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Varieties of institutional systems: A contextual taxonomy of understudied countries

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ABSTRACT

We advance a new theoretical framework to capture the diverse and unique institutional context of understudied economies in Africa, Middle East, East Europe, Latin America, and Asia. Our framework encompasses the configurational context encapsulated by state, financial markets, human capital, social capital, and corporate governance institutions operating in these regions. Using qualitative data solicited from experts to compile the institutional profiles of 68 economies, we identify seven types of institutional systems. Ultimately, we offer a more comprehensive and up-to-date taxonomy of the national institutional context operating throughout the global economy. We call this taxonomy "Varieties of Institutional Systems."

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1. Introduction

Principally, all management scholars aspiring a theoretical contribution should be concerned about context (Meyer, 2015, p. 369).

National institutions have long been a central part of international business theory (Cantwell, Dunning, & Lundan, 2010). As the formal and informal "rules of the game," national institutions underpin much of the context in which international business and competition takes place. Recently, the field has witnessed the emergence of more holistic theoretical foundation for understanding the impact of institutional diversity on international business phenomena by focusing on how national institutions configure in complementary ways into *systems* of economic organization (e.g., Ioannou & Serafeim, 2012; Jackson & Deeg, 2008; Hotho, 2014; Judge, Fainshmidt, & Brown, 2014). This look at international business context through a systemic lens entails a departure from focusing on relationships between single institutions or isolated elements of "doing business" in a specific context (Redding, 2005).

The literature on institutional systems straddles two primary frameworks—Varieties of Capitalism (VOC) (Hall & Soskice, 2001) and National Business Systems (NBS) (Whitley, 1999). The VOC typology divides some advanced economies into liberal and coordinated market economies, based on the allocative mechanism of resources, profits and risk. Alternatively, the NBS typology focuses on "distinctive ways of structuring economic activities with different kinds of actors following contrasting priorities and logics" (Whitley, 1998: 449); and encompasses institutions pertaining to the state, financial markets, human capital, and social capital. While both typologies have proven useful in explaining the nature and consequences of systemic variation, especially in developed economies (e.g., Witt & Redding, 2013; Hotho, 2014; Schneider & Paunescu, 2012), they are often not well-suited for characterizing the increasingly significant group of newly-developed, emerging, and developing economies. Notably, emerging and developing economies encompass most of the world's population and, since 2013, the majority of global purchasing power (Economist, 2013). Furthermore, newly-developed economies often do not resemble well established advanced economies due to their unique trajectories (Schneider, 2013; Tsui-Auch & Lee, 2003).

Consequently, we go beyond the VOC and NBS frameworks in this study by considering additional unique institutional aspects, such as state and family salience, which have proven to be highly relevant to economies in Africa, Middle East, East Europe, Latin

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America, and Asia (Aguilera & Judge, 2014). Our new framework, "Varieties of Institutional Systems" (VIS), more comprehensively captures the institutional context provided by the state, financial markets, human capital, social capital, and corporate governance institutions in these important but understudied regions within the global economy. Then, we rely on rich qualitative data provided by a panel of regional experts to compile the institutional profiles of 68 national economies, and inductively identify seven distinct national institutional systems using a two-step cluster analysis technique.

Our study makes several important contributions to the international business literature. First, the VOC framework has been criticized for "its lack of attention to the developing world" as well as to the role of the state and social norms in how economic activity is organized within the national institutional context (Wilkinson, Wood, & Deeg, 2014, p. 2). Similarly, NBS is not well-suited to depict many economic systems around the world where different types of state and family capitalism have recently emerged (Musacchio, Lazzarini, & Aguilera, 2015; Lane, 2008; Tsui-Auch & Lee, 2003). Our framework remedies this omission by adding new institutional dimensions to VOC and NBS particularly relevant to Asian, East European, African, Middle Eastern, and Latin American contexts (e.g., Hearn, 2015; Nölke & Vliegenthart, 2009; Witt & Redding, 2013; Schneider, 2009).

Second, our approach offers a more comprehensive and systemic way to think about institutional context (Jackson & Deeg, 2008). Namely, it transcends geographical boundaries and allows for a parsimonious conceptual and operational mapping of nation-states that may not appear similar (or dissimilar) when looking at a single type of institution or variable (Aguilera, Filatotchev, Gospel & Jackson, 2008). To properly understand international business context, we need to combine a nation's "social, cultural, legal, and economic variables" (Cheng, 1994, p. 165). As stated by Peng, Wang, and Jiang (2008, p. 921), "Even among developed economies, there are significant differences in terms of how competition is organized."

Third, while acknowledging that organizational heterogeneity exists within nations (Walker, Brewster, & Wodd, 2014), we develop an improved platform for scholars examining the implications of cross-national institutional differences for organizations embedded in different types of institutional systems (Li, Cui, & Lu, 2014; Martin, 2014; Whitley, 1998). Because national institutions often shape the bundles of resources and capabilities firms possess (Berger & Dore, 1996; Soskice, 1999; Carney, Gedajlovic, & Yang, 2009), different types of organizational competitive advantages may emerge as distinct responses to different national institutional systems (Hall & Soskice, 2001).

Finally, while national institutions typically change slowly, research shows that institutional change does occur (Gingrich, 2015; Taras, Steel, & Kirkman, 2012; Berry, Guillén, & Hendi, 2014). As such, older typologies can become outdated as the institutional profile of nation-states shifts over time (Hotho, 2014; Hall & Gingerich, 2009). By drawing on current expert knowledge that is not available in extant archival datasets coupled with a broader consideration of institutional context, we are able to refine and extend prior typologies and begin to consider all regions of the global economy. According to Hotho (2014), such a taxonomical approach may stimulate the conceptual refinement of exiting typologies.

2. Institutional systems as international business context

The configurational approach to national institutions is a way of distilling a complex array of interdependent variables into a unified whole. It reflects the reality that within national boundaries, institutions tend to "hang together" as coherent entities or gestalts. According to Redding (2005, p. 131), "[the] reason why the nation-state often emerges as the most compelling among the various surrounding envelopes is that so much of the institutional fabric is set within its boundaries." The notion of institutional gestalts is predicated on the principle of complementarity, which emerges when two or more elements mutually reinforce one another's effects or because they compensate for one another's deficiencies (Crouch, 2005). In so doing, societal institutions combine to affect the organization of economic activities and, thereby, provide the context for a range of country-level and organizational outcomes (Morgan & Kristensen, 2014; Jackson & Deeg, 2008).

Prior studies have shown the usefulness of the configurational approach in explaining a variety of organizational outcomes such as outward and inward foreign direct investment (Pajunen, 2008; Witt & Lewin, 2007), internationalization of state-owned enterprises (Li et al., 2014), cross-national differences in CEO compensation (Greckhamer, 2015), export patterns (Schneider, Schulze-Bentrop, & Paunescu, 2010; Schnedier & Paunescu, 2012), human resource practices (Fenton-O'Creevy, Gooderham, & Nordhaug, 2008), corporate environmental performance (Hartmann & Uhlenbruck, 2015), percentage of women on corporate boards of directors (Grosvold & Brammer, 2011), and equitable wealth creation (Judge et al., 2014). For instance, Schnedier and Paunescu (2012) show that the institutional gestalts in the USA and Germany – both in which property rights are well protected – promote various levels of coordination among economic actors, and therefore are better positioned for radical and incremental innovation, respectively.[1] Reinforcing these insights, Hoskisson, Yiu, and Kim (2004, p. 301) argue that:

. . . in the U.S. transactional capital market system, corporate control is often exercised through a change in the management by takeovers. Such a change is easier if firms are not hindered by long-term relational contracts with their managers, as such reorganization may lead to great internal organizational conflicts. As such, the absence of a relational managerial labor market is conducive to the arm's-length transactional capital market in the United States.

Within the institutional systems literature, the VOC (Hall & Soskice, 2001) and NBS (Whitley, 1999) frameworks are the two seminal theoretical perspectives seeking to explain how institutional combinations shape economic exchange within nation-states. Below, we begin by discussing these two typologies, and then refine and extend them into our new proposed taxonomy which we label "Varieties of Institutional Systems" (VIS).

2.1. The VOC and NBS frameworks

Hall and Soskice's (2001) work firms as the "crucial actors in a capitalist economy" (p. 6) and the firm's strategic interactions as the underlying mechanisms explaining systemic variation. Their VOC typology attempts to explain *how* economic activity is organized among capital, labor, and management within advanced economies. Within that framework, countries are divided into two main types—liberal market economies (LMEs) and coordinated market economies (CMEs).

In LMEs, companies coordinate their activities via competitive market arrangements, and the allocative mechanism is based primarily on market supply and demand. Most firms raise capital through the stock exchange or private equity markets, where

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[1] This literature focuses on larger, dominant organizations, or those that control and account for dominant proportions of total economic activity and resources in the economy.

Table 1
Institutional contextual dimensions of the VOC, NBS, and VIS frameworks.

