Competitiveness and Managerial Discretion: An Empirical Investigation at the

National-level

Purpose

We examine the national-level predictors of country competitiveness using the concept of

managerial discretion. Our objective is to empirically link the strategic management discipline

particularly the upper echelon theory to the concept of country performance measured by

competitiveness.

Design/methodology/approach

We test the proposed relationship between managerial discretion and country competitiveness

using a sample of 18 countries from 6 different regional clusters. Discretion scores are

generated from survey responses of prominent senior management consultants, while country

competitiveness is measured via the Global Competitiveness Index developed by the World

Economic Forum. A multi-level regression analysis on the panel dataset spanning 10 years of

national competitiveness levels is used to empirically demonstrate the association between

managerial discretion and country competitiveness.

Findings

We show that managerial discretion is a direct predictor of national-competitiveness through

its ability to provide CEOs with a wider array of actions to innovate and enhance firm

performance which will ultimately contribute to country competitiveness.

Practical Implications

The positive influence of managerial discretion on country competitiveness provide an

interesting framework to examine the influence of firms over public policy making.

Additionally, with businesses becoming increasingly globalized, the profile of countries

becomes of a great importance and can become a tool for corporate strategic decisions, such

as: market entry strategies.

Originality/value

By linking the well know term of competitiveness to the concept of managerial discretion, we

provide a totally new approach to assess country performance. Additionally, this paper

contributes to the growing literature of managerial discretion by discovering new national-level

consequences.

Keywords: Competitiveness, National-level, Managerial Discretion, CEOs

Introduction

If executives do indeed matter, as shown by recent research (e.g. Quigley and Hambrick, 2015; Quigley and Graffin, 2016), then their latitude of actions would not only affect organizational outcomes, but will also have national-level implications. Mainstream research on managerial discretion, or latitude of actions, uncovers several individual, organizational and industry-level antecedents and consequences (e.g. McClelland et al., 2010, Peteraf and Reed, 2007). However, at the national-level there is a surprising void in relation to the drivers and implications of managerial discretion. Only recently, consideration has been given to national context by introducing the effect of the cultural environment on managerial discretion and its subsequent implication in terms of CEO impact on firm performance (Crossland and Hambrick, 2007, 2011). Despite this attempt, scholars (e.g. Wangrow et al., 2015) have called for more research to understand the implication of the discretion construct. Therefore, our aim is to investigate the potential relationship between managerial discretion and other national-level implications, namely country competitiveness.

Although, managerial discretion has several implications for strategy, Crossland and Hambrick, 2011) argue that it does not necessarily have any association with country performance particularly competitiveness. We challenge their proposition and argue that greater degree of managerial discretion would allow greater innovation and heterogeneity in firm strategies, which by aggregating it to the national-level would benefit and boost country competitiveness. Additionally, very few academics have examined the impact of managerial discretion on a macro-level construct, even when some did (e.g. Crossland and Chen, 2013), they fell short in identifying whether discretion is a desirable construct to drive performance in general, and country competitiveness in particular. Therefore, through our assessment of the relationship between discretion and competitiveness, we contribute by combining these two perspectives and by introducing new national-level implications of managerial discretion.

Managerial Discretion: A Review of Current Literature

Managerial discretion is conceptualized as the latitude in executives' decision-making (Hambrick and Finkelstein, 1987). It explicitly emerges as a conceptual link between theories that are predominantly deterministic ((e.g. population ecology (Hannan and Freeman, 1977), or neoinstitutionalism (DiMaggio and Powell, 1983)) and those that are mostly managerial (e.g. upper echelons (Hambrick and Mason, 1984)). Discretion exists to the extent that constraints to decision-making are relatively absent and when multiple plausible alternatives are available for executives to choose from. As such, it is a function of the individual executive (e.g. locus of control), the organisation (e.g. resource availability) and the task environment (e.g. industry

regulations) characteristics or any combination of these. Together, these internal and external factors comprise a powerful range of possible limitations or catalysts for executive actions.

The core concept of the discretion model argues that if executives, particularly CEOs, have a greater array of alternatives and their influence on decision making is high, their effect on organisational outcomes (strategy and performance) becomes greater (Wangrow et al., 2015). Using an innovative technique to capture individual CEO effects on firm performance, Hambrick and Quigley (2014) find that CEOs in high-discretion industries possess a greater effect on firm performance compared to their counterparts in moderate- and low-discretion industries. Similarly, Quigley and Hambrick (2015) assert an increased effect of CEOs on firm performance in the US – a high-discretion context (Crossland and Hambrick, 2011). However, a recent study by Fitza (2014) shows that the actual CEO effect is smaller than previous studies' estimates and that such effects are conflated with events that are outside the CEO's control, mainly related to random chance. The difference is seen in the methodology employed by scholars to estimate the CEO effect. Despite this variance, Quigley and Graffin (2016) reaffirm the significant importance of CEOs and their greater effect on firm performance if those CEOs possess discretion. This is consistent with earlier studies that link managerial discretion to CEO power and performance variability, in which greater discretion is positively related to greater performance variability (e.g. Adams et al., 2005). As such, these earlier studies provide considerable support for the notion that managerial discretion is positively related to greater CEO effect on firm performance and that discretion is the main driver for this increased effect.

