Granovetter, M. (1995). Coase revisited: Business groups in the modern economy. *Industrial and Corporate Change*, 4(1), 93–130.
- Greif, A., & Tabellini, G. (2010). Cultural and Institutional Bifurcation: China and Europe Compared. *American Economic Review*, 100(2), 135-140
- Greif, A. (2012). The Maghribi traders: a reappraisal? *The Economic History Review*, 65(2), 445-469
- Haxhi, I., & Aguilera, R. V. (2017). An institutional configurational approach to cross-national diversity in corporate governance. *Journal of Management Studies*, 54(3), 261–303

- Hearn, B., & Filatotchev, I. (2019). Founder retention as CEO at IPO in emerging economies: The role of private equity owners and national institutions. *Journal of Business Venturing*, 34(3), 418-438
- Heidenreich, S., Mohr, A., & Puck, J. (2015). Political strategies, entrepreneurial overconfidence and foreign direct investment in developing countries. *Journal of World Business*, 50(4), 793-803
- Hooghiemstra, R., Hermes, N., & Emanuels, J. (2014). National Culture and Internal Control

 Disclosures: A Cross-country Analysis. *Corporate Governance: An International Review*, 23(4),
 357-377
- Hu, H. W., Cui, L., & Aulakh, P. S. (2019). State capitalism and performance persistence of business group-affiliated firms: A comparative study of China and India. *Journal of International Business Studies*, 50(2), 193-222
- Jensen, M. C., & Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305-360
- Jacobson, D., & Deckard, N. (2012). The tribalism index: Unlocking the relationship between tribal patriarchy and Islamist militants. *New Global Studies*, 6(1), 1-16
- Joireman, S. F. (2001). Inherited legal systems and effective rule of law: Africa and the colonial legacy. *The Journal of Modern African Studies*, 39(4), 571-596
- Joireman, S. F. (2004). Colonization and the rule of law: Comparing the effectiveness of common law and civil law countries. *Constitutional Political Economy*, 15(4), 315-338
- Kaufman, D., Kraay, A., & Mastruzzi, M. (2009). *Governance Matters VIII: Governance Indicators* for 1996-2008. Washington: World Bank Policy Research Unit, June

- Khanna, T., & Palepu, K. (2000). Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *The Journal of Finance*, 55(2), 867-891
- Khanna, T., & Rivkin, J. W. (2001). Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22(1), 45-74
- Khanna, T., & Yafeh, Y. (2007). Business groups in emerging markets: Paragons or Parasites? *Journal of Economic Literature*, 45(2), 331-372
- Kim, H., Hoskisson, R., & Wan, W. (2004). Power dependence, diversification strategy, and performance in keiretsu member firms. *Strategic Management Journal*, 25(7), 613-636
- Kim, H., & Song, J. (2017). Filling institutional voids in emerging economies: The impact of capital market development and business groups on M&A deal abandonment. *Journal of International Business Studies*, 48, 308–323
- La Porta, R., Lopez-de-Silanes, F., Schliefer, A. & Vishny, R. (1998). Law and Finance. *Journal of Political Economy*, 106(6), 1113-1155
- Liedong, T. A., Aghanya, D., Jimenez, A., & Rajwani, T. (2023). Corporate political activity and bribery in Africa: Do internet penetration and foreign ownership matter? *Journal of Business Research*, 154, 113326
- Luiz, J. M. (2015). The impact of ethno-linguistic fractionalization on cultural measures: Dynamics, endogeneity and modernization. *Journal of International Business Studies*, 46(9), 1080-1098
- Luo, X., Chung, C-N., & Sobczak, M. (2009). How do corporate governance model differences affect foreign direct investment in emerging economies? *Journal of International Business*Studies, 40, 444–467
- Mair, J., & Martí, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of Business Venturing*, 24, 419–435

- Masulis, R. W., Pham, P. K., & Zein, J. (2011). Family business groups around the world: Financing advantages, control motivations, and organizational choices. *Review of Financial Studies*, 24(11), 3556-3600
- Mintz, S. M. (2005). Corporate Governance in an International Context: legal systems, financing patterns and cultural variables. *Corporate Governance: An International Review*, 13(5), 582-597
- Montalvo, J. G., & Reynal-Querol, M. (2005). Ethnic polarization, potential conflict, and civil wars. *American Economic Review*, 95(3), 796-816
- Morck, R., Wolfenzon, D., & Yeung, B. (2005). Corporate governance, economic entrenchment and growth. *Journal of Economic Literature*. 43(3), 655-720
- Moscana, J., Nunn, N., & Robinson, J. A. (2017). Keeping it in the family: lineage organization and the scope of trust in Sub Saharan Africa. *American Economic Review: Papers and Proceedings*, 107(5), 565-571
- Nakpodia, F., Shrives, P. J., & Sorour, M. K. (2020). Examining the link between religion and corporate governance: Insights from Nigeria. *Business and Society*, 59(5), 956–994
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge, UK: Cambridge University Press
- North, D. C. (1991). Institutions. Journal of Economic Perspectives, 5(1), 97-112
- North, D. C. (1994). The historical evolution of polities. *International Review of Law and Economics*, 14(4), 381-391
- Nunn N. (2008). The Long Term Effects of Africa's Slave Trades. *Quarterly Journal of Economics*. 123(1), 139-176
- Nunn N. (2010). Religious Conversion in Colonial Africa. *American Economic Review Papers and Proceedings*. 100(2), 147-152

- Nunn, N., & Wantchekon, L. (2011). The Slave Trade and the Origins of Mistrust in Africa. *American Economic Review*, 101(7), 3221-3252
- NYSE (2016). New York Stock Exchange Manual. Section 3: Corporate Responsibility.