Institutional dimension	VOC	NBS	VIS
Role of the state			
Direct state dominance			✔
Indirect intervention in private sector		✔	✔
Type of state[a]			✔
Role of financial markets			
Equity market	✔	✔	✔
Credit market	✔	✔	✔
Family wealth			✔
State-provided capital		✔	✔
Role of human capital			
Coordination with labor	✔	✔	✔
Knowledge capital		✔	✔
Role of social capital			
Generalized trust		✔	✔
Role of corporate governanc			
Ownership concentration	✔	✔	✔
Family ownership		✔	✔
Family intervention in management			✔

Notes: [a]—Regulatory, welfare, developmental, and/or predatory. VOC = Varieties of Capitalism; NBS = National Business Systems; VIS = Varieties of Institutional Systems.

shareholders tend to be highly dispersed. The labor market in an LME is flexible, and labor coordination is largely absent. This type of system is often found in former British colonies, with the USA being a prime example. Appendix A lists countries that prior research has identified as heavily reliant on markets as the organizing logic.

In CMEs, the mode of coordination is less competitive in nature. Instead, companies forge core competencies through strategic interactions, collaborative arrangements, and the exchange of private information within networks. In CMEs, there is more consensus-building through inter-organizational networks such as business confederations, industry wide wage-setting coordination, collective bargaining and cooperation between labor and management in firm strategic decisions, and vocational training.[2] Ownership tends to be more concentrated, and the capital market relies heavily on networks and commercial banks. CMEs are mostly found in Western and Northern Europe, with Germany as a prime example (see Appendix A).

As for the NBS framework, Whitley (1998, 449) also posits that "economies can be compared as different kinds of systems of economic organization according to the prevalent ways in which economic activities and relationships are coordinated and controlled." However, his framework is based on four main contextual dimensions: the role of the state in the economy, the type and development of financial markets, the nature of the educational system and labor market, and the presence of informal norms pertaining to social capital (Whitley, 1999). Within these institutional configurations, he identifies six different types of national business systems (see Table 1 in Whitley, 2000, p. 859). For instance, high direct control and low cooperation among firms is characteristic of *fragmented business systems* because trust is low and financial capital is scarce (Whitley, 1999). As a result, firms are usually smaller and opportunistic (Whitley, 1994). In contrast, *collaborative* business systems benefit from relatively high levels of

trust and financial resources readily available through the credit markets. Labor is well organized and plays an important role in how resources are allocated by management. As a result, firms tend to be highly collaborative and networked (Whitley, 1999).[3]

2.2. Limitations of the VOC and NBS frameworks

In spite of its ample merits, VOC has been criticized for its narrow focus on developed economies and its oversight of key institutional dimensions (Schneider, 2013; Hotho, 2014). For instance, VOC does not systematically account for the ways in which firms interact with the state and, perhaps more importantly, the heterogeneity of how autonomous states influence firms. This is particularly problematic given that political bargaining has been a vibrant area of research within the IB field (e.g., Boddewyn & Brewer, 1994; Hillman & Wan, 2005). Similarly, VOC discusses interfirm networks but overlooks the notion of political or policy networks, which is a crucial element of the institutional context within which firms operate (e.g., Rizopoulos & Sergakis, 2010). Furthermore, VOC does not account for cultural variation which plays a significant role in explaining how economic actors engage with one another.

Witt and Redding (2013, p. 295) compare thirteen Asian countries to five Western countries, and conclude that "the traditional dichotomy of CME versus LMEs is not useful for understanding Asian business systems." Schneider (2013) notes that "capitalism in many developing countries is what it is," (p. 22) and not likely on a trajectory toward becoming one of the types associated with many developed economies. The embedded institutional complementarities within these systems often prevent such change (Acemoglu & Robinson, 2012).[4] These critiques suggest that many of the LME/CME characteristics are not applicable to countries outside of VOC's boundaries. In fact, Hall and Soskice identify several *advanced* economies where institutional complementarities are less apparent, and subsequent studies note that some of these countries probably do not reside on the LME-CME continuum (Hancké, Rhodes, & Thatcher, 2008; Lane, 2008; Schmidt, 2003). We agree with Boyer (2005) and Walker et al. (2014) that what the *Varieties* of Capitalism typology needs, ironically, is more conceptual variety.

In a similar vein, Whitley's NBS typology is conceptually derived from observational evidence from predominantly developed economies, blended with consideration of a few developing East Asian and East European economies (e.g., Hamilton & Biggart, 1988; Kagono, Alonaka, Sakakibara, & Okumara, 1985; Maurice, Sellier, & Silvestre, 1986; Maurice, Sorge, & Warner, 1980; Whitley, 1990). This incomplete representation of the global economy raises concerns about whether the business systems identified truly capture all notable patterns of economic organization throughout the world, particularly since Whitley never provides a systematic empirical test of his typology (Hotho, 2014). For instance, Whitley's (2000) *state organized* system includes a state which coordinates labor and controls banks. Yet, the NBS typology fails to distinguish between nation-states characterized by various types of state capitalism, where the state may not necessarily organize labor but

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[2] The CME group has been sub-divided into network-based CME (e.g., Japan in the 1990s) and negotiation-based CME (e.g., Germany). Similarly, coordination is in some cases facilitated at the federal or national level, while in other cases it occurs among economic actors at the sectorial or sub-national level (Emmenegger, 2010).

[3] Recent work has synthesized VOC with Whitley's NBS, maintaining that LMEs and CMEs could be clearly distinguished and mapped onto the four NBS dimensions (see Witt & Redding, 2013; Morgan, 2007).

[4] For instance, diversified business groups in Latin America have little incentive to coordinate with the already atomized labor market characterized by high turnover and low incentives to invest in knowledge capital. In turn, low knowledge capital reinforces low-technology investment by diversified business groups. Consequently, such complementarities prevent Latin American economies from shifting towards a CME or LME (Schneider, 2013).

instead make direct resource allocation decisions (Frye & Shleifer, 1996; Musacchio et al., 2015).

Furthermore, while Whitley differentiates between tendencies for concentrated versus dispersed ownership across business systems, he also does not explicitly include the *type* of dominant owner in his typology. As such, the NBS approach does not fully account for the role that powerful families play in societies. In many countries, firms often exist to provide for, promote, and secure the national standing of family dynasties (Fogel, 2006). In turn, these families provide for their employees and other key stakeholders. Indeed, according to Morgan (2007), NBS ignored such social actors and did not pay sufficient attention to key power relations in society. Finally, NBS has also been criticized for its high levels of abstraction, inclusion of elements that are hard to measure, and an understatement of the importance of extractive government institutions in many parts of the world (Casson & Lundan, 1999). Consequently, NBS would benefit from an extension into other economies, and a refinement of the theoretical logic underpinning the typology. This is what we attempt to do in the remainder of our paper.

3. Varieties of institutional systems (VIS): a new contextual framework

Boyer (2005, p. 15) maintains that "we find genuinely new brands of capitalism outside the OECD."[5] This claim is backed up by the Economist (2014: para. 5), for instance, stating that "around 85% of $1 billion-plus businesses in South-East Asia are family-run, around 75% in Latin America, 67% in India and around 65% in the Middle East. China (where the proportion is about 40%) and Sub-Saharan Africa (35%) stand out for their relatively low share of family firms, because in both cases many large firms are state-owned." In many understudied economies, the institutional mechanisms of markets and collaboration identified by VOC and NBS are either absent or peripheral. Instead, the primary institutional 'driver' of economic activity is often the state and/or the extended family (Morck & Steier, 2005).[6]

Accordingly, our VIS framework integrates the VOC and NBS typologies, and also extends them by considering the role of the state and powerful families. Specifically, we include five institutional dimensions of economic activity: (1) the role of the state in the economy, (2) the role of financial markets, (3) the role of human capital, (4) the role of social capital, and (5) the role of corporate governance institutions. In doing so, we capture the unique features that are associated with understudied institutional contexts in Asia, Africa, Latin America, Middle East, and Eastern Europe, while maintaining enough parsimony for our taxonomy to be useful. In Table 1, we summarize the five institutional contextual dimensions and their respective elements, and we compare them with the VOC and NBS typologies. Next, we discuss each of the VIS five institutional dimensions

3.1. Role of the state

The state in our framework refers to a country's government, particularly the executive branch. According to Carney and Witt (2012) and Whitley (2003), states influence their economies in three fundamental ways. First, Zhang and Whitley (2013) note that

the state's dominance of the national economic system is determined by the extent to which it is directly and actively involved in economic production, usually through majority or minority state-owned enterprise. "State companies make up 80% of the value of the stock market in China, 62% in Russia and 38% in Brazil. They accounted for one-third of the emerging world's foreign direct investment between 2003 and 2010 and an even higher proportion of its most spectacular acquisitions, as well as a growing proportion of the very largest firms" (Wooldridge, 2012: para. 7). We refer to this contextual element within the state dimension as *direct state dominance*.

Second, the state may also indirectly intervene in the economy through capital provision, favoritism, and/or participation in corporate governance (e.g., political appointments to upper echelons) (Boyer, 2005; Kang & Moon, 2012; Musacchio & Lazzarini, 2014). We refer to this element as *indirect intervention in the private sector*. For instance, Russian oligarchs became wealthy not due to their acquisition of privatized means of production (Estrin, Poukliakova, & Shapiro, 2006), but because Putin – in leading the Russian state – facilitated the accumulation of assets by these tycoons (Adachi, 2013; Lane, 2008). Frye and Iwasaki (2011) similarly show that, in Russian joint-stock firms, the state "sends" directors that both extract resources from the state and provide important benefits and services to the state. In many countries, corruption is rampant and often renders the state a critical actor in how organizations allocate their resources. For instance, the Chinese state often picks and chooses which IPOs are approved and promoted in the national stock exchanges (Tian, 2011). According to Fan, Wong, and Zhang (2007: 330), "27% of the CEOs in a sample of 790 newly partially privatized firms in China are former or current government bureaucrats."