Another important implication for managerial discretion is executive compensation. Using a variety of external (task environment) and internal proxies, several studies demonstrate that more discretion is positively associated with greater CEO compensation (e.g. Boyd and Salamin, 2001; Finkelstein, 2009; Finkelstein and Boyd, 1998; Rajagopalan and Finkelstein, 1992). Equally important is the discretion outcome related to firm strategic behaviour. For instance, Kim (2013) finds that discretion, derived from CEO duality, is an important driver for the likelihood of market entry. Also, discretion has been directly correlated with the degree of commitment to the status quo, in the sense that greater discretion weakens such commitment and increases the likelihood of strategic change (McClelland *et al.*, 2010). Staying in the stream of strategic change, Quigley and Hambrick (2012) empirically find that internal constraints (e.g. retention of a prior CEO on the board) reduce the degree of managerial discretion, which in turn limits the scale of strategic change. From a broader perspective, executives operating in a free-market economy, which drives higher degree of managerial discretion, engage in more risk-taking behaviour (Makhija and Stewart, 2002). Despite, these previous attempts to

understand the consequences of managerial discretion, few other studies have considered and examined alternative outcomes (Wangrow *et al.*, 2015).

As mentioned earlier, there is a dearth of research in the national-level dimension of managerial discretion (e.g. Wangrow et al., 2015). So far, studies have failed to provide deep insights into this important but under-researched dimension. The only consideration given to the national context in the discretion literature was Crossland and Hambrick's (2011) and later Haj Youssef and Christodoulou (2017) work on the differences in CEO discretion across countries and the role of cultural values and practices in shaping the degree of discretion accorded to executives. Crossland and Hambrick (2011) argue that CEOs of public firms headquartered in countries with greater discretion have a greater effect on company performance compared to their counterparts in low-discretion countries. Also, discretion plays an important mediating role between national-level antecedents (cultural values) and the effect of CEOs on firm performance (Crossland and Hambrick, 2011). As such, the greater the discretion at the national level, the higher the effect of CEOs on firm performance. A recent study by Crossland and Chen (2013) presents new insights into the national level framework of managerial discretion. The findings suggest that CEO accountability is dependent on the degree of managerial discretion, in which CEOs in high-discretion countries are more accountable for poor firm performance than those in low-discretion countries (Crossland and Chen, 2013). Therefore, CEO accountability, or dismissal-performance sensitivity, is another outcome of national-level managerial discretion.

So far, no other consideration has been given to the implications of managerial discretion at the national-level. Such framework provides a great opportunity for researchers to discover new insights and develop the theory further. Furthermore, while managerial discretion has long been related to performance, there seems to be stark controversy regarding whether greater degrees of managerial discretion are always desirable (Crossland and Hambrick, 2011). In other words, is managerial discretion always beneficial/desirable? Some theoretical propositions suggest that greater discretion may lead executives to develop managerial objectives, which is executives foreseeing actions that provide self-returns (Shen and Cho, 2005). However, that would be dependent on the individualities of each executive and their own values, which may not be generalisable across all contexts. Therefore, we attempt to fill in this gap.

National Competitiveness: A Review of Current Literature

Influenced by globalization, the national environment of countries has increasingly become an important factor driving competition. The core driver of national competitiveness lies in the

nations' firms' abilities to upgrade and innovate through its industry (Rugman and Verbeke, 2004). National competitiveness is a matter of considerable importance for both business and national economy leaders (Thompson, 2004). There are debates on what really competitiveness means and implies (Huggins et al., 2014; Akpinar et al., 2017). To some scholars (e.g. Cho and Moon, 2005; Kao et al., 2008) national competitiveness is the relative position of a country among others in the international market, and refers to the establishment of an environment that sustains more value creation for its businesses (Garelli, 2003). In other words, it is the set of institutions and national policies that determine the firm productivity in a particularly environment (Sala-i-Martin et al., 2014). On the other hand, Garelli (2014) argued that competitiveness is the attractiveness and aggressiveness to attract foreign direct investments. A recent research (Hanafi et al., 2017) attempted to categorize national competitiveness, by mapping the competitive advantage of nations using a systematic approach to detangle the important categories of extant research on this topic. Results highlight the unaddressed areas within this research stream and pointed out to the importance of uncovering new indicators that would drive national competitiveness from a strategic level. Therefore, the literature needs studies to understand and test new sources of national competitiveness to enable the identification of the main determinants of such concept and as a result encourage policies to promote its enhancement. This is the main gap that our study is aiming to address, by incorporating the concept of managerial discretion and arguing it's importance in driving national competitiveness.

In today's globalised world, executives and policy makers need to assess the extent to which the external environment is competitive and could attract more competition. For the economics school, national competitiveness is a straightforward issue mainly related to the factor costs and largely determined by the relative exchange rate, labour and land costs (e.g. Fagerberg, 1996; Reinert, 1995). On the other hand, for scholars in the management field, this concept is more broadly conceived, where national competitiveness tends to be more related to complex institutional and systematic factors of the macro-political economy which affect the micro-economic activities of firms within competitive environments (countries) (e.g. Strange, 1998; Krugman, 1996). National competitiveness has been used in several ways by different scholars, practitioners, policymakers, stakeholders (Solvell, 2015), this complexity brings more uncertainty through which top executives need to steer their firms via appropriate strategies (Luo, 2001). As such, national competitiveness is a function of the efficiency of domestic institutional environments in fostering competitive activity within its territory (Thompson, 2004). In other words, to achieve national competitiveness, countries should create

institutional environments that are consonant with business needs. From this standpoint, executives of firms operating in a given environment would prefer policy makers to establish policies that aim at providing a domestic institutional environment that would enable them to draw on a broader array of actions. Hence, in the following section, we aim to establish a theoretical linkage between discretion and national competitiveness on the basis that allowing business leaders more freedom in decision making would allow more innovation, greater strategic change and better development for firms and by aggregating these to the national level, this would boost competitiveness.