 http://nysemanual.nyse.com/lcm/sections/lcm-sections/chp_1_4/default.asp Accessed 16/8/2016
- Oehmichen, J. (2018). East meets west—Corporate governance in Asian emerging markets: A literature review and research agenda. *International Business Review*, 27, 465–480
- Ritter, J. (1987). The costs of going public. Journal of Financial Economics, 19, 269–282
- Sanders, G. W., & Boivie, S. (2004). Sorting things out: Valuation of new firms in uncertain markets. *Strategic Management Journal*, 25(2), 167-186
- Sanders, W. M. G., & Carpenter, M. A. (1998). Internationalization and firm governance: The roles of CEO compensation, top team composition and board structure. *Academy of Management Journal*, 41(2), 158-178
- Sarpong, D., Bi, J., & Amankwah-Amoah, J. (2016). On the nurturing of strategic foresight: The Ubuntu perspective. *Futures*, 75, 14-23
- Singh, D. A., & Gaur, A. S. (2009). Business group affiliation, firm governance, and firm performance: Evidence from China and India. *Corporate Governance: An International Review*, 17(4), 411–425
- Suchman, M. C. (1995). Managing legitimacy and institutional approaches. *Academy of Management Review*, 20(3), 571-610
- Sydow, A., Cannatelli, B. L., Giudici, A., & Molteni, M. (2022). Entrepreneurial Workaround Practices in Severe Institutional Voids: Evidence From Kenya. *Entrepreneurship: Theory and Practice*, 46(2), 331–367

- Tajeddin, M., & Carney, M. (2019). African Business Groups: How Does Group Affiliation Improve SMEs' Export Intensity? *Entrepreneurship, Theory & Practice*, 43(6), 1194–1222.
- The Economist. (2019). African companies are expanding across the continent. *Accessed 22 June* 2021
- Thornton, P. H., & Ocasio, W. (1999). Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958-1990.

 American Journal of Sociology, 105(3), 801-844
- Tobin, J. (1982). Money and Finance in the Macroeconomic Process. *Journal of Money, Credit & Banking*, 14(2), 171-204
- Tung, R. L., & Stahl, G. K. (2018). The tortuous evolution of the role of culture in IB research: what we know, and what we don't know, and where we are headed. *Journal of International Business Studies*, 49(9), 1167-1189
- Vissa, B., Greve, H., & Chen, W.-R. (2010). Business group affiliation and firm search behavior in India: Responsiveness and focus of attention. *Organization Science*, 21(3), 696–712
- Vittinghoff, E., Glidden, D. V., Shiboski, S. C. & McCulloch, C. E. (2012). Regression Methods in Biostatistics: Linear, Logistic, Survival, and Repeated Measures Models. 2nd ed. 2012 edition. Springer; 2011
- Westphal, J. D., & Graebner, M. E. (2010). A matter of appearances: How corporate leaders manage the impressions of financial analysts about the conduct of their boards. *Academy of Management Journal*, 53(1), 15–44
- Westphal, J. D., & Zajac, E. J. (2001). Decoupling policy from practice: The case of stock repurchase programs. *Administrative Science Quarterly*, 46(2), 202–228

Wooldridge, J. M. (2009). *Introductory econometrics: a modern approach*. Boston, MA: Cengage Learning

Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. (2008). Corporate governance in emerging economies: A review of the principal–principal perspective. *Journal of Management Studies*, 45(1), 196–220

Table 1. Elements of firm level shareholder value governance

This table outlines the individual corporate governance elements we have included which when combined form an index reflecting the relative degree of adoption of shareholder value corporate governance by each firm. We propose two shareholder value adoption indices. Both are essentially the same and contain 16 elements – bar for a difference in the last or sixteenth element relating to independent nonexecutive directors. The first index variant comprises the first 15 elements plus element 16a, namely it takes the value 1 if there is a presence of at least one independent nonexecutive director on the board. The second index variant similarly comprises the first 15 elements though this time with element 16b, which takes the value 1 if there is a minimum of 50% of independent nonexecutives on the board. The indices were compiled by the authors from individual IPO listing prospectuses for all IPOs that took place in Africa between January 2000 and August 2016. Two t-difference in means tests are undertaken across the sample reflecting a division in corporate governance per high versus low formal institutional quality, and then per high versus low informal tribalism. In terms of formal institutional quality, "high" is differentiated from "low" by those values over a median of 64%, while in terms of informal tribalism "high" is differentiated from "low" by being over a median of 46.84%. $\dagger p \leq 0.10$; $\dagger p \leq 0.05$; ** $p \leq 0.05$;

Element	Formal		Informal		
	High Inst.	Low Inst.	High	Low	
	Quality	Quality	Tribalism	Tribalism	
	%	%	%	%	
(1) Presence of non-ordinary shares	1.03	0.96	0.00†	2.13	
(2) Proxy voting	78.35	72.12	73.83	76.60	
(3) International auditor	42.27***	21.15	25.23*	38.30	
(4) International accounting standards	45.36†	36.54	36.45†	45.74	
(5) CEO pay disclosure	63.92**	47.12	37.38***	75.53	
(6) Executive stock options	9.28*	2.88	3.74†	8.51	
(7) Executive bonuses	22.68	17.31	14.02**	26.60	
(8) Executive ownership	41.24	43.27	41.12	43.62	
(9) Unitary Board	57.73†	50.00	52.34	55.32	
(10) CEO = Chairperson	48.45†	40.38	36.45**	53.19	
(11) Remuneration committee	29.90*	18.27	19.63†	28.72	
(12) Remuneration committee independence	21.65*	11.54	12.15*	21.28	
(13) Audit committee	51.55	51.92	56.07†	46.81	
(14) Audit committee independence	34.02	30.77	31.78	32.98	
(15) Attendance statement of nonexecutives	19.59†	12.50	3.74***	29.79	
(16a) Independent nonexecutives > 1 nonexecutive board member	49.48	48.08	50.47	46.81	
(16b) Independent nonexecutives > 50% of total nonexecutives	34.02*	23.08	24.30†	32.98	
Index – shareholder value (>1)	44.65***	37.68	37.15***	45.48	
Index – shareholder value (>50%)	43.69***	36.12	35.51***	44.61	
Formal Institutional Quality			39.34***	56.16	
Informal Tribalism	57.01***	71.91			