Third, states qualitatively differ in the overarching postures they assume toward national economic life. We draw on Carney and Witt (2012) and Whitley (2003) and consider four types of states. When the state sets and enforces the rules of the game, particularly the protection of property rights, it is referred to as a *Regulatory State*. With the exception of inherently public goods and services, regulatory states usually do not participate significantly in economic activity (Rosecrance, 1996). USA provides a prime example of a country with such a state.

A *Welfare State* emphasizes the "protection and promotion of the economic and social well-being of its citizens, primarily through the redistribution of wealth by the state" (Carney & Witt, 2012, p. 10). In such states, employment stability is favored and political relations are more coordinated or collaborative (Esping-Anderson, 2004). For instance, Acemoglu and Robinson (2014) explain how worker protests in 1918 in Sweden and a political coalition of the ends of the income distribution laid the foundations for the establishment of the welfare state as a mechanism intended to compress income inequality and protect labor well-being.

A *Developmental State* exerts substantive control over the economy, primarily by looking to long-term national interests and engaging in the development of business sectors via industrial policy. For example, Evans (1989, p. 563) explains that developmental states "may not be immune to 'rent seeking' or to using some of the social surplus for the ends of incumbents and their friends rather than those of the citizenry as a whole, but on balance, the consequences of their actions promote rather than impeding transformation." Such states, as in Brazil and Taiwan, exhibit a strong sense of corporate identity and a dense set of institutionalized links to private elites (Evans, 2014).

Finally, *Predatory States* are characterized as being governed by "elites who monopolize power through the use of opaque decision-making procedures, weak institutions, and a lack of market competition" (Carney & Witt, 2012, p. 11). For instance, Frye and

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[5] This literature refers to OECD (Organization for Economic Co-Operation and Development) members prior to the recent addition of countries such as Israel, Chile, and Estonia.

[6] Due to the weaknesses in formal governing institutions in many developing economies, a relatively large informal sector often emerges. However, our focus is on the formal sector where key organizations tend to conduct the bulk of their activities.

Schleifer (1996) provide evidence for the "grabbing hand" in Moscow as compared to a more business-friendly, "invisible hand" type of state in Poland. This type of state is remarkably prevalent throughout history because "[the] synergies between extractive economic and political institutions create a vicious circle, where extractive institutions, once in place, tend to persist" (Acemoglu & Robinson, 2012, p. 637). Importantly, neither developmental nor predatory states are common in regions that earlier frameworks examined.

3.2. Role of financial markets

Financial markets are a central element of any national institutional system whereby capital is acquired and distributed (Davis & Marquis, 2005). As Murray (1997) notes: They "don't just oil the wheels of economic growth, they are the wheels." Weber, Davis, and Lounsbury (2009) show that a country's historically favoring of investor-based systems (e.g., British colonies) increases the likelihood of stock exchange adoption and reliance on equity markets as the source of firm financial capital. Similarly, Zysman (1994) explains that Germany's heavy reliance on banks as the source of financial capital is rooted in its need to quickly catch-up with the industrial revolution that had emerged in Britain. Hence, a society's path-dependent political and economic history under-pins the logic with which financial markets develop and operate (Acemoglu & Robinson, 2012; Davis & Marquis, 2005). Indeed, NBS and VOC both include *equity* and *credit* markets as two main channels through which economic actors obtain financial capital.

However, as noted above, the state often acts as a financial capital provider outside of traditional private sources, particularly in countries where the state has been an owner of factors of production or financial institutions (Lazzarini, Musacchio, Bandeira-de-Mello, & Marcon, 2015). Furthermore, in economies where financial markets are relatively underdeveloped, firms tend to rely on internal capital markets based on accumulated family wealth (Steier, 2009). In fact, when states and/or families assume the role of capital-provider, they substitute for financial markets and inhibit their development (Schneider, 2009). In sum, the financial roles of *family wealth* and *state-provided capital* also need to be considered if we are to have a more complete picture of the national institutional context, especially in developing economies.

3.3. Role of human capital

This third dimension of our taxonomy concerns the formation of knowledge and the organization of labor markets within a national institutional system. Hall and Soskice (2001) propose that labor relations are key to how human capital is utilized and introduce the distinction of whether or not organizations coordinate strategic activities with labor. In countries where labor is organized and strong – typically through institutionalized legal arrangements that stem from long-standing political and economic ideology (Botero et al., 2004) – strategic investment time horizons tend to be longer and strategy and human resource practices such as wages and promotion are negotiated with labor (Locke & Thelen, 1995). Similarly, in labor markets underpinned by relational networks, strategic options tend to be constrained because firms are interlocked within long-term-oriented networks (Hoskisson et al., 2004; Witt & Lewin, 2007).

Alternatively, more fragmented labor markets may bring about higher employee turnover and flexibility (Witt & Redding, 2013). In many countries outside the OECD original members, labor markets are often inefficient and internal to business groups or state owned enterprises. In such contexts, labor is usually less effectively coordinated into collective action, and the organizing principle is many times based on connections to political and/or family elites

(Aguilera & Judge, 2014). Still, as Witt and Redding (2013) sustain, there is considerable variance among these nations in this regard. Hence, we include *coordination with labor* as an important element within this human capital dimension.

In addition, most countries described in VOC and NBS tend to exhibit relatively high levels of *knowledge capital* due to their robust educational and skill formation systems (Morgan, 2007). They have high literacy rates, advanced health care services, longer life expectancy, and a high rate of higher and professional education attainment. This is quite common in early OECD members who tend to be closer to Rosecrance's (1996) "virtual state"—focusing more on investing in people and intangibles, rather than on territory, natural resources, and other tangibles that may reinforce extractive institutions. However, in countries not covered by the VOC and NBS typologies, knowledge capital is often scarce and concentrated at the top of society. Exceptions, such as highly-educated Russia, also exist.

In sum, the level of knowledge capital within a national context is important because it determines how organizations engage with employees in productive activities. For instance, when knowledge capital is collectively available to firms within an economy, organizations may invest in firm-specific skills (Jackson & Deeg, 2008), whereas knowledge capital scarcity may reduce incentives to invest in particular capabilities and even sectors (Schneider, 2013).

3.4. Role of social capital

Collective social capital refers to the extent to which members have *trust* in other members of society and in society at large (i.e., generalized trust) (Inglehart, 1999; Putnam, 1993). Prior studies show that trust significantly shapes economic activity patterns within countries (Knack & Keefer, 1997). Whitley, Jeffrey, Czaban, and Lengyel (1996, p. 399) argue that pervasive distrust in society inhibits the "institutionalization of long-term obligational linkages between enterprises" and encourages "managers to develop informal connections to ensure availability of the required supplies." In other words, the degree to which economic actors trust each other and institutions is an organizing principle underpinning the behavior of and coordination among firms (McEvily, Perrone, & Zaheer, 2003). When there is a lack of generalized trust, individuals and organizations rely on informal networks, centering on extended clan or family relationships as an organizing principle thus relying more on specific trust (Kong, 2015; Wood & Frynas, 2006).

Trust is determined by the "long-term experience of social organization, anchored in historical and cultural experiences" (Rothstein & Stolle, 2008: 442). To varying degrees, trust tends to be high in countries covered by the VOC and NBS typologies relative to countries in other regions. In developing and emerging markets in particular, generalized trust is typically lower due to, for instance, pervasive corruption and an ineffective state. This is particularly the case in developing economies where corruption is not only pervasive, but also arbitrary (Rodriguez, Uhlenbruck, & Eden, 2005). Yet, this is not always the case as prior studies have identified considerable variation in trust and corruption levels in these economies (e.g., Kong, 2015). For instance, countries that foster economic equality may experience higher trust, regardless of the level of economic development (Uslaner, 2008).

3.5. Role of corporate governance

This final dimension of our VIS framework pertains to how companies are controlled and managed, and encompasses three elements. First, unlike ownership patterns found in most LMEs, in most countries around the world, especially where formal

institutions tend to be rather weak and financial markets are underdeveloped, ownership is highly concentrated, often as a means to overcome institutional voids (Khanna & Palepu, 1997; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000). Ownership structure does not receive a prominent role in the VOC typology (Carney et al., 2009), while the NBS typology more directly addresses this aspect of the national economic context. Thus, *ownership concentration* is an important element of the institutional economic context because it shapes how owners, labor, and management interact with each other (Aguilera & Jackson, 2003). Concentrated ownership introduces vastly different agency problems (e.g., principal-principal) compared to the classic principle-agent problem, which results in different mechanisms governing economic activity. Still, economies in the regions we focus on exhibit substantial variability in the extent of ownership concentration (e.g., Heugens, van Essen, & van Oosterhout, 2009).