Managerial Discretion and National Competitiveness

Earlier research has emphasised that countries vary in their competitiveness levels and their attitudes towards competitiveness (e.g. French and Jarrett, 1994; Ho, 2005). This difference is mainly triggered by the varied cultures that each country is characterised by. From early treaties of cultural variables (Weber, 1904), culture has played a critical role in advancing nations, particularly enhancing overall country performance. The differences in national culture do not only explain human or organisation behaviour but also national performance (Franke et al., 1991). From Hofstede's (1980) study to the most recent cultural model of House et al. (2004), the results have shown a significant positive effect of culture on national performance and economic development. Despite the direct link between national culture and economic growth, scholars have debated that other important external factors exist (e.g. economic factors) which affect economic performance (Yeh and Lawrence, 1995). Economic freedom was found to mediate the relationship between national culture and economic growth (Johnson and Lenartowicz, 1998). Economic freedom or economies that are more open tend to grow faster and perform better than other economies which are strained by regulations (e.g. Dollar, 1992; Sachs and Warner, 1995). Since open economies help to protect private property, it allows freedom of choice and most importantly encourage individual autonomy and entrepreneurial behaviour (Gwartney et al., 1996; Reed, 2001). Moreover, the insights of clusters in the concept of national competitiveness is the foundation for a set of more innovative approaches and complex strategies, which set the recipe for a greater competitiveness (Bobel, 2017). Since market demand is constantly changing, which causes great uncertainty (Aoki, 1995), in such economies or countries, executives are able to foresee a broader range of actions and are not constrained in terms of the type or scale of strategy that they could implement. This is consistent with the tenets of task-environment discretion (Finkelstein, 2009). These countries are more innovative, value competition and promote specialisation (Johnson and Lenartowicz, 1998), all of which provide executives with greater freedom to choose which products and

services to produce, how to compete, and afford them greater freedom in terms of their decision making (North, 1990). Similar findings are echoed in Makhija and Stewart (2002) who argue that differences in the national context and free market versus centrally planned economies have an important role in determining the risk orientation of executives. They find that managers in free-market economies are equipped with more tolerance for ambiguity and are more accountable for organisational outcomes, which in turn increases their propensity to take risky actions (Makhija and Stewart, 2002). This is consistent with Crossland and Chen (2013), who demonstrate that executives across countries based on that country national characteristics are more accountable for poor firm performance and their dismissal rate is higher. They also show that a country's level of managerial discretion plays a crucial role in determining the accountability of its executives regarding poor firm performance.

Since the nature of firms is strongly determined and influenced through responses to the constraints and opportunities available in their specific environment (Child, 1981), organisations tend to be configured in a way to match or comply with their given institutional environment (Khanna and Palepu, 2000). For instance, Kwok and Tadesse (2006) find that national culture has a positive and significant effect on the financial systems adopted in a country. This is because financial systems are a function of the controllability of the environment (Rajan and Zingales, 2003), in the sense that the broader national environment dictates the type of financial systems that can be implemented in a country. In countries with a flexible institutional environment (e.g. free-market), the decision-making processes are vague and cannot be easily predicted. As such, the executives of firms operating in such environments should be allowed a greater degree of managerial discretion (Sharpman and Dean, 1997). In contrast, countries with a rigid institutional environment constrain executives' behaviour and limit their latitude of actions. Countries with more discretion provide executives with a wider array of behaviours, which may in turn allow faster firm action, more innovation and heterogeneous strategies. By aggregating the competitive success of firms to the national level, it seems that the overall national-level competitiveness increases (Thompson, 2004). This happens because national performance is not inherited but rather depends on the capacity of a nation's industry to innovate and upgrade (Davies and Ellis, 2000; Porter, 1990; Snowdon and Stonehouse, 2006). This is the case for both the industries and the actual firms that can drive national performance. Zahra (1999) argues that societies with greater entrepreneurial orientation are more competitive than others. The greater the entrepreneurial orientation in a country, the higher the latitude of executive actions. This is because such characteristics allow more innovation and tolerance of uncertainty, which in turn drives global competitiveness (Lee

and Peterson, 2000). Thus, country-level managerial discretion should act as an important trigger for enhanced national competitiveness.

The way firms contribute to the overall performance of a country is based on their strategic behaviour (Francis, 1992). Business leaders are the main contributors to their firms' performance and competitiveness, but how this can be aggregated to the national-level? Larrea and colleagues (2017), in a study on the role of leadership in triggering strategies for competitiveness, found that the experience and learning path of leaders which consists on appreciating the need for transformation and continuous innovation and change as a crucial driver for developing strategies for competitiveness. In-line with such an approach, business leaders accorded lower freedom of latitude of actions are incapable of transforming the existing the status quo of their firms due to the limited availability of choices and the increased constraints from the external environment. As such, they are unable to develop strategies to enhance the competitiveness state of their organisations and ultimately the national environment. Generally, national competitiveness does not equate directly to the relative international market price of factor inputs but rather stems from the free and undistorted competitive activity within the domestic institutional environment (Thompson, 2004). As such, when an executive has a greater latitude of actions and can choose strategic initiatives without any environmental constraints, the overall competitive scale of the domestic market increases, leading to greater national competitiveness. There has been much evidence that firms in different countries tend to foresee different strategies due to the institutional context of the countries in which they operate (e.g. Thomas and Waring, 1999). Firms that innovate and seek growth opportunities through innovation and the development of products and markets tend to provide executives with a greater degree of discretion (Rajagopalan and Finkelstein, 1992). By following this orientation, they tend to bear high ambiguity and uncertainty in cause-effect relationships. Countries that are the home of such firms should be more competitive than others. In contrast, countries with low discretion seem to limit executives' array of actions. In this case, firms operating in these environments tend to foster strategies that are similar to competitors and focus on building stable strategies. When companies follow stable strategies, and are more constrained in their behaviour, they will in turn have a reduced latitude of executives' actions (Rajagopalan, 1997). Therefore, we hypothesise:

Hypothesis: Managerial discretion has a significant positive relationship with national-level competitiveness.