Table 2 Summary of governance elements

This table presents the percentage of firms with each provision – classified per regional universe, where these are subdivided into South Africa, the continent's largest economy and equity market, and then Southern Africa excluding South Africa, North Africa, and the Sub Saharan (SSA) regions of East & West Africa – where these are subdivided between common law, civil code law and overall for the year 2016. Overall is defined as the whole sample of firms. All data is sourced from listings prospectuses, as outlined in Appendix Table 1. a, b, c, d refers to t-difference in means for each element in respect to other regional universes. So, for example an "a" in the North Africa column refers to t-difference in means between North Africa (denoted as b) and South Africa (denoted as a). These are referred to in the context of t-difference in means test for each of the respective governance elements between each of the regions, with a p value of 0.10 or lower. In the t-difference in means comparison between common law and civil code law countries the following relates to statistical significance of p-values: $\dagger p \le 0.10$; $\ast p \le 0.05$; $\ast p \le 0.01$; $\ast p \le 0.005$

Governance element	Type	Percentage (%) of firms with governance provisions in:							
		South Africa North Africa S		Sub Saharan	Sub Saharan Africa (ex SA)		All Africa		
		(a)	(b)	Southern Africa (c)	East & West Africa (d)	Common law	Civil Code law	Overall	
Separation of ownership from control					<u> </u>				
Presence of non-ordinary shares	Dictatorship	0.00	0.00d	6.67	1.16	0.00	1.74†	1.00	
Proxy voting	Democracy	100.00c,d	92.22d	80.00d	53.49	65.12	82.61***	75.12	
International Auditor	Democracy	100.00b,d	23.33c,d	93.33d	43.02	58.14	27.83***	40.80	
International Accounting standards	Democracy	100.00b,d	2.22c,d	93.33d	43.02	54.65	13.91***	31.34	
Incentive compensation									
CEO pay disclosure	Democracy	100.00b,c,d	53.33c	73.33d	48.84	63.95	48.70*	55.22	
Executive stock options	Democracy	60.00b,c,d	4.44	0.00a	2.33	8.14	4.35	5.97	
Executive bonuses	Democracy	100.00b,c,d	17.78c,d	46.67d	8.14	25.58	15.65*	19.90	
Executive ownership	Democracy	70.00b,d	36.67	53.33	43.02	52.33	34.78***	42.29	
Board monitoring									
Unitary Board	Democracy	100.00b,d	13.33c,d	93.33	83.72	93.02	24.35***	53.73	
CEO = Chairperson	Dictatorship	10.00b	72.22c,d	13.33	24.42	15.12	66.09***	44.28	
Remuneration committee	Democracy	100.00b,c,d	8.89c,d	73.33d	22.09	40.70	11.30***	23.88	
Remuneration committee independence	Democracy	100.00b,c,d	5.56c	60.00d	10.47	31.40	5.22***	16.42	
Auditor committee	Democracy	100.00b,d	35.56c,d	93.33d	55.81	73.26	35.65***	51.74	
Auditor committee independence	Democracy	100.00b,c,d	20.00c	86.67d	27.91	51.16	18.26***	32.34	
Attendance statement of nonexecutives	Democracy	50.00b,c,d	23.33d	6.67	5.81	10.47	20.00*	15.92	
(a) Ind. nonexecutives > 1	Democracy	100.00b,c,d	41.11c	66.67	47.67	56.98	42.61**	48.76	
(b) Ind. nonexecutives > 50% of total nonexecutives	Democracy	100.00b,c,d	16.67c,d	53.33d	27.91	41.86	18.26***	28.36	
Shareholder value index > 1	_	86.88b,c,d	34.38c,d	64.17d	38.66	50.00	34.35***	41.04	
Number of constituent firms:		10	90	15	86	86	115	201	

Table 3 Summary of governance, institutional quality and investor protection statistics
This table reports summary statistics for average direct BG ownership, shareholder value governance adoption, formal institutional quality, informal tribalism and all the precursor indices forming tribalism for individual sample markets.

Country	N	Direct	Governance metric							
		ownership	Firm	Formal	Informal	Informal Tribalism Sub-indices				
		BG	Shareholder value index	Institutional quality index	Tribalism index	Corruption	Ethnic fractional	Indigenous population	Gender equality	Group grievance
	#	%	%	%	%	0-1	0-1	0-1	0-1	0-1
North Africa										
Algeria	3	70.70	39.58	33.77	67.55	0.6514	0.3395	0.9900	0.6137	0.5166
Egypt	11	44.44	48.86	38.94	68.47	0.6600	0.1835	0.9100	0.5947	0.7305
Morocco	37	49.44	30.24	46.82	63.94	0.6157	0.4840	0.9900	0.5866	0.4608
Tunisia	39	51.74	33.81	48.88	61.38	0.5914	0.0395	0.9800	0.6307	0.4694
East Africa										
Kenya	7	16.45	60.71	39.06	76.60	0.7357	0.8590	0.9900	0.6757	0.7556
Tanzania	7	1.40	40.18	42.95	69.66	0.6671	0.7355	0.9900	0.7016	0.6825
Uganda	1	0.00	37.50	39.37	76.98	0.7386	0.9300	0.9900	0.7047	0.7501
Rwanda	1	0.00	37.50	51.92	49.52	0.4657	0.3240	0.9900	0.7959	0.7014
Mauritius	13	39.77	39.90	72.11	49.34	0.4700	0.6150	0.6800	0.6512	0.3860
Seychelles	3	0.00	33.33	56.15	49.34	0.4700	0.2025	0.6800	0.6512	0.3860
West Africa										
Nigeria	31	31.22	35.28	29.09	75.94	0.7329	0.6520	0.9800	0.6259	0.5881
BVRM	6	54.10	22.92	42.22	65.16	0.6243	0.7870	0.9900	0.5955	0.6550
Ghana	15	13.88	41.67	52.84	58.45	0.5571	0.6735	1.0000	0.6798	0.5412
Cape Verde Islands	1	0.00	31.25	58.62	45.10	0.4271	0.4175	0.0000	0.7153	0.7480
Sierra Leone	1	0.00	37.50	36.08	72.76	0.6986	0.8190	0.9000	0.6610	0.7187
Southern Africa										
Botswana	7	7.58	66.96	68.88	40.14	0.3757	0.4100	0.9600	0.6945	0.4938
Malawi	1	48.16	56.25	48.87	69.89	0.6686	0.8790	0.9000	0.6851	0.7690
Zambia	2	38.91	65.63	46.88	65.51	0.6271	0.7810	0.9900	0.6321	0.6495
Namibia	4	20.33	68.75	61.17	52.23	0.4943	0.6330	0.8500	0.7264	0.6056
Mozambique	1	98.10	31.25	44.56	74.64	0.7171	0.6930	0.9900	0.7283	0.6298
South Africa	10	5.48	86.88	59.26	59.11	0.5657	0.7515	0.7900	0.7466	0.2719
Overall	201	35.34	41.04	47.21	63.44	0.6092	0.4768	0.9386	0.6403	0.5258