Second, the importance of wealthy family dominance in most parts of the world extends to the corporate governance sphere as well. In particular, family ownership of large corporations is a defining characteristics of many economies in the Middle East, Latin America, Northern Africa, and partially Asia. According to Fogel (2006: 603), in many economies "a handful of very wealthy families control a substantial part of the large corporate sector . . .

Through control pyramids, cross-holding, dual-class shares, and other mechanisms, these families are able to control a vast amount of corporate assets many times their family fortune." Even in contexts where formal institutions may be relatively strong, deep cultural and clan-based institutions permeate the formation of *family ownership.* For instance, Acemoglu, Reed, and Robinson (2014) explain that in some parts of Sub-Saharan Africa, a set of very few ruling families, originally recognized by British colonial authorities, capture much of the means of production.

According to Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, and Moyano-Fuentes (2007, p. 106), "owners of family firms are concerned not only with financial returns but also with . . . non-financial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty." That is, the extended family and elites are primary stakeholders in some institutional systems, as compared to other systems where the stakeholder scope is wider or simply different in nature (Henisz, 2014). Consequently, reinvesting in the productive capabilities of the firm through market mechanisms of capital allocation is not always the central concern.

Third, because the extended family is often the core unifying feature as a means to overcome institutional voids (Steier, Chua, &

Table 2
Measures used in construction of institutional profiles.

Institutional Element	Data Source
State direct dominance	• Experts were asked whether state ownership is prevalent (direct dominance) • Government expenditure as% of GDP (World Bank, 2015)
State indirect intervention	• Experts were asked whether the state meddles in the private sector through regulation, political networks, financial resource provision, and participation in corporate governance (indirect dominance) • World Governance Indicators (2015) • Heritage Foundation Economic Freedom Index (2015)
Type of state	• Experts were asked about the overall posture of the state toward the economy: regulatory, welfare, developmental, and/or predatory (Carney and Witt, 2012)
Equity markets	• Experts were asked about the main source(s) of financial capital (e.g., banks/equity market/family/state) • Stock market capitalization to GDP (World Bank, 2015) • Number of listed firms (World Bank, 2015)
Credit markets	• Experts were asked about the main source(s) of financial capital (e.g., banks/equity market/family/state). • Credit to private sector to GDP (World Bank, 2015)
Family wealth	• Experts were asked about the main source(s) of financial capital (e.g., banks/equity market/family/state)
State-provided capital	• Experts were asked about the main source(s) of financial capital (e.g., banks/equity market/family/state)
Coordination with labor	• Experts were asked whether economic activity is coordinated with organized labor • New Unionism—unionization rates (Hall-Jones, 2015) • Labor Flexibility Index (Heritage, 2015) • Botero et al. (2004)—Labor coordination laws index
Knowledge capital	• Experts were asked whether high quality knowledge capital is available in the economy • The Human Development Index—Education and Health indices (UN, 2015) • Availability of skilled labor (WEF Global Competitiveness report, Executive Opinion Survey, 2014)
Generalized trust	• Experts were asked whether there is high level of generalized trust in society and institutions • Corruption and Ethics in Society index (World Bank, 2015) • Generalized trust in society (World Values Survey, 2015)
Ownership concentration	• Experts were asked whether ownership of key organizations tends to be dispersed or concentrated
Family ownership	• Experts were asked whether the typical owner of key organizations is wealthy families • Fogel (2006)
Family intervention in management	• Experts were asked: in the case of family business, are these run by the family or are they professionalized? • WEF Global Competitiveness Report, Executives Opinion Survey (2014). "In your country, who holds senior management positions, usually relatives or friends without regard to merit or mostly professional managers chosen for merit and qualifications?"

Chrisman, 2009), founding families run their businesses directly instead of relying on professionalized management (Peng & Jiang, 2010). Management is often related to the holding family, and in fact, the state is sometimes an extension of dominant families as is the case in some Middle Eastern countries (according to the expert panel of our study). Therefore, a relevant aspect of economic organization in the regions we study pertains to *family intervention in management*. For instance, "the commanding heights of the world's fastest-growing region, Asia, are dominated by great business families. At first glance, companies such as Samsung and Hutchison Whampoa may look like regular public companies, but closer examination quickly reveals a family dynasty and a family saga." To be clear, while family firms may control substantial portions of productive capital in many institutional contexts, reliance on close family–related managers as opposed to professional management is more common outside the original OECD member nations.

In sum, our proposed VIS framework includes five institutional contextual dimensions and thirteen contextual elements included within them. In the next section, we draw on this framework to inductively identify varieties of institutional systems, using rich qualitative data provided by a panel of country and regional experts.

4. Data and methodology

4.1. Data collection

Although our understanding of emerging and developing countries is growing, archival data tends to be incomplete, unreliable, or simply unavailable to analyze a vast array of countries. Indeed, as noted by Witt and Redding (2013), if we were to wait for all the data needed to study Asian, African, Latin American, East European, and Middle Eastern countries, we would be waiting for a very long time. To overcome this paucity of reliable data, we undertook two steps. First, we collected available archival data for all countries in the five regions we focus on (see Table 2). We removed economies that represented less than 0.1% of gross world product (e.g., Malawi), those often considered as fiscal paradises or tax havens (e.g., Cayman Islands), and those that have been previously classified and extensively studied in the VOC and NBS frameworks (e.g., the United States, Japan, and Western Europe; see first two columns in Appendix A for the entire list). As we expected, these archival data were lacking in terms of country coverage, and hence we used them only as an initial frame of reference for the second step.

In the second step, we assembled a panel of experts to help us assess the institutional profile of each economy. According to Crossland and Hambrick (2011), one of the main advantages of an expert panel is that the panelists can provide informed ratings with relative objectivity, combining their familiarity of the scientific body of knowledge with tacit knowledge of the classified cases. Relatedly, because archival data may often offer only crude measures for capturing latent constructs, other, complementary approaches to country classification are useful. Furthermore, Von Glinow and Teagarden (2009) argue that a team of scholars embedded in diverse contexts can better explicate the relevant qualitative insights that are often hidden in archival data. In our case, the panel of experts was not only knowledgeable of these regions, they were often embedded in those contexts and we were able to engage them in a conversation about the contextual institutional dimensions of our taxonomy.

The usage of expert panel input for classification of cases can be found in several works in international business and management (e.g., Doupnik & Salter, 1993; Hambrick & Abrahamson, 1995; Crossland & Hambrick, 2011). For example, Hambrick (1981a,

1981b) relied on six industry experts to classify organizations into four strategic archetypes, and Hambrick and Abrahamson (1995) asked securities analysts and academics to assess the levels of managerial discretion within their industries of expertise. Similarly, Crossland and Hambrick (2011) utilize expert panel input to assess the influence of national cultural context on managerial discretion. In sum, the expert panel approach has been repeatedly shown to be a useful way to study socio-economic phenomena that are relatively understudied.

We selected eleven experts based on their in-depth knowledge of different regions and familiarity with the VOC, NBS, and corporate governance literatures.[7] We used the available archival data from the first step as a general guide when discussing the institutional contextual dimensions of nations with the experts. Our analyses are based on the experts' qualitative input. Specifically, we designed a template for the experts to comment on and complete where necessary. Building upon prior literature (e.g., Witt & Redding, 2013; Ioannou & Serafeim 2012; Whitley, 1999; Judge et al., 2014; Hotho, 2014), we included questions and data regarding the five institutional dimensions pertaining to the role of: (1) the state, (2) financial markets, (3) human capital, (4) social capital, and (5) corporate governance (see Table 2). Once experts returned their templates, we conducted a follow-up interview to discuss any unclear or unexpected entries.

Overall, we were able to obtain complete institutional profiles for 68 economies (listed in Table 3) which represent 33 percent of Gross World Product in Purchasing Power Parity (PPP) terms and 76 percent of the world's population. Given that the USA, Japan, Germany, and United Kingdom, which have been studied extensively and classified in many prior studies, account for a third of Gross World Product (PPP), our sample covers the majority of the understudied portion of global economic activity. Regarding population, our sample covers 90% of East Asia, 94% of South Asia, 80% of Eastern Europe, 88% of Latin America, 91% of the Middle East and Northern Africa, and 59% of Sub-Saharan Africa.

4.2. Analytical procedure

To identify the varieties of national institutional systems operating in our sample countries, we employed a generalization model design whereby qualitative data is translated into categorical data for quantitative analysis (e.g., Putnam & Jones, 1982; Brett, Shapiro, & Lytle, 1998). This has three benefits: first, it provides insights to theory by emphasizing discovery-oriented research; second, it assures methodological rigor and "allows deriving generalizable results from qualitative data" (Srnka & Koeszegi, 2007: 60); and third, it facilitates a more direct comparison between configurations and highlights patterns of differences in qualitative data. Similar to Witt and Redding (2013), and due to the exploratory nature of our study, we code the qualitative expert data of the country profile into dichotomous variables for each of the thirteen taxonomy's elements. This approach was further validated by having two members of the research team code each element independently. The coding was identical for all entries.

To illustrate, one expert on Sub-Saharan Africa noted that the level of trust is almost completely correlated to the prevalence of the slave trade. Countries less affected by slave trade (such as Tunisia, South Africa, Botswana, and Namibia) enjoy correspondingly higher levels of generalized trust. We therefore coded these countries as having high trust levels in the social capital dimension. Similarly, the expert noted that new organizational investment in Kenya originates predominantly from internal

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[7] Descriptive information pertaining to the panel of experts is available from the authors upon request.