Methodology

Sample

We select 18 countries in total to illustrate the sample of our study. The countries selected are: Australia, Austria, Canada, Egypt, France, Germany, Italy, Japan, Kuwait, the Netherlands, Qatar, Singapore, South Korea, Spain, Sweden, Switzerland, the United Kingdom and the United States. Majority of these countries, except, Egypt, Kuwait and Qatar, have been heavily used in earlier cross-cultural studies and studies looking at cross-national business phenomena (e.g. La Porta *et al.*, 1999; Crossland and Hambrick, 2011). Also, these countries account for most publicly listed companies around the world and constitute the highest percentage of the global domestic product (World Bank, 2014). We included three additional countries – Egypt, Kuwait and Qatar – to provide more richness to the data and help improve the generalisability of the findings. Also, this would enable us to have countries with different competitiveness scores.

Independent Variable

Scholars have theorized managerial discretion antecedents through a set of different organizational, individual and industry-level antecedents (e.g. Boyd and Salamin, 2001; Keegan and Kabanoff, 2008; McClelland et al., 2010). However, such theorization represents an indirect approach for assessing the degree of managerial discretion, thus treating discretion as a 'black box'. We took a different stance, in which we attempted to measure discretion directly following the call of Wangrow and colleagues (2015) and the operationalization technique used by Crossland and Hambrick (2011) and Haj Youssef and Christodoulou (2017). As such, we generated discretion scores from prominent, long-tenured and highly experienced management consultants working in the world's top 10 consultancy firms (e.g. McKinsey & Company, Boston Consultant was first given a definition of managerial discretion and then asked to rate on a 7-point Likert scale the degree of discretion available to CEOS of publicly listed firms headquartered in our sample (i.e. 18 countries). Of the 193 consultants contacted, 57 granted participation and provided utilizable responses. Our panellists provided 792 ratings with every country receiving between 30 and 56 ratings.

We assessed the possible nonresponse bias in couple of ways. First we conducted test comparing respondent to nonrespondents in terms of years of experience and nationality. Results show that nonsignificant differences (p<0.1). Then, we compared the final respondent pool with the total sampling, 193 versus 57, again we found no significant differences (p<0.1). We also computed the intraclass correlation coefficient (ICC) (3,k) to check whether the interrater reliability between the comparative ratings of managerial discretion is valid (Taggar, 2002). ICC(3,k) was 0.93 indicating strong agreement in ratings across our panellists. Finally,

to assure that our discretion ratings are in-line with Crossland and Hambrick's (2011) scores (15 countries only), we calculated the person correlation coefficient between these two and found further support for the validity of our discretion ratings (r=0.90, p<0.01). Figure 1 below shows the variation of managerial discretion across the sampled countries along with the trend of panellists rating per country.

Please Insert Figure 1 Here

Dependent Variable

To study the implications of managerial discretion for national-level competitiveness, we conducted an international field study using the publicly listed database of the World Economic Forum (WEF) to derive country-level competitiveness scores. Consistent with studies in the management literature (e.g. House et al., 2004; Herciu and Ogrean, 2008; Casero et al., 2013; Petrakis et al., 2015; Welsh et al., 2016), GCI is considered one of the main aggregate indicators of national competitiveness, which has been widely used by earlier researchers (e.g. Thompson, 2004). Despite, the existence of other national competitiveness measures – mainly the World Competitiveness Index (WCI) by the International Institute of Management Development – we chose GCI to first challenge the proposition of a non-relationship that Crossland and Hambrick (2011, 815-816) make and second to cover all the countries in our sample. The GCI is developed by the World Economic Forum in collaboration with Professor Xavier Sala-i-Martin from Columbia University. It is a result of two other measures – the Growth Competitiveness Index and Business Competitiveness Index – which are also aimed at measuring national competitiveness. It incorporates variables that respond to the continuous advancement in economic research and accounts for changes in the international landscape (Herciu and Ogrean, 2008). GCI examines the comparative weaknesses and strengths of competitiveness across 131 countries by classifying economic development based on Porter et al. (2002) and by taking into consideration 114 indicators that capture economic development and productivity, which are categorised into 12 pillars. According to WEF (2016), these pillars are as follows: institutions (e.g. legal and administrative framework), infrastructure (e.g. transport, roads), macroeconomic environment (e.g. interest rates), health and primary education (e.g. health and education level), higher education and training (e.g. educational attainment), goods market efficiency (e.g. production), labour market efficiency (e.g. skilled labour), financial market development (e.g. business investment climate), technology (e.g. technological advancement), market size (e.g. export), business sophistication (e.g. networks) and finally innovation (e.g. R&D). The 12 categories reported above are then organised into three sub-indices – basic index, efficiency enhancer index and innovation and sophistication index – which are given different weights depending on the economic stage of development of

each country, as proxied by the share of exports and GDP per capita (Schwab *et al.*, 2015). Data included in the construction of the GCI are both soft and hard. Soft or secondary data are collected from recognised databases such as the International Monetary Fund (IMF), World Bank and Global Entrepreneurship Monitor, to name a few. The primary or hard data are collected from the WEF's Executive Opinion Survey, which captures the perspectives of more than 14,000 business leaders and executives around the world on topics related to national competitiveness and their view of the competitiveness level of the country in which they reside or operate (WEF, 2016).