Table 4. Pearson Correlation analysis This table reports descriptive statistics and Pearson correlations for all variables in aggregate sample. $\dagger p \leq 0.10; *p \leq 0.05; **p \leq 0.01; ***p \leq 0.005.$

		Mean	Std. dev.	1	2	3	4	5	6	7
1	Shareholder value overall index (>1)	0.410	0.186	1.000						
2	BG own, %	0.273	0.309	-0.237***	1.000					
3	Tribal index, Normalized	0.000	1.000	-0.228***	-0.009	1.000				
4	Common law, 0-1	0.423	0.495	0.426***	-0.067***	0.292***	1.000			
5	Log (GDP per capita, US\$)	8.774	0.688	0.150*	0.076	-0.536***	-0.426***	1.000		
6	Log (board size, #)	2.100	0.390	-0.119†	0.098*	0.210***	-0.141*	-0.044	1.000	
7	Log (Av. Executive tenure, years)	1.676	0.921	-0.001	0.091	0.231***	0.028	-0.113†	-0.011	1.000
8	Ratio nonexecutives on board, %	0.658	0.209	0.105***	0.027***	0.056†	0.215***	-0.116	0.123	0.112
9	CEO = Founder, 0/1	0.498	0.501	0.059	0.019†	-0.077	0.040	0.156*	-0.180**	0.084
10	Ratio social elite nonexecutives, %	0.175	0.214	0.161*	-0.151	0.270***	0.442***	-0.265***	-0.059	-0.048
11	Log (Revenue, US\$)	9.816	2.016	0.204***	0.137***	0.118†	-0.152*	0.232***	0.283***	0.100
12	ROA, %	0.065	0.308	0.055	0.019	0.050	-0.044	0.018	0.011	0.119†
13	Log (Firm Age, years)	2.659	1.065	-0.108	0.038***	0.258***	-0.145*	-0.049	0.361***	0.429***
14	Ratio debt to total assets, %	0.639	0.838	0.014	-0.046	0.001	-0.014	0.058	0.097†	0.010
15	Shares Offered/ Total Shares, %	0.333	0.228	-0.040	-0.086***	0.034	0.276***	-0.247***	-0.091	-0.152*
16	Lead Manager is foreign, 0/1	0.149	0.357	0.286***	0.081	0.071	0.035	-0.062	0.053	-0.041

Table 4. (Continued) Pearson Correlation analysis This table reports descriptive statistics and Pearson correlations for all variables in aggregate sample. $\dagger p \leq 0.10$; $*p \leq 0.05$; $**p \leq 0.01$; $***p \leq 0.005$.

		8	9	10	11	12	13	14	15	16
1	Shareholder value overall index (>1)									
2	BG own, %									
3	Tribal index, Normalized									
4	Common law, 0-1									
5	Log (GDP per capita, US\$)									
6	Log (board size, #)									
7	Log (Av. Executive tenure, years)									
8	Ratio nonexecutives on board, %	1.000								
9	CEO = Founder, 0/1	-0.124	1.000							
10	Ratio social elite nonexecutives, %	0.242*	-0.091	1.000						
11	Log (Revenue, US\$)	-0.017	-0.091	-0.113†	1.000					
12	ROA, %	0.003	0.077	-0.030	0.195***	1.000				
13	Log (Firm Age, years)	-0.024	-0.321***	-0.118*	0.305***	0.126†	1.000			
14	Ratio debt to total assets, %	0.121	0.046	0.007	0.020	-0.076	-0.076	1.000		
15	Shares Offered/ Total Shares, %	0.137*	-0.052	0.201***	-0.296***	-0.063	-0.225***	0.034	1.000	
16	Lead Manager is foreign, 0/1	0.058***	-0.056	-0.015	0.196***	0.054	0.038	-0.039	0.071	1.000

Table 5. OLS regression between BG ownership and firm's adoption of shareholder value governance $^{a,\ b,\ c}$

This table presents the random (country) effects OLS regression results for dependent variable which is the shareholder value governance index (>1). In all cases the formal institutional quality and informal tribal indices are normalized. Additional country-level constant is included in variable part of random variance component; ^a Binary effects for year and industry were included in the models but are not reported in the table; ^b Standard errors are in parentheses; ^c Country-cluster adjusted standard errors & covariance.