Table 3
Institutional matrices of 68 economies based on qualitative expert input.

Country	Region	SDD	SII	Type of State	CWL	KC	EM	CM	FW	SPC	GT	OC	FO	FIM
Algeria	North Africa	Yes	Yes	Developmental	Low	Low	No	Yes	Yes	No	High	Yes	Yes	High
Angola	North Africa	Yes	Yes	Developmental and Predatory	Low	Low	No	No	Yes	No	Low	Yes	No	Low
Argentina	Latin America	Yes	Yes	Predatory	High	High	No	No	Yes	No	Low	Yes	Yes	High
Azerbaijan	Asia	Yes	Yes	Developmental	Low	High	No	No	Yes	No	High	Yes	Yes	High
Bahrain	Middle East	Yes	Yes	Welfare	Low	High	No	Yes	Yes	Yes	Low	Yes	Yes	High
Bangladesh	Asia	Yes	Yes	Predatory	Low	Low	No	Yes	No	No	Low	Yes	Yes	High
Belarus	East Europe	Yes	Yes	Predatory	Low	High	No	No	No	Yes	Low	Yes	No	High
Botswana	SS. Africa	No	No	Regulatory	Low	Low	No	No	Yes	No	High	Yes	Yes	Low
Brazil	Latin America	Yes	Yes	Developmental	Low	Low	Yes	Yes	Yes	No	Low	Yes	Yes	High
Bulgaria	East Europe	No	Yes	Developmental	High	High	No	Yes	No	No	Low	No	No	High
Cameroon	SS. Africa	Yes	Yes	Developmental	Low	Low	No	No	Yes	No	Low	Yes	Yes	Low
Chile	Latin America	No	No	Regulatory	Low	High	Yes	Yes	Yes	No	High	Yes	Yes	Low
China	Asia	Yes	Yes	Developmental and Predatory	Low	Low	No	Yes	No	Yes	Low	Yes	Yes	High
Colombia	Latin America	No	Yes	Regulatory	Low	Low	No	Yes	Yes	No	Low	Yes	Yes	High
Czech Rep.	East Europe	No	No	Regulatory	High	High	No	Yes	No	No	Low	No	No	High
DR Congo	SS. Africa	Yes	Yes	Developmental	Low	Low	No	No	Yes	No	Low	Yes	No	Low
Egypt	North Africa	Yes	Yes	Developmental	Low	Low	No	Yes	Yes	No	Low	Yes	No	Low
Estonia	East Europe	No	No	Developmental	High	High	No	Yes	No	No	High	No	No	Low
Ethiopia	SS. Africa	Yes	Yes	Predatory	Low	Low	No	No	Yes	No	Low	Yes	No	Low
Georgia	Asia	No	Yes	Developmental	Low	High	No	Yes	No	Yes	High	Yes	Yes	High
Ghana	SS. Africa	Yes	Yes	Predatory	Low	Low	No	No	Yes	No	Low	Yes	Yes	Low
Hong Kong	Asia	No	No	Regulatory	Low	High	Yes	Yes	No	No	High	Yes	Yes	High
Hungary	East Europe	No	No	Regulatory	High	High	No	Yes	No	No	Low	No	No	High
India	Asia	Yes	Yes	Developmental and Predatory	High	Low	No	Yes	No	No	Low	Yes	Yes	High
Indonesia	Asia	Yes	Yes	Developmental and Predatory	High	Low	No	Yes	No	No	Low	Yes	Yes	High
Iran	Middle East	Yes	Yes	Welfare	Low	High	No	Yes	No	Yes	Low	Yes	Yes	High
Israel	Middle East	No	No	Regulatory	High	High	Yes	Yes	No	No	High	Yes	Yes	High
Jordan	Middle East	No	Yes	Developmental	Low	High	No	Yes	Yes	No	Low	Yes	No	High
Kazakhstan	Asia	No	Yes	Developmental	Low	High	No	Yes	No	Yes	High	Yes	No	High
Kenya	SS. Africa	Yes	Yes	Predatory	Low	Low	No	No	Yes	No	Low	Yes	No	Low
Korea (South)	Asia	No	Yes	Developmental	High	High	No	Yes	No	No	Low	Yes	Yes	High
Kuwait	Middle East	Yes	Yes	Welfare	Low	High	Yes	Yes	Yes	Yes	Low	Yes	Yes	High
Latvia	East Europe	No	No	Developmental	High	High	No	Yes	No	No	High	No	No	High
Lebanon	Middle East	No	No	Developmental	Low	High	No	Yes	Yes	No	Low	Yes	No	Low
Lithuania	East Europe	No	No	Developmental	High	High	No	Yes	No	No	High	No	No	High
Malaysia	Asia	Yes	Yes	Developmental and Predatory	Low	Low	No	Yes	No	No	Low	No	Yes	High
Mexico	Latin America	Yes	Yes	Regulatory	Low	High	No	Yes	Yes	No	High	Yes	Yes	High
Mongolia	Asia	Yes	Yes	Predatory	Low	Low	No	Yes	No	No	Low	Yes	Yes	High
Morocco	North Africa	Yes	Yes	Developmental	Low	Low	No	Yes	Yes	No	High	Yes	Yes	High
Namibia	SS. Africa	No	No	Regulatory	Low	Low	Yes	Yes	Yes	No	High	Yes	No	Low
Nigeria	SS. Africa	No	Yes	Predatory	Low	Low	No	Yes	Yes	No	Low	Yes	Yes	High
Pakistan	Asia	Yes	Yes	Predatory	Low	Low	No	Yes	No	Yes	Low	Yes	Yes	High
Peru	Latin America	No	Yes	Regulatory	Low	High	No	Yes	Yes	No	Low	Yes	Yes	High
Philippines	Asia	Yes	Yes	Predatory	Low	Low	No	Yes	No	No	Low	Yes	Yes	High
Poland	East Europe	No	No	Regulatory and Developmental	High	High	No	Yes	No	No	High	No	No	High
Qatar	Middle East	Yes	Yes	Welfare	Low	High	No	Yes	Yes	Yes	Low	Yes	Yes	High
Romania	East Europe	No	Yes	Developmental	High	High	No	Yes	No	No	Low	No	No	High
Russia	East Europe	Yes	Yes	Predatory	Low	High	No	No	No	Yes	Low	Yes	No	High
Rwanda	SS. Africa	Yes	Yes	Developmental	Low	Low	No	No	Yes	No	Low	Yes	No	Low
Saudi Arabia	Middle East	Yes	Yes	Welfare	Low	High	Yes	Yes	Yes	Yes	Low	Yes	Yes	High
Senegal	SS. Africa	Yes	Yes	Developmental	Low	Low	No	No	Yes	No	Low	Yes	No	Low
Singapore	Asia	Yes	No	Regulatory and Developmental	Low	High	Yes	Yes	No	No	High	No	Yes	High
Slovakia	East Europe	No	No	Developmental	High	High	No	Yes	No	No	Low	No	No	High
Slovenia	East Europe	No	No	Developmental	High	High	No	Yes	No	No	Low	No	No	High
South Africa	SS. Africa	No	No	Regulatory and Developmental	Low	High	Yes	Yes	Yes	No	High	Yes	No	Low
Sri Lanka	Asia	Yes	Yes	Predatory	High	Low	No	Yes	Yes	No	Low	Yes	Yes	High
Sudan	North Africa	Yes	Yes	Developmental	Low	Low	No	No	Yes	No	Low	Yes	No	High
Taiwan	Asia	Yes	Yes	Developmental	High	High	No	Yes	No	No	High	Yes	Yes	High
Tanzania	SS. Africa	Yes	No	Regulatory	Low	Low	No	No	Yes	No	Low	Yes	No	Low
Thailand	Asia	Yes	Yes	Developmental and Predatory	Low	Low	No	Yes	No	No	Low	Yes	Yes	High
Tunisia	North Africa	No	Yes	Developmental	Low	Low	No	Yes	Yes	No	High	Yes	Yes	High
Turkey	Middle East	No	Yes	Developmental	Low	High	No	Yes	No	No	High	Yes	Yes	High
Uganda	SS. Africa	Yes	Yes	Predatory	Low	Low	No	No	Yes	No	Low	Yes	No	Low
Ukraine	East Europe	Yes	Yes	Developmental	High	High	No	Yes	No	Yes	Low	Yes	No	High
UAE	Middle East	Yes	Yes	Welfare	Low	High	No	Yes	Yes	Yes	Low	Yes	Yes	High
Venezuela	Latin America	Yes	Yes	Predatory	High	High	No	Yes	Yes	Yes	Low	Yes	No	High
Vietnam	Asia	Yes	Yes	Developmental and Predatory	Low	Low	No	No	Yes	Yes	Low	Yes	Yes	High
Yemen	Middle East	Yes	Yes	Developmental	Low	Low	No	Yes	Yes	No	Low	Yes	Yes	High

Note: SS = Sub-Saharan; SDD = State direct dominance, SII = state indirect intervention, EM = equity markets, CM = credit markets, FW = family wealth, SPC = state-provided capital, CWL = coordination with labor, KC = knowledge capital, GT = generalized trust, OC = ownership concentration, FO = family ownership, FIM = family intervention in management.

family wealth while a tiny fraction is sourced from an oligopolistic banking sector and a virtually inactive stock market with excessively high costs of equity capital. In this case, it was clear that while Kenya's equity and credit markets should be coded as 0, family wealth should be coded as 1. When it comes to the type of state element, prior studies indicate some countries may exhibit more than one type (Carney & Witt, 2012). Hence, we coded a separate dichotomous variable for each of the four state types. The resulting institutional contextual matrices of the 68 economies and 13 institutional elements are presented in Table 3.