Control variables

Previous research has shown the importance of national culture in driving economic performance and how culture can advance the economic development of countries (e.g. Petrakis *et al.*, 2015). Studies have also shown that national culture can increase wealth, which will in turn enhance countries' economic performance (Hofstede, 2001). Particularly, House *et al.* (2004) examined the direct association between national cultural dimensions and country competitiveness. Thus, the first control variable is national culture, measured as a set of cultural practices and values as per House *et al.* (2004) along with the cultural tightness-looseness dimension as per Gelfand *et al.* (2011).

In addition to the national cultural influence, formal institutions are expected to influence countries' economic development (e.g. Minkov and Hofstede, 2012; North, 1990), and as such their national competitiveness. For instance, studies in the corporate governance literature have demonstrated the increased importance of the governance systems implemented in various countries; this includes, for instance, the ownership structure (La Porta *et al.*, 1999) of publicly listed firms. Therefore, to control for ownership structure, we used the mean score of all four proportions that exist in La Porta *et al.*, (1999).

Moreover, Millar *et al.* (2005) argue that countries characterised by an Anglo-American system and a common legal law origin are more developed economies. Thus, the country legal origin plays an important role in driving a country's economic development and hence its competitiveness. Accordingly, we also control for the legal origin based on La Porta *et al.*'s (1999) classification of common versus civil legal law origins; each country was coded either 1 for common law origin or 0 for civil legal low origin.

Furthermore, the employee protection and legislation that help to sustain long-term employment in a country would positively contribute to reducing that country's unemployment, which in turn is healthy for economic growth. Hence, we control for the employment protection as per Botero *et al.*'s (2004) employment law index, which was

constructed using three indicators: employee protection legislation, collective dismissals protection and company-based protection.

Also, we control for the country's level of entrepreneurial behaviour. It has been argued that entrepreneurship is an important contributor to socio-economic growth and development and generally enhances national prosperity and competitiveness (e.g. Zahra, 1999; Lee and Peterson, 2000). As such, and following Autio *et al.* (2013), we derived entrepreneurial behaviour scores from the Global Entrepreneurship Monitor's (GEM) adult population survey.

Because we are interested in the impact of managerial discretion on national competitiveness, which is the relative quality of a competitor to compete at an international level with other countries and the probability of winning such competition (Francis, 1992), it is important to control for the aggregate economic performance of a country. As such, we control for the level of economic output per country as it plays an extremely important role in allowing countries to be more competitive. Following recent studies (e.g. Berry *et al.*, 2014; Macher and Mayo, 2015), the aggregate economic performance of countries was operationalised using GDP per capita. However, it is important to note that due to the highly skewed nature of GDP per capita variables, we used logged GDP per capita.

Finally, because economic freedom is considered an essential contributor to the development and competitiveness of countries, we also control for it using the Economic Freedom Index published and created by the Heritage Foundation and the Wall Street Journal. Economic freedom is strongly associated with greater economic development, healthier societies, better per capita wealth, etc. and captures several variables such as: rule of law, limited government, regulatory efficiency and open markets.

Table 1 below shows the mean scores for all the variables per country.

Please Insert Table 1 Here

Statistical Analysis: Hierarchical Linear Model (HLM)

To capture the estimates of the explanatory variables at the year and country levels, and thereby predict individual national-level performance per year, we specified a multilevel regression model, often referred to as a hierarchical linear model (HLM) (Bliese and Hanges, 2004). The use of multilevel analysis is consistent with the broader management literature (e.g. Hammer *et al.*, 2009; Aguinis *et al.*, 2013; Quinn and Bunderson, 2016) and particularly the strategic leadership literature (e.g. Crossland and Hambrick, 2011; Crossland and Chen, 2013; Lam et *al.*, 2015). Due to the within-subject nature of the current data (discretion and competitiveness

levels within country), multilevel analysis was used to capture the nesting of the measures within each subject (Bliese, 2000). The multilevel approach is suitable for the current data structure because it accounts for the interdependencies among repeated observations per country (e.g. multiple years by the same country), whereas standard regression techniques do not and instead assume that each yearly observation is independent of the others, which increases the likelihood of Type I (when analysing group-level effect) and Type II (when analysing individual-level effect) errors (Bliese and Hanges, 2004). The current data contained multiple yearly observations nested within any given country, and the multilevel model or HLM modelling appropriately controls for the possibility that national competitiveness performance from the same country would be more related to one another than to performances from another country. It also supports the simultaneous testing and explanatory variables at yearly (e.g. economic performance, economic freedom index) and country levels (e.g. level of managerial discretion).

Before estimating the proposed relationship between variables, we sought to determine whether there was any significance between group-variation in the dependent variable (GCI) – a prerequisite for conducting multilevel analysis (Quinn and Bunderson, 2016). We first estimated a baseline ordinal regression model (intercept only) that included only the dependent variable (GCI), then we conducted a baseline multilevel regression (intercept only) that included GCI as the dependent variable and a random effect for the country as a grouping variable. A likelihood ratio test indicated that the multilevel ordinal regression model provided a significantly better fit than the non-nested ordinal regression model (χ^2 ₍₂₎ =44.07, p<0.001), indicating the appropriateness of the multilevel modelling technique for testing the proposed relationship. Even with the inclusion of the control variables, the likelihood ratio test also indicated that the multilevel model provided a significantly better fit than the non-nested ordinal regression model (χ^2 ₍₂₎ =26.20, p<0.001).