	Dependent varial	ble: shareho	lder value overall	index (>1) – underlying ind	ex
	Controls only		Ownership		Informal	
			plus controls		Tribal index	
	Model 1	p value	Model 2	p value	Model 3	p value
Constant	-0.378 [0.213]	0.075	-0.341 [0.202]	0.091	-0.331 [0.171]	0.053
Hypotheses						
BG ownership			-0.076 [0.037]	0.040	-0.076 [0.037]	0.038
Moderation - informal						
BG ownership					+0.061 [0.032]	0.052
x Tribal index						
Tribal index	-0.044 [0.021]	0.033	-0.043 [0.02]	0.030	-0.058 [0.015]	0.000
Environmental controls						
Common law	0.214 [0.044]	0.000	0.200 [0.038]	0.000	0.197 [0.026]	0.000
Log (GDP per capita)	0.068 [0.019]	0.000	0.064 [0.018]	0.000	0.063 [0.018]	0.000
Log (ODF per capita)	0.000 [0.019]	0.000	0.004 [0.018]	0.000	0.003 [0.018]	0.000
Board controls						
Log (board size)	-0.024 [0.041]	0.559	-0.016 [0.039]	0.684	-0.019 [0.029]	0.514
Log (Av. Executive tenure)	0.008 [0.011]	0.453	0.010 [0.011]	0.377	0.008 [0.013]	0.510
Ratio nonexecutives on board	0.291 [0.046]	0.000	0.271 [0.043]	0.000	0.272 [0.048]	0.000
CEO = Founder	0.003 [0.014]	0.843	0.003 [0.014]	0.839	0.002 [0.021]	0.918
Ratio social elite nonexecutives	0.021 [0.077]	0.782	0.027 [0.072]	0.708	0.035 [0.055]	0.528
Firm controls						
Log (Revenue)	0.016 [0.006]	0.010	0.019 [0.006]	0.003	0.019 [0.006]	0.001
ROA	0.034 [0.029]	0.232	0.036 [0.027]	0.180	0.035 [0.030]	0.246
Log (Firm Age)	-0.001 [0.013]	0.944	-0.001 [0.013]	0.935	-0.001 [0.012]	0.984
Ratio debt to total assets	-0.004 [0.007]	0.629	-0.002 [0.008]	0.766	-0.003 [0.011]	0.784
IPO controls						
Shares Offered/ Total Shares	-0.114 [0.035]	0.001	-0.123 [0.035]	0.000	-0.124 [0.045]	0.006
Lead Manager is foreign	0.104 [0.039]	0.008	0.101 [0.038]	0.009	0.098 [0.027]	0.000
No. Obs.	189	<u> </u>	189	_	189	-
Wald χ^2 [prob]	322.27 [0.00]		333.50 [0.00]		343.48 [0.00]	
R ² within	0.3394		0.3524		0.3635	
R ² between	0.8963		0.9057		0.9115	
R ² overall	0.6824		0.6912		0.6989	

Figure 1. Theoretical associations

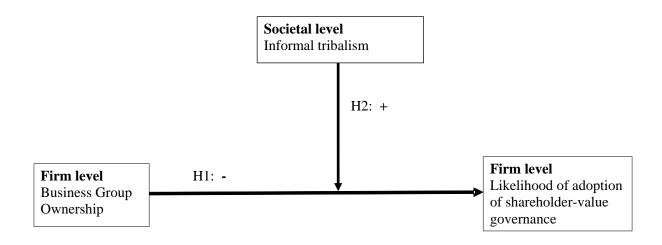


Figure 2. Extent of control of Bank of Africa business group, 2011

This traces the cash flow ownership versus control rights across Bank of Africa Group. Control and cash flow rights were estimated using the method outlined in Chernykh (2008). AGORA and ATTICA are entities located in the country of Benin that act as intra-group private equity within the internal capital market. *** and †† denotes investment by AGORA and ATTICA respectively

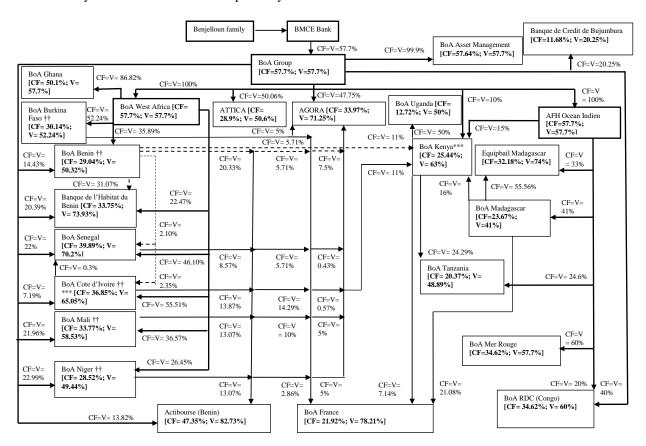
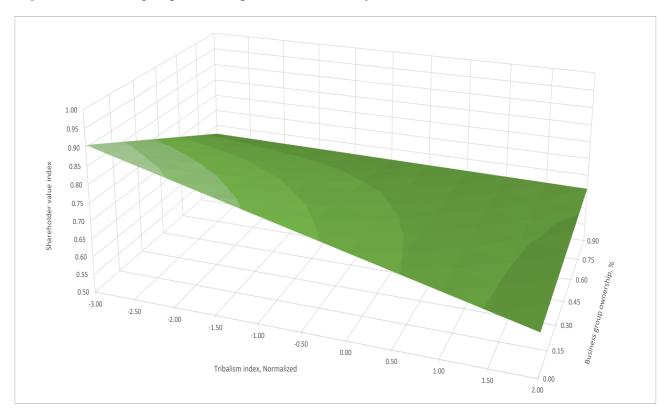


Figure 3. Business group ownership and moderation by informal tribalism



Appendix Table 1. Elements of firm level shareholder value governance

This table outlines the governance elements we have included as an integral part of the shareholder value firm level governance structure. Each element is defined alongside its source. All indices are equally weighted arithmetic averages of constituent elements. There are two overall or aggregate indices denoting a firm's adoption of shareholder value governance – where the distinction between the two is based on (1) the presence of at least one independent nonexecutive director on the board or (2) a minimum of 50% of independent nonexecutives on the board. The indices were compiled by the authors from individual IPO listing prospectuses for all IPOs that took place in Africa between January 2000 and August 2016.