Next, we submitted the completed institutional profiles for the 68 economies to a two-step cluster analysis in order to uncover natural groupings in the data and obtain a more systematic output. According to Ronen and Shenkar (2013, p. 869), clustering is "more than a methodological device; it is a vital tool for theory development . . . setting a foundation for sense-making, reasoning, and conceptualization." As an advanced clustering technique, two-step cluster analysis overcomes some of the drawbacks associated with both hierarchical and K-means clustering such as their inability to deal with dichotomous variables and solution instability (Bacher, 2000; Hair et al., 2006; Ketchen & Shook, 1996). In fact, two-step cluster analysis is especially appropriate for our study as it is the only type of cluster analysis that uses the log-

likelihood measure instead of (squared) Euclidian distance (Norusis, 2008), and converges on the most efficient solution by comparing solutions with different numbers of clusters (Chiu, Fang, Chen, Wang, & Jeris, 2001).

In the first stage, the Bayesian Information Criterion (BIC) is calculated for each potential number of clusters, which provides an initial estimate for the actual number of clusters (Norusis, 2011). During that process, empirical cases are grouped into pre-clusters by constructing a cluster features tree (Okazaki, 2006). In the second step, the pre-clusters are used as input for a hierarchical clustering algorithm. During this step, the range of solutions is reduced to the best number of clusters based on the BIC (Rundle-Thiele, Kubacki, Tkaczynski, & Parkinson, 2015). According to Rundle-Thiele et al. (2015, p. 526), "the BIC is considered one of the most useful and objective selection criteria, as it avoids the arbitrariness of traditional clustering techniques." Once the solution is reached, Chi-square tests are conducted for the dichotomous variables to determine their relative importance to the clustering. Furthermore, the silhouette measure of cohesion and separation is required to be above zero to establish that the within-cluster distance and the between-cluster distance are sufficiently low and high, respectively. Finally, the cluster solution

Table 4
A taxonomy of seven varieties of institutional systems in five understudied regions.

Configuration	Configuration 1	Configuration 2	Configuration 3	Configuration 4	Configuration 5	Configuration 6	Configuration 7
Type of institutional system	State-Led	Fragmented with fragile state	Family-Led	Centralized Tribe	Emergent LME	Collaborative Agglomerations	Hierarchically Coordinated
The state							
Direct dominance	High	High	Mixed	High	Mixed	Low	Low
Indirect intervention	High	High	High	High	Low	Mixed	High
Type of state	Predatory	Developmental and/or Predatory	Developmental	Welfare	Regulatory	Developmental	Developmental
Financial markets							
Equity markets	Low	Low	Low	Low	High	Low	Low
Credit markets	High	Low	High	High	High	High	High
Family wealth	Mixed	High	High	High	Mixed	Low	Low
State provided capital	High	Low	Low	High	Low	Low	Low
Human capital							
Coordination with labor	Mixed	Low	Low	Low	Low	High	Mixed
Knowledge capital	Low	Low	Mixed	High	High	High	High
Social capital							
Generalized trust	Low	Low	High	Low	High	High	Low
Corporate governance							
Ownership concentration	High	High	High	High	High	Low	High
Family ownership	Mixed	Mixed	High	High	High	Low	Mixed
Family intervention	High	Low	High	High	Mixed	Mixed	High
Countries in the configuration	Argentina Bangladesh Belarus China India Indonesia Malaysia Mongolia Pakistan Philippines Russia Sri Lanka Thailand Venezuela Vietnam	Angola Cameroon D.R. Congo Egypt Ethiopia Ghana Kenya Rwanda Senegal Sudan Tanzania Uganda	Algeria Azerbaijan Brazil Colombia Mexico Morocco Nigeria Peru Tunisia Yemen	Bahrain Iran Kuwait Qatar Saudi Arabia UAE	Botswana Chile Hong Kong Israel Namibia Singapore South Africa	Czech Republic Estonia Hungary Latvia Lithuania Poland Slovak Republic Slovenia	Bulgaria Georgia Jordan Kazakhstan Korea (South) Lebanon Romania Taiwan Turkey Ukraine

must contain clusters roughly similar in size, which is determined by the ratio of largest to smallest cluster.

5. Empirical results

Results of the two-step cluster analysis are presented in Table 4. The analysis produced a solution with a silhouette measure of cohesion and separation of 0.4, above the zero required for an acceptable solution. Seven configurations emerged within the data set, as depicted in Table 4. The ratio of largest to smallest cluster was 2.5:1, which is acceptable. In examining the importance of clustering variables, indirect state intervention, the type of state, coordination with labor, and family intervention in management all emerged as highly important for classification. The sources of financial capital, level of knowledge capital, direct state intervention, and trust were moderately important, whereas ownership concentration, which was high in five of the seven clusters, was the least salient variable to the clustering process. We discuss each of the configurations below.

Configuration 1 is made up of 15 economies that share several institutional elements, despite the range of political regimes among members of that cluster. It contains countries such as Pakistan, Russia, Venezuela, China, Vietnam, and Indonesia where civil liberties tend to be relatively limited. Additionally, it includes countries such as Malaysia and India, where individual and civil liberties tend to be wider. However, in all the countries in Configurations 1, the state takes an active and direct role in the economic ordering of society. In these systems, political networks often serve as the mechanism thorough which economic activity is coordinated. These networks tend to monopolize and sustain power, introducing predatory elements to the state. Family ownership and management are present, but the dominant role of the state means that these families are frequently closely tied to the state, hence reinforcing its dominance. Financial capital is mostly provided by private and state-owned banks. We label this system 'State-Led', which is similar but not identical to Whitley's "state-organized" national business system, in which the state does not necessarily assume an active role in the economy.

Configuration 2, with 12 economies from Sub-Saharan Africa and the Middle East (i.e., Egypt), shares several of the characteristics of Configuration 1 but in these economies the direct and indirect state intervention is high and there exist substantial institutional voids. The availability of human, financial, and social capital are relatively low in this configuration. This system is somewhat similar to Whitley's (1999) "fragmented business system," although it possesses some additional nuances such as a relatively fragile federal government. Companies embedded in this type of system tend to organize their economic activities in silos using internal accumulated wealth and without coordinating with labor. Consequently, we label this particular institutional system 'Fragmented with a Fragile State'.

The ten geographically-dispersed economies of Configuration 3 are predominantly 'Family-Led'. This system contains economies located in Northern Africa and Central Asia as well as Latin America. In these economies, wealthy and dominant families take center stage in ownership, resource allocation, and management. As such they are the central ordering agents of economic life. This configuration is somewhat similar to the "highly coordinated" configuration identified by Whitley (1999), but it differs in that the role of the state is relatively lower and focused more on growth policies. While labor coordination is low, trust tends to be high, which allows wealthy families to drive the economic agenda.

Configuration 4 is made up of six relatively wealthy economies operating exclusively in the Middle East. An additional important key feature of most economies in this configuration is their emphasis on public welfare. Based on the "Wasta" social organizing principle where powerful families in these societies are guardians of key resources but are also expected to provide a safety net for the lower levels of society (Berger, Silbiger, Herstein, & Barnes, 2015), this is a very paternalistic institutional system. Many of these societies are still quite tribal in nature and tend to take care of their own within the extended clan. As a result, we label this system as 'Centralized Tribe' type. As one expert has noted, in these economies "the family is the state," so the boundaries often blur. Notably, none of the NBS or VOC types resemble this configuration, perhaps because neither examine economies in this particular region.

Configuration 5 contains a group of seven increasingly market-oriented economies. These disparate economies somewhat resemble "LMEs" (from the VOC approach) or "compartmentalized business systems" (from the NBS approach). Nonetheless, several, such as Singapore, retain some state dominance in orchestrating the establishment of a regulatory government system. Indeed, Singapore has been posited to exhibit a blend of LME with substantial state participation in the economy (Tsui-Auch & Lee, 2003), a hybrid business system which Ritchie (2009) labels 'State Coordinated, Liberal Market Economy." Although they appear in various stages of economic development, the abundance of financial, social, and knowledge capital are all relatively high in these economies. Rapidly developing economies, like Botswana and Namibia, provide a strong contrast to other African countries that are plagued by deep and persistent institutional voids. Israel is another example of an exception to several struggling economies in the Middle East, with its increasingly LME-like economic context (Fainshmidt, 2012). We label this system as an "Emergent LME" type.