Furthermore, to determine the extent to which the variation in GCI was due to the grouping variables (countries), we calculated the intra-class correlation (ICC) statistic for multilevel ordinal regression model (Algesheimer and Herrmann, 2005), which reveals a ratio of between-group variance to total variance. The ICC value of 0.92 indicated that differences between countries accounted for a large percentage of the total variance in the yearly GCI. Also, we chose to grand-centre the variables prior to running the multilevel models as this is an important and helpful procedure before estimating an HLM model because it reduces the correlations among main-effect, random-effect and interactive terms (Bliese, 2000). We relied on Stata 14 to estimate the model.

Findings

Table 2 shows that managerial discretion measures are positively correlated with national competitiveness and that control variables included in the multilevel modelling affect and have an important influential role on competitiveness. This further supports the inclusion of these variables. This table shows the mean, standard deviation and the bivariate correlations between all variables including the control variables.

Please Insert Table 2 Here

Furthermore, Table 3 contains the results for the HLM. As per the model below, managerial discretion has a positive and significant effect on national-level competitiveness measured by GCI ($\beta_{discretion}$ =2.505, p<0.001), thus providing support for our proposed relationship. Clearly, countries that allow for greater latitude in executive decision making perform better overall.

Please Insert Table 3 Here

Again, the empirical results indicate that the inclusion of the various control variables was warranted. Concerning the impact of national culture, the findings show that all cultural practices exhibit a strong relationship with national competitiveness. Particularly, institutional collectivism (p<0.001), power distance (p<0.001), performance orientation (p<0.001), gender egalitarianism (p<0.001) and assertiveness (p<0.01) have a strong negative relationship with national competitiveness. In contrast, in-group collectivism (p<0.001), uncertainty avoidance (p<0.001), future orientation (p<0.001), humane orientation (p<0.001) and cultural looseness (p<0.001) showed a strong positive relationship with country competitiveness. In relation to GDP per capita, it is obvious that the greater the economic productivity and performance of a country, the greater its competitiveness (p<0.001), which is also reflected in the relationship between economic freedom index and GCI (p<0.001). Consistent with the literature (e.g. La Porta et al., 1999), the ownership dispersion (p<0.001) and legal origin (p<0.001) of countries exhibited strong positive and negative relationships consecutively. The greater the flexibility of ownership structure and legal origin (e.g. protection of property rights in common laws), the greater is a country's ability to compete on an international level. Also, the employment law index (p<0.001) showed a significant positive relationship with country competitiveness.

Although entrepreneurial behaviour seemed to drive economic performance and growth, which in turn contributes to countries' competitiveness, it has exhibited a negative

relationship. There is no direct explanation for such findings, but a possible argument may be related to culture and other formal institutions factors. It has been argued that entrepreneurial orientation or activity within a given country is subject to and constrained/enabled by its culture (Autio *et al.*, 2013), which may well not show any positive relationship while not controlling for the cultural aspect. Also, according to Berger (1991), the entrepreneurial activity continues to be relatively constrained in many countries despite their considerable economic development. Thus, to have a positive relationship, there is a need to include a different set of variables to control for variables that are directly related to entrepreneurial behaviour. Due to the small variation across countries in terms of entrepreneurial behaviour, such an association should be interpreted with caution.

Lastly, the variable year did not show any relationship with national competitiveness. It may be that the actual construction of the GCI measure considers the yearly changes and impact of external events (e.g. financial crisis). For that reason, financial crisis did not show any impact in this sample. Also, another explanation may relate to the nature of the variables in use in the multilevel modelling, as most them were constructed in a static manner that does not change over time.

Discussion and Implications

As discussed earlier, that the managerial discretion literature failed to answer a fundamental question, is discretion good or bad. Majority of work in this field of research examined the various consequences of managerial discretion, either from the individual (e.g. CEO risk taking behavior (Miller et al., 1982) compensation (Rajagopalan and Finkelstein, 1992)), organization (e.g. strategic change (Quigley and Hambrick, 2012)), industry (e.g. attentional homogeneity (Abrahamson and Hambrick, 1997)) or even at the national-level (e.g. CEO effect on firm performance (Crossland and Hambrick, 2011); CEO accountability (Crossland and Chen, 2013)). However, none have examined if discretion is a desirable construct for better performance. Crossland and Hambrick (2011: 815) mentioned that "discretion is not, per se, necessarily good or bad, but simply refers to the latitude of action available to executives". Additionally, they didn't envision a relationship between discretion and country performance, particularly national competitiveness. We challenged such proposition and empirically demonstrated that managerial discretion is beneficial for country performance particularly competitiveness. We found that countries that provide greater latitude of actions for CEOs are more competitive than their counterparts who provide less discretion. This is due to the positive impact of managerial discretion on fostering competitive environment among firms that operate in a country, and by aggregating this to the national level the competitive environment becomes between countries.

The positive influence of managerial discretion on country competitiveness may provide an interesting framework to examine the influence of firms over public policymaking, for instance in the establishment of rules and regulations. This interesting question may be important for non-market strategy research. Public policymaking literature often emphasize the impact of firm size, industry competition, country-level institutional determinants and the interaction between these as proxies for firm influence over public policymaking (Macher and Mayo, 2015). However, discretion may present a better theoretical fit for explaining public policymaking. Policy makers are generally interested in achieving greater national performance and always seek to put their country on the global competitive map. Our paper shows the positive impact of managerial discretion in accomplishing these goals, as such policy makers should provide flexible institutional environments, particularly formal institutions, which allows for greater latitude of actions. By incorporating managerial discretion in nonmarket strategy research, answers for the relative success or failure for firms' efforts to influence public policymaking may be provided. Ketelhohn et al. (2015) assessed the impact of the national competitiveness model on public policymaking in Central America, their results strongly suggest that the adoption of such model has positively contributed to the international competition and economic development of countries in this region and most importantly it has enhanced countries abilities to attract new foreign direct investments. This view is also supported by other studies by giving individual case analysis of countries (e.g. Goncalves et al., 2015; Reve and Sasson, 2015). Therefore, by integrating the concept of managerial discretion as an important indicator of national competitiveness, this would have a direct impact on public policymaking and will encourage government officials to find suitable solutions, like relaxing its rules and regulations on businesses, to allow a greater latitude of actions for business decision makers.