Element	Definition
Separation of ownership from	Definition
control	
(1) Presence of non-ordinary shares	Binary 1/0 variable. Takes value of 1 if firm exclusively uses ordinary (one share one vote) shares across entire shareholder base. Thus, there is no discrimination between shareholders through the use of non-voting stock, preference shares, convertible instruments, or share structures inferring differentials in voting rights –
(2) Proxy voting	such as A, B, C class shares. Binary 1/0 variable. Takes value of 1 if a clear statement is made in listing prospectus regarding recognition and arrangements for voting by proxy.
(3) International auditor	Binary 1/0 variable. Takes value of 1 if either an international auditor or its local subsidiary is used as the firm's auditor.
(4) International accounting standards	Binary 1/0 variable. Takes value of 1 if firm declares that its accounts and financial statements were prepared in accordance with international (as opposed to indigenous) accounting standards. These are typically GAAP, US GAAP, or IFRS.
Incentive compensation	indigenous, accounting standards. These are typically of this, or if his.
(5) CEO pay disclosure	Binary 1/0 variable. Takes value of 1 if CEO salary is disclosed in listing prospectus. This relates to improved transparency with external investors (principals) and a reduction in their bonding costs.
(6) Executive stock options	Binary 1/0 variable. Takes value of 1 if firm remunerates its executives with stock options or other derivative instruments.
(7) Executive bonuses	Binary 1/0 variable. Takes value of 1 if firm remunerates its executives with performance-related bonus payments at end of tax year.
(8) Executive ownership	Binary 1/0 variable. Takes value of 1 if executives are entitled to stock ownership as part of their compensation arrangements.
Board monitoring	
(9) Unitary Board	Binary 1/0 variable. Takes value of 1 if the board of directors is unitary, i.e., if it is
(10) CEO = Chairperson	comprised of a single tier encompassing executive and nonexecutives. Binary 1/0 variable. Takes value of 0 if the same individual occupies both the roles of CEO and chairperson and 1 otherwise
(11) Remuneration committee	Binary 1/0 variable. Takes value of 1 if the firm established a remuneration committee as part of its governance apparatus – where this committee exclusively decides compensation levels and structure of board membership.
(12) Remuneration committee	Binary 1/0 variable. Takes value of 1 if the remuneration committee is independent
independence	(in terms of membership) from CEO or other dominant block shareholders.
(13) Audit committee	Binary 1/0 variable. Takes value of 1 if the firm established an audit committee as part of its governance apparatus – where this committee is solely responsible for the firm undertaking audits of its activities and for ensuring these audits are performed by external independent auditors.
(14) Audit committee independence	Binary 1/0 variable. Takes value of 1 if the audit committee is independent (in terms of membership) from CEO or other dominant block shareholders.
(15) Attendance statement of	Binary 1/0 variable. Takes value of 1 if the firm either declares an Attendance Rota
nonexecutives	of nonexecutives in designated board meetings (essential to their performing their monitoring function within the firm on behalf of external principals) or a clear statement that attendance is checked and duly reported to external shareholders.
(16a) Independent nonexecutives > 1	Binary 1/0 variable. Takes value of 1 if there is at least one independent nonexecutive on the board.
(16b) Independent nonexecutives >	Binary 1/0 variable. Takes value of 1 if a minimum of 50% of nonexecutives are
50% of total nonexecutives	independent and unaffiliated with CEO or any external shareholder principal.

Market	non-exhaustive representation of data and information sources from across Africa Information source
North Africa	Databases: Al Zawya (see website at: http://www.zawya.com/); Mubasher investment reporting
	(http://www.mubasher.net/en/Index.aspx); Bloomberg LLP; Business Week
Algeria	Websites: Bourse d'Algérie [SGBV] (htp://www.sgbv.dz); Commission d'Organisation et des
	Surveillance des Opérations de Bourse [COSOB] (http://www.cosob.org/) Telephone interviews and direct correspondence: M. Hamdi and Mme. Haffar (Bourse d'Alger)
	receptione interviews and direct correspondence. wi. Haindr and winie. Hariar (Bourse & Aiger)
Egypt	Websites: Egyptian Stock Exchange [EGX] (http://www.egx.com.eg/english/homepage.aspx);
	The Egyptian Financial Supervisory Authority (http://www.efsa.gov.eg/content/IFIE/about_efsa.html); Central Bank of Egypt
	(http://www.cbe.org.eg/English/)
	Telephone interviews (unstructured) to obtain data: Mohammed Omran (Chairman, EGX)
	Cairo-based interviews: Ayman Raafat (Market Control, EGX); Hebatallah El Serafi (Research & Market Development, EGX); Yasmin El-Khatib (PR & Communications, EGX)
Morocco	Websites: Bourse de Casablanca (http://www.casablanca-bourse.com/); Le Conseil Déontologique
Wiorocco	des Valeurs Mobilières [CDVM] (http://www.cdvm.gov.ma/)
	Casablanca-based interviews to obtain data: Mme. Meryem Tazi (Chef de Produits, Service
	Marketing, Bourse de Casablanca); Mme. Amina Zouaoui (Analyste, Service Négociation, Bourse de Casablanca)
Tunisia	Websites: Bourse de Tunis (http://www.bvmt.com.tn/); Conseil du Marché Financier [CMF]
	(http://www.cmf.org.tn/); Central Bank of Tunisia (http://www.bct.gov.tn/)
	Tunis-based interviews: M. Hatem Zribi (Direction de la Promotion du Marché, Bourse de Tunis): Mme. Maher Chtourou (Banque Centrale de Tunisie library)
	Tunis-based procurement of data from library of African Development Bank
Sub Saharan Africa	Databases: African financials annual reports (http://www.africanfinancials.com/); Invest Africa annual reports (http://investinginafrica.net/african-stock-markets/); Thomson Perfect Information portal; Bloomberg LLP; Business Week
East Africa	
Kenya	Websites: Nairobi securities exchange (https://www.nse.co.ke/); Capital Markets Authority Keny
	(http://www.cma.or.ke/); Daily Nation business journal (http://www.nation.co.ke/) Local Nairobi-based interviews: Public relations officer, Nairobi Stock Exchange; Investment
	Manager, Suntra Investment Bank, Kenya
Mauritius	Websites: Stock Exchange of Mauritius [SEM] (<u>http://www.stockexchangeofmauritius.com/</u>)
Seychelles	Websites: Trop-X Seychelles stock exchange (http://www.trop-x.com/)
Tanzania	Websites: Dar Es Salaam stock exchange (http://www.dse.co.tz/)
	Telephone procurement of listing prospectus from M. Stimali, Tanzania Tea Packers Ltd
Rwanda	Websites: Rwanda stock exchange (http://rse.rw/); Capital Market Authority (http://cma.rw/)
Uganda	Websites: Uganda securities exchange [USE] (http://www.use.or.ug/); Capital Markets Authority
	(http://www.cmauganda.co.ug/) Procurement of annual reports: Kampala-based USE library
	Kampala-based interviews: Investment Management team, Crane Bank, Kampala; Head of trading
	USE trading floor, Kampala; Investment Manager, African Alliance Securities, Kampala; Head of
West Africa	equities trading, Standard Chartered Bank, Kampala
Nigeria	Websites: Nigerian stock exchange [NSE] (http://www.nse.com.ng/Pages/default.aspx); Securities
	and Exchange Commission Nigeria (http://www.sec.gov.ng/) Lagge based programment of annual reports and listings prospectuses from NSE library Lagge
	Lagos-based procurement of annual reports and listings prospectuses from NSE library, Lagos Lagos-based interviews: M. Obaseki (President of Operations, NSE); Mme. Hauwa M. Audu
	(Founder CEO, Amyn Investments and stockbroking, Lagos)