Configuration 6 contains a group of eight economies operating within Eastern Europe. The state in these economies is largely developmental, providing growth-focused policies and investment into industrial sectors. Ownership is not highly concentrated, but still must coordinate with labor. Banks are the dominant source of financial capital. Although they are still emerging or recently emergent, they share many features with traditional CMEs like Germany; however, the economies in this configuration are generally more focused on growth and development than on equality and national welfare programs. Thus, we label countries in Configuration 6, 'Collaborative Agglomerations' since they represent a novel form of the CME.

Finally, Configuration 7 contains a geographically-dispersed group of ten countries from East Asia, the Middle East, Central Asia, and Eastern Europe. This configuration shares several similarities with Configuration 6; a developmental state, reliance on banking as the primary source of financial capital, and high levels of knowledge capital characterize them both. However, in Configuration 7, the state takes a more active role, generalized trust tends to be lower, and families tend to have a stronger influence on corporate governance. Still, families play a smaller role compared to other configurations, and there is higher levels of knowledge capital, less generalized trust, and a larger role for the state than in the Family-Led type. We also note that these countries seem to be at the initial stages of adopting some characteristics of Hall and Soskice's (2001) CME. However, low levels of generalized trust and lack of high coordination with the high-quality labor suggest that coordination occurs mostly among concentrated (increasingly family) owners and state investment agencies. Consequently, we call this rather unusual configuration, a 'Hierarchically Coordinated' type.

It is noteworthy to point out that while some of the seven institutional systems exhibit a few characteristics similar to LME or CME types, none of them are identical to the two types identified by Hall and Soskice (2001). This lack of fit is also applicable to the six business system types depicted in Whitley (2000). That is,

while Whitley's NBS typology is closer to our taxonomy, the seven varieties of institutional systems we identify here are qualitatively distinct from Whitley's national business systems. In addition, the economies in our configurations cluster relative to each other based on local expertise for our data. Hence, our descriptions of the contextual dimensions for each configuration are to be taken as generalities that facilitate a manageable taxonomy.

To illustrate the spatial position of the 68 economies and seven configurations relative to each other, we use multidimensional scaling (e.g., Sullivan, Nerur, & Balijepally, 2011; Spencer, 2003) with the PROXCAL module in SPSS 20 to create a three-dimensional visual representation of the *dissimilarities* across the economies (see Ronen & Shenkar, 2013). In Fig. 1, the position of each economy is in a common space relative to others in terms of institutional profile similarity. We follow Craig, Douglas, and Grein (1992: 779) in not labelling the axes because interpretation of the dimensions is not always clear since "there is not a direct relationship between a dimension and the underlying variables." Instead, a 16-dimensional scale has been mathematically collapsed onto three dimensions for visualization purposes. Thus, Fig. 1 is a three-dimensional estimation of the proximity, or relative adjacency, of countries based on multidimensional institutional proximity (i.e., dissimilarity scores), allowing us to see how countries group relative to each other.

Fig. 1 identifies each cluster member by color. Each of the seven colors tend to hang together in institutional space, though some deviations from the clusters' centers are also evident. Interestingly, the most dispersed cluster includes the nations that we identify as

"emergent-LME" (Configuration 5 in Table 4); and these were the only economies to fall into low Z-axis space. The figure shows how the seven identified institutional configurations tend to hang together and share similar features while also exhibiting spatial distinctions.

6. Discussion and conclusions

6.1. Overview

Eleven years ago, Redding (2005, p. 124) observed that "there is scanty attention to context" in much international business research and called for the field to address this void. We respond to this call by focusing particularly on advancing understanding of the institutional context in understudied regions of the global economy. Specifically, we go beyond the VOC and NBS perspectives to advance a more comprehensive VIS framework relevant to economies located in Asia, Africa, East Europe, the Middle East, and Latin America. We then analyze expert assessments to identify natural groupings in the qualitative data, and uncover seven distinct configurations that enrich the literature both theoretically and empirically.

6.2. Contributions to international business research

Our study contributes to international business research and theory in several ways. First, our more holistic theoretical framework goes beyond previous studies which focus on
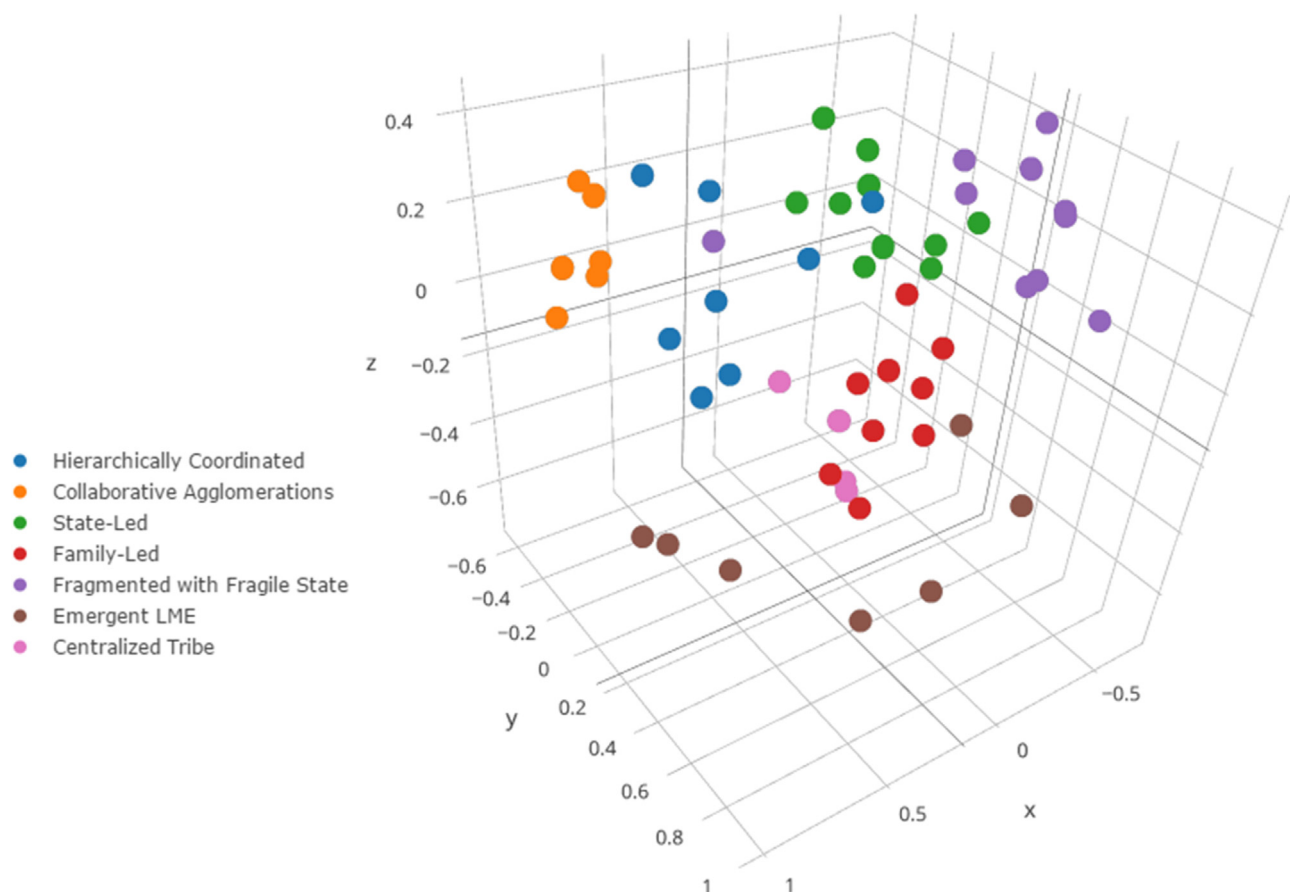

Fig. 1. Multidimensional scaling of 68 understudied economies.

individual institutions or a particular contextual dimension when theorizing about the role of institutional context. With our VIS taxonomy, we demonstrate that some countries fall into the same VIS type despite being geographically remote or belonging to different cultural clusters. As an example, Ronen and Shenkar (2013) group countries based on religion, geography, and language. In comparison, our study focuses more on the similarities and differences in institutional systems as they relate to economic organization. These similarities are not always intuitively apparent, and our systemic approach fleshes this out. For instance, while Tunisia and Colombia do not share geographical borders or cultural and ethnic heritage, both organize economic activity in a similar way—as a *Family-led* system. Thus, the VIS taxonomy allows us to go deeper than prior studies in uncovering the institutional infrastructure undergirding the economic behavior of firms.

Second, by relying on experts intimately familiar with each of these institutional contexts, as well as drawing on prior literature, we were able to extend and refine the two dominant typologies in meaningful ways. For instance, the NBS literature and prior international business studies identify the central role of government in shaping the institutional economic context within a nation. Yet, our more nuanced approach specifies three unique ways in which it can do so. Furthermore, the role of wealthy families in shaping the economic context is rarely considered, and our study demonstrates this dimension deserves more attention. Thus, by presenting an institutional framework to characterize many developing economies, international business scholars are now on more fertile ground to study the role of institutional context in a more structured, systematic, and comprehensive manner.