Also, our results may have important management implications as well. With business becoming increasingly globalized and internationalized, the profile of countries becomes of a great importance and can become as a tool for corporate strategic choices. National differences showed strong influence on market entry strategies (Hennart and Larimo, 1998) and as discretion has also demonstrated varied levels across countries (e.g. Crossland and Hambrick, 2011; Haj Youssef and Christodoulou, 2017); managerial discretion could shed the light on the foreign direct investment entry modes and location of the target market. CEOs operating in high discretion countries may wish to internationalize via entry modes that involve more

control and risk (e.g. greenfield investment). These strategies offer more latitude of actions and considerable options to the executive to choose from. As opposed to executives who are used to less discretionary environments may choose to foresee international expansion using less risky strategies such as joint ventures. Also, the location of the target market may be related to the levels of discretion of that country. Executives operating in countries that provide considerable leeway to their actions may logically decide to internationalize to similar countries rather than countries that impose more constraints on their actions. Additionally, managerial discretion could be an important concept in mapping national cooperation. Cho et al., (2016) argued that despite the culturally diverse setting of South Korea and Dubai, both countries can benefit from cooperating with each other by sharing their strengths and experience on competitiveness. Discretion could play a key role in the understanding of countries strength and can be used as a tool to map the similarities between countries and the potential cooperation method between them.

Furthermore, the idea of delivering beyond GDP goals into a better national strategy that is built on innovation, supporting institutions and skills (Aiginger and Vogel 2015), would be better explained and supported by the concept of managerial discretion. As seen in this paper, we argued that managerial discretion is a positive contributor to national competitiveness, but we couldn't unveil the mechanism in which managerial discretion drives competitiveness. By integrating the 'high-road strategy' introduced by Aiginger and Vogel (2015), we may be able to attain a better understanding of the mechanism in which discretion impacts competitiveness. This can be via the positive implication of discretion on innovation. Providing greater latitude of actions of business decision makers would significantly enhance their entrepreneurial qualities and they would engage more in greater innovation (, which makes it more likely for firms to continuously innovate to further support the competitiveness of the national environment. Because, high discretion contexts provide greater task complexity, a wider range of actions complex information process and greater innovation and creativity, which all seem to enhance country competitiveness. Another stipulation for the mechanism in which discretion drives national competitiveness could be that, discretion allows executives to take actions from a broader array of choices and enables them to foresee strategic change, which positively impact firm performance (Quigley and Hambrick, 2012). Taking these characteristics into consideration, the competition scale would increase in a country allowing firms to become more productive and seek more efficient actions, which all fall under the umbrella of boosting a country's competitiveness profile in the internal market.

Conclusion

Our paper contributes to both the competitiveness and strategic management literature by uncovering the relationship and the implication of managerial discretion on national competitiveness. We provide a deeper understanding of factors that may drive country competitiveness and we have answered calls to study the discretion construct on a nationallevel. This is particularly important as it opens a new way of analysing the determinants of the competitive advantage of nations which has important implications at the national level. Furthermore, and as mentioned earlier, the managerial discretion literature failed to answer a fundamental question – is discretion desirable? The majority of the work in this field of research has examined the various consequences of managerial discretion at the individual (e.g. CEO risk-taking behaviour (Miller et al., 1982)), compensation (Rajagopalan and Finkelstein, 1992)), organisation (e.g. strategic change (Quigley and Hambrick, 2012)), industry (e.g. attentional homogeneity (Abrahamson and Hambrick, 1997)) or even national levels (e.g. CEO effect on firm performance (Crossland and Hambrick, 2011) as well as regarding CEO accountability (Crossland and Chen, 2013)). However, none have examined if discretion is a desirable construct for better performance. Crossland and Hambrick (2011: 815) mentioned that "discretion is not, per se, necessarily good or bad, but simply refers to the latitude of action available to executives". Additionally, they didn't envision a relationship between discretion and country performance, particularly national competitiveness. The author challenged this proposition and empirically demonstrated that managerial discretion is beneficial for country performance. The findings indicated that managerial discretion has a positive effect on national competitiveness. Countries that provide a greater latitude of actions for CEOs are more competitive than their counterparts who provide less discretion. This is due to the positive impact of managerial discretion on fostering a competitive environment among firms that operate in a country, and by aggregating this to the national level the environment between countries becomes more competitive. Understanding how discretion functions at the national level remains an under-researched topic in the literature.

Although this paper represents an attempt to address this gap, there are several avenues for future research to consider. For instance, a greater understanding of the mechanism in which discretion drives national competitiveness is warranted. We did not attempt to assess the industry role and its effect on the relationship between managerial discretion and national competitiveness. Porter refers to national competitiveness as driven by the capacity of a country's industry to innovate and upgrade, this may play a role in the relationship between discretion and competitiveness. Future work is encouraged to look at the inter-relationship between these three variables and assess the role that industry plays.