BVRM Websites: BRVM main site (http://www.brvm.org)

Cote d'Ivoire:

Procurement of annual reports: Abidjan (Cote d'Ivoire)-based library for BRVM

Abidjan-based interviews:

BRVM exchange: Emmanuel Zamble (Market operations manager, BRVM); Khassim Diop (Chargée de développement du Marché, BRVM); Abdoulaye Sogoba (Assistant chargée de la

formation, BRVM)

Abidjan brokers: M. Auguste Kouakou (Gniman-Finance SA, Abidjan); M. Hermann Boua

(Hudson et Cie, Abidjan)

Mali: Bamako-based interviews: M. Amadou Djeri Bocoum (Directeur de l'Antenne Nationale de Bourse du Mali, Bamako); M. Alassane Sissoko (Responsable des études et de la négociation,

Société de Gestion et d'Intermédiation (SGI) du Mali SA, Bamako)

Ghana Websites: Ghana stock exchange (http://www.gse.com.gh/)

Accra-based interviews:

Ghana stock exchange: Worlanyo Amoa (Senior Manager, Research and Product Devlopment,

GSE)

Ghana Brokers: Armah I. J. Akotey (Vice President, Databank Brokerage and Investment Banking, Accra, Ghana); Edem Akpenyo (HFC Brokerage Services, Accra, Ghana); Kafui Asare (Head of Client Relations, SAS Investment Management, Accra, Ghana); Haruna Gariba (Head of Client

Relations, Merchant Bank of Ghana Ltd, Accra, Ghana)

Cameroon Websites: Doula stock exchange (http://www.douala-stock-exchange.com/)

Cape Verde Website: Cape Verde stock exchange [BVC] (http://www.bvc.cv/)

Telephone based interviews and procurement of data: Edmilson Mendonça (Operations Manager,

BVC); Ronnie Machado (Compliance Manager, BVC)

Sierra Leone Telephone-based interviews and procurement of data: M. Gibrilla Sesay (Operations Manager,

Sierra Leone stock exchange); M. Michael Collier (Deputy President, Rokel Commercial Bank, Freetown, Sierra Leone); Jacob Kanu and Daniel Thomas (CEO's of independent local licensed

stockbrokers, Freetown)

Southern Africa

Botswana Website: Botswana stock exchange [BSE] (http://www.bse.co.bw/)

Telephone interviews and data procurement: Kopane Bolokwe (Operations officer, BSE)

Gabarone-based interviews with Head of Operations, BSE; President of Stock Brokers Botswana

Malawi Websites: Malawi stock exchange [MSE] (http://www.mse.co.mw/); The Nation business journal

(http://mwnation.com/)

Zambia Websites: Lusaka stock exchange [LuSE] (http://www.luse.co.zm/); The Post business journal

(Zambia) (http://www.postzambia.com/)

Telephone-based procurement: Mme. Sitali Mugala (Operations Manager, Lusaka stock exchange)

Lusaka-based interviews: LuSE operations personnel

Namibia Websites: Namibia stock exchange [NSX] (http://nsx.com.na/)

Windhoek-based data procurement from NSX building and library

Telephone based procurement: John Mandy (CEO, NSX); Loide Nakanduungile (Research

Manager, NSX); Manda Steynberg (Operations Manager, NSX)

Mozambique Websites: Bolsa de Valores de Maputo [BVM] (http://www.bvm.co.mz/)

Maputo-based interviews: Señor Bruno Tembe (Técnico Superior, BVM); Señor Felisberto

Navalha (Operations Manager, Central Bank of Mozambique)

Maputo-based procurement from Central Bank of Mozambique annex library, Baixa, Maputo

South Africa Websites: Johannesburg stock exchange [JSE] (https://www.jse.co.za/)

Appendix Table 3. Worldwide comparison of indicesTable documenting comparison of indices and selected sub-component indices. All indices standardized and rebased on a 0-1 scale