Indeed, many of the developing economies classified here were not only absent from previous VOC and NBS studies, but from international business studies in general. Our study sheds light on these economies by classifying a vast array of developing economies. This is an important contribution, given that scholars are increasingly interested in understanding the economic context in Africa, the Middle East, and Latin America. By focusing on frontier markets such as Namibia, Nigeria, Saudi Arabia, and Mexico, we advance knowledge of the national institutional systems found in these understudied contexts. In many of these economies, often organized as a 'hierarchical capitalism' (Schneider, 2013), a set of elites controls and manages dominant firms and many other aspects of the economy. However, as we argue through our theoretical framework and show with our results, these economies differ on several dimensions, including their reliance on political or family networks as resource allocation mechanisms. These distinctions across a wide array of developing economies are an important first step in characterizing understudied contexts outside of the OECD. For instance, Romania has been labeled a "cocktail capitalism" (Nölke, & Vliegenthart, 2009) with no clear capitalist type emerging. In our study, it belongs to the 'Hierarchically Coordinated' institutional economic system.

Similarly, our study improves upon the work of Hoskisson, Wright, Filatotchev, and Peng (2013), who recently made significant headway in advancing the field's understanding of emerging and developing "mid-range" economies. The authors classified 60 economies according to institutional quality as well as the quality of infrastructure and input factors. Some similarities to our study are evident. Our framework includes knowledge capital and the role of the state in the economy, which partially resemble the two dimensions used by Hoskisson et al. (2013). For example, Bangladesh and Venezuela are both state-led economies in our study, and Hoskisson et al. (2013) categorize them into the cluster of poor institutional quality and factor conditions. However, our VIS framework is more fine-grained and comprehensive, including several qualitative dimensions of the institutional profile. For instance, Hoskisson et al. (2013) group Russia and Hungary into a cluster of high quality infrastructure, but relatively low institutional development. In contrast, our approach is more nuanced by grouping Russia into a *State-led* type, while characterizing Hungary as a system of *Collaborative Agglomerations*.

Third, our VIS framework may prove useful to international business scholars interested in the institution-based view as a tool for exploring the "arrows the firm has in its quiver" (Peng, Sun, Pinkham, & Chen, 2009). By taking a structuralist approach based on previous work, we offer a frame of reference for better depicting dominant features of the institutional context in which IB takes place and that may give rise to institutional advantages of firms in the global arena. In the words of Allen (2004, p. 105), "it is the structure of the national economy, not the differences between firms that largely determines the actions of firms." By classifying countries into institutional systems, our VIS framework might help explain systemic variation in firm-level competencies and constraints.

For instance, consider that Israel has been labeled a "start-up nation" due to its capacity to generate many international high-tech-based ventures (Senor & Singer, 2011). However, because Israel was only recently categorized as a developed economy by the IMF in 2009 (Fainshmidt, 2012), it is largely absent from prior studies using the VOC and NBS frameworks. As our results show, Israel is part of the *Emergent-LME* configuration, consistent with the Hall and Soskice's (2001) claim that LMEs are generally more conducive to high-tech radical innovation (Schneider & Paunescu, 2012). Reasons for Israel's success may be many (e.g., technological military capability), but by identifying Israel as an *Emergent-LME* type, we can better explain why it has seen such success with high-tech ventures. This also contributes to the literature by shedding light on several advanced economies that were missing from VOC and NBS studies.

Fourth, our results challenge the assumption that institutions change very slowly over time. Several examples from our results are noteworthy. First, while Whitley (2000) categorized Poland as a "fragmented business system" over a decade ago, our results indicate that Poland today is better characterized as a system of *Collaborative Agglomerations* (Configuration 6). This suggests that Poland is not as fragmented today, mostly due to the prevalence of family-firm coordination within clusters of industrial activity. Similarly, following liberalization reforms in recent decades, the Czech Republic is a new addition to this *Collaborative Agglomerations* type of institutional system.

A second example of institutional change is South Korea. As state dominance continues to subside in South Korea, the emergence of more non-market coordination and family dominance has occurred. For now, it appears that coordination in South Korea is focused on the economy's elite and state investment agencies (Configuration 7, *Hierarchically Coordinated)*, but it does not include labor. It remains to be seen whether this process moves their economy even more towards a collaborative system, family-led system, or a combination of the two.

Lastly, according to Lazzarini (2013, p. 107), "Chile is well known for its institutional reforms that have helped curb corruption and increase bureaucratic efficiency." A direct outcome of these massive market-oriented reforms is the accession of Chile to the OECD in 2010. Indeed, our results indicate that the *Emergent-LME* type appears to be the type of system increasingly practiced in Chile, as the Chilean economy continues to liberalize and rely on the market as the primary allocative mechanism of resources. In sum, our approach to classifying countries within our VIS framework identified systemic institutional change across some countries, indicating that such change is sometimes faster than assumed by previous frameworks.

6.3. Limitations and future research

Our study is not without limitations that warrant additional research. First, we recognize that institutional and organizational diversity exists within national contexts. In many developing economies, for instance, a large informal sector is present, while our VIS framework is geared towards the formal sector. 'Context,' and specifically national institutional context of economic organization, are broad terms that encompasses a wide array of elements (Von Glinow & Teagarden, 2009; Redding, 2005). In general, while we agree with the statement that every national institutional system "will exhibit divergent and unique characteristics" (Carney et al., 2009: 7), studies do point to "a remarkable convergence upon just a few configurations" (Boyer, 2005: 520). Still, future studies incorporating additional institutional dimensions relevant to understudied economies around the world are warranted in order to better understand within-economy and across-economy variations.

Second, the transitory nature of world economies entails that snapshot taxonomies and typologies require constant revisiting and updating (Hotho, 2014). As we argue, institutional change may render older frameworks less relevant. Many economies around the world are in transition and our taxonomy is not well-suited to study such evolutionary phenomena. Indeed, Fig. 1 suggests that some understudied economies appear to be experimenting with a variety of practices and have not settled into a more static nature. It would be interesting to include elements of change into our VIS taxonomy, thus extending the national institutional systems literature further.

Third, while the usage of expert panel data is valuable in many ways, it also has its limitations (Snow and Hambrick, 1980). For instance, our results are only as good as the experts' contextual objectivity and knowledge. Therefore, empirical examination of the VIS taxonomy with archival data as it becomes available will be required to validate and refine the taxonomy in a systematic way. Relatedly, with regards to our coding of each of the 68 understudied economies, while our exploratory effort offers new valuable insights into differences across understudied economies dispersed throughout the global economy, more precision in developing institutional profiles is clearly warranted in future studies in order to capture the essential profile of each of these economies. Future research could develop reliable and valid scales for each of the five institutional dimensions and the various elements within each of these dimensions.

Finally, there are developing economies not included in our analysis that may offer additional insights. In fact, it is entirely possible that advanced economies require an additional look in light of the contextual dimensions we include in our VIS framework. For instance, Schmidt (2003) suggests that the institutional system in France is not explained well by the VOC typology, particularly due to the role of the state in the French economy. With this in mind, future research aiming to uncover more new systems is therefore warranted.

7. Conclusion

One can cogently argue that advancing knowledge of the role of institutional context is of paramount importance to international business theory and hence a central feature of international business research. With the rise of developing economies throughout the global economy, scholarly research has not kept pace with understanding of the institutional context for over three-quarters of the global population that generates over one-third of global economic output. In this study, we address this void in the international business literature by shedding light on the institutional context of economies in understudied regions, thus advancing a more comprehensive and up-to-date framework of the varieties of institutional systems that make up the global economy.

Acknowledgements

Appendix A.

See Table A1

Table A1
Summary of classification scheme.

Market-based (LME)[*]	Collaborative (CME)[*]	State-Led	Fragmented with Fragile State	Family-Led	Centralized Tribe	Emergent LME	Collaborative Agglomerations	Hierarchically Coordinated
Australia	Austria	Argentina	Angola	Algeria	Bahrain	Botswana	Czech Republic	Bulgaria
Canada	Belgium	Bangladesh	Cameroon	Azerbaijan	Iran	Chile	Estonia	Georgia
Ireland	Denmark	Belarus	D.R. Congo	Brazil	Kuwait	Hong Kong	Hungary	Jordan
New Zealand	Finland	China	Egypt	Colombia	Qatar	Israel	Latvia	Kazakhstan
Switzerland	France[**]	India	Ethiopia	Mexico	Saudi Arabia	Namibia	Lithuania	Korea (South)
UK	Germany	Indonesia	Ghana	Morocco	UAE	Singapore	Poland	Lebanon
USA	Italy[**]	Malaysia	Kenya	Nigeria		South Africa	Slovak Republic	Romania
	Japan	Mongolia	Rwanda	Peru			Slovenia	Taiwan
	Netherlands	Pakistan	Senegal	Tunisia				Turkey
	Norway	Philippines	Sudan	Yemen				Ukraine
	Portugal[**]	Russia	Tanzania					
	Spain[**]	Sri Lanka	Uganda					
	Sweden	Thailand						
		Venezuela						
		Vietnam						

[*] These economies have been classified by Hall and Soskice (2001) and subsequent literature. The LME group corresponds to the compartmentalized system in Whitley's NBS, and the CME encompasses various subtypes of collaborative systems included in NBS such as collaborative, highly coordinated, and coordinated industrial district.

[**] These economies are often classified as unique subtypes of collaborative systems where there is more state dominance and, in some cases, relatively liberal labor relations (Schneider, 2013; Hall & Thelen, 2009; Grosvold & Brammer, 2011).

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