)-1 scale	WGI Aggregate	Tribalism Index
North America		
Canada	0.90390	0.25000
United States	0.80588	0.25000
Western Europe		
Austria	0.87460	0.27000
Belgium	0.82316	0.36000
Denmark	0.92337	0.14000
Finland	0.94849	0.04000
France	0.78721	0.35000
Germany	0.88930	0.25000
Greece	0.58264	0.45000
Iceland	0.86536	0.01000
Ireland	0.87631	0.14000
Italy	0.63155	0.46000
Luxembourg	0.91615	0.29000
Macedonia	0.55497	0.42000
Malta	0.77302	0.39000
Netherlands	0.91652	0.21000
Norway	0.93091	0.00000
Portugal	0.74394	0.28000
Spain	0.70601	0.38000
Sweden	0.92552	0.04000
Switzerland	0.94487	0.27000
United Kingdom	0.86302	0.37000
Eastern Europe and former Soviet Union		
Albania	0.51969	0.51000
Armenia	0.46788	0.53000
Azerbaijan	0.36447	0.60000
Belarus	0.36920	0.52000
Bulgaria	0.55390	0.48000
Croatia	0.62717	0.49000
Cyprus	0.75853	0.48000
Czech Republic	0.73386	0.46000
Estonia	0.80484	0.44000
Georgia	0.61706	0.62000
Hungary	0.64556	0.43000
Kazakhstan	0.41709	0.56000
Kyrgyzstan	0.35045	0.65000
Latvia	0.70534	0.45000
Lithuania	0.72813	0.39000
Moldova	0.46447	0.56000
Poland	0.72690	0.35000
Slovenia	0.71935	0.34000

Slovakia	0.69079	0.47000
Tajikistan	0.30044	0.66000
Ukraine	0.34778	0.59000
Uzbekistan	0.26463	0.61000
Turkmenistan	0.22662	0.60000
Romania	0.56729	0.52000
Russia	0.37245	0.53000
Asia & Oceania		
Afghanistan	0.18862	1.00000
Australia	0.89697	0.12000
Bangladesh	0.34857	0.57000
Brunei Darussalam	0.66230	0.44000
Cambodia	0.36142	0.61000
China	0.42055	0.54000
India	0.46357	0.59000
Indonesia	0.47816	0.69000
	0.84356	0.34000
Japan		
Korea, Republic of	0.70148	0.43000
Nepal	0.37369	0.84000
New Zealand	0.95368	0.11000
Malaysia	0.63938	0.54000
Maldives	0.49426	0.65000
Mongolia	0.51023	0.48000
Singapore	0.88318	0.28000
Sri Lanka	0.46759	0.48000
Pakistan	0.29390	0.89000
Papua New Guinea	0.41077	0.58000
Philippines	0.48289	0.45000
Thailand	0.45818	0.64000
Vietnam	0.41307	0.52000
Middle East & North Africa		
Algeria	0.32955	0.71000
Bahrain	0.51272	0.60000
Chad	0.22753	0.99000
Egypt	0.31553	0.68000
Eritrea	0.18645	0.64000
Iraq	0.19519	0.80000
Iran	0.29631	0.78000
Israel	0.68279	0.47000
Jordan	0.50553	0.68000
Kuwait	0.48443	0.56000
Lebanon	0.35453	0.69000
Libya	0.13246	0.84000
Mauritania	0.33568	0.70000
Morocco	0.33368	0.72000
Oman	0.57265	0.56000
Qatar	0.65777	0.53000

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Latin America & Caribbean	Zambia	0.46504	0.72000
	Zimbabwe	0.22713	0.63000
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	Argentina	0.43720	0.34000

Barbados	0.76328	0.19000
Belize	0.47226	0.62000
Bolivia	0.39215	0.64000
Brazil	0.51638	0.50000
Chile	0.79857	0.21000
Costa Rica	0.67909	0.26000
Colombia	0.46870	0.54000
Cuba	0.41198	0.37000
Dominican Republic	0.47598	0.49000
Ecuador	0.38654	0.55000
El Salvador	0.50342	0.42000
Grenada	0.60066	0.44000
Guatemala	0.39035	0.63000
Guyana	0.44732	0.49000
Haiti	0.26227	0.43000
Honduras	0.37989	0.38000
Jamaica	0.53550	0.38000
Mexico	0.47341	0.53000
Nicaragua	0.40431	0.43000
Panama	0.55608	0.43000
Paraguay	0.40337	0.43000
Peru	0.47765	0.58000
Suriname	0.49562	0.59000
Trinidad and Tobago	0.54518	0.40000
Uruguay	0.72516	0.22000
Venezuela	0.21402	0.52000

Endnotes

ⁱ Constructing such a firm-level index is labor intensive and involves unrestricted access to all prospectuses for each firm at listing, which are typically unavailable or at best partially available through standard subscription third-party data vendors such as Bloomberg or Thomson. Further complexity, as evidenced in our African multi-country sample, is added by the prevalence of at least four languages in the corporate communications and filings, two different accounting philosophies (continental European versus Anglo Saxon), and the often at best minimal adoption of formal international accounting standards such as IFRS.

ii Jacobson & Deckard (2012: 10) argue that, as the internal reliability of the scale is high, shifting the weightings of specific variables within the index does not significantly change the rankings of individual nations or meaningfully alter its ability to predict or moderate the role of BG ownership in determining a firm's Anglo-American governance adoption. iii A shortcoming of this RQ measure is that, while it accounts for examples of conflict such as that in Rwanda and Burundi between rival Tutsi and Hutu groups, it fails to account for unrest in regions such as Nigeria's Niger Delta, Eastern Kenya following the 2007 elections and North-Western Pakistan, these latter three regions being defined by considerable ethno-linguistic fractionalization.

iv Off diagonal covariances between dimensions increase the spuriousness of this simple distance method, necessitating more complex and less tractable techniques for gauging distance.

^v If dummy variables for all country (and time) categories were included, their sum would equal one for all observations, which would be identical to and hence perfectly correlated with the vector-of-ones variable whose coefficient is the constant term; if the vector-of-ones variable were also present, this would result in perfect multicollinearity, so that the matrix inversion in the estimation algorithm would be impossible. This is referred to as the dummy variable trap (Wooldridge, 2009).

vi The industry classifications are Basic Materials, Consumer Goods Non-Cyclical, Consumer Goods Cyclical, Energy, Financials, Health, Industrials, Technology, Telecommunications and Utilities. The identification of firms according to their industry using broad Bloomberg definitions is in keeping with the data limitations across our sample, a common characteristic of emerging economies.