Another limitation relates to the context of this study. Although this paper has a wide geographical spread including six different regional clusters, other important countries exist with a growing global presence and with firms competing on an international scale. The sampling in this thesis has resulted in the omission of significant countries such as Russia, Brazil, India, China, etc. which are becoming increasingly influential in today's global economy. There is a need to determine whether such findings in terms of the consequences of discretion are also generalisable to other countries. As such, researchers are also encouraged to broaden the discretion context even further by including sample of other countries.

References

- Abrahamson, E., and Hambrick, D. C. 1997. Attentional homogeneity in industries: The effect of discretion. Journal of Organizational Behavior, 18: 513-532.
- Adams, R., Almeida, H., and Ferreira, D. 2005. Powerful CEOs and their impact on corporate performance. Review of Financial Studies, 18: 1403-1432.
- Aguinis, H., Gottfredson, R. K., and Culpepper, S. A. 2013. Best-practice recommendations for estimating cross-level interaction effects using multilevel modelling. Journal of Management, 39(6): 1490-1528.
- Aiginger, K., and Vogel, J. 2015. Competitiveness: from a misleading concept to a strategy supporting Beyond GDP goals. Competitiveness Review, 25(5), 497-523.
- Akpinar, M. Can, O., and Mermercioglu, M. 2017. Assessing the sources of competitiveness of the US states", Competitiveness Review: An International Business Journal, Vol. 27 (2), pp.161-178.
- Algesheimer, R., Dholakia, U. M., and Herrmann, A. 2005. The social influence of brand community: Evidence from European car clubs. Journal of Marketing, 69: 19-34.
- Aoki, M. 1995. Economic fluctuations with interactive agents: Dynamic and stochastic externalities. Japanese Economic Review, 46(2): 148-165.
- Autio, E., Pathak, S., and Wennberg, K. 2013. Consequences of cultural practices for entrepreneurial behaviors. Journal of International Business Studies, 44: 334-362.
- Berry, H., Guillen, M. F., and Hendi, A. S. 2014. Is there convergence across countries? A spatial approach. Journal of International Business Studies, 45 (4): 387-404.
- Bliese, P. D. 2000. Within-group agreement, non-independence, and reliability. In K. J. Klein and S. W. J. Kozlowski (Eds). Multi-level theory, research, and methods in organizations:Foundations, extensions, and new directions, San Francisco: Jossey-Bass, 349-381.
- Bliese, P. D., and Hanges, P. J. 2004. Being both too Liberal and too Conservative: The perils of treating grouped data as though they were independent. Organizational Research Methods, 7: 400-417.
- Böbel, I. 2017. On Strategy & Competitiveness: 10 Recipes for Analytical Success. Competitiveness Review: An International Business Journal, 27 (4), 433-435.
- Botero, J. C., Djankov, S., La Porta, R., Lopez-de-Silanes, F., and Shleifer, A. 2004. The regulation of labour. Quarterly Journal of Economics, 119: 1339-1382.
- Boyd, B. K., and Salamin, A. 2001. Strategic reward systems: A contingency model of pay system design. Strategic Management Journal, 22: 777-792.
- Casero, J. C. D., Gonzalez, M. A., Escobedo, M. C. S., Martinez, A. C., and Mogollon, R. H. 2013.

- Institutional variables, entrepreneurial activity and economic development. Management Decision, 51(2): 281-305.
- Child, J. 1981. Culture, contingency and capitalism in the cross-national study of organizations. In B. M. Staw., and L. L. Cummings (Eds). Research in organizational behavior. Greenwich, CT: JAI Press, 303-356.
- Cho, D. S., and Moon, H. C. 1998. A nation's international competitiveness in different stages of economic development. Advances in Competitiveness Research, 1(6): 5-19.
- Cho, D. S., Moon, H. W., and Yin, W. 2016. Enhancing national competitiveness through national cooperation: The case of South Korea and Dubai. Competitiveness Review, 26 (5), 482-499.
- Cho, D.S. and Moon, H.C. (2005), "National competitiveness: implications for different groups and strategies", *International Journal of Global Business and Competitiveness*, Vol. 1 No. 1, pp. 1-11.
- Crossland, C., and Chen, G. 2013. Executive accountability around the world: Sources of crossnational variation in firm performance-CEO dismissal sensitivity. Strategic Organization, 11: 78-109.
- Crossland, C., and Hambrick, D. C. 2007. How national systems differ in their constraints on corporate executives: A study of CEO effects in three countries. Strategic Management Journal, 28: 767-789.
- Crossland, C., and Hambrick, D. C. 2011. Differences in managerial discretion across countries:

 How nation-level institutions affect the degree to which CEOs matter. Strategic Management
 Journal, 32: 797-819.
- Davies, H., and Ellis, P. 2000. Porter's Competitive Advantage of Nations: Time for the Final Judgment? Journal of Management Studies, 37, 1189-1213.
- DiMaggio P., and Powell, W. 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48: 147-160.
- Dollar, D. 1992. Outward-oriented developing economies really do grow more rapidly: Evidence from 95 LDCs, 1976-1985. Economic Development and Cultural Change, 40: 523-544.
- Fagerberg, J. 1996. Technology and Competitiveness. Oxford Review of Economic Policy, 12(3): 39-51.
- Finkelstein, S. 2009. Why is industry related to CEO compensation? A managerial discretion explanation. Open Ethics Journal, 3: 42-56.
- Finkelstein, S. 2009. Why is industry related to CEO compensation? A managerial discretion explanation. Open Ethics Journal, 3: 42-56.
- Finkelstein, S., and 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: 179-199.
- Fitza, M. A. 2014. The use of variance decomposition in the investigation of CEO effects: how large must the CEO effect be to rule out change? Strategic Management Journal, 35(12): 1839-1852.
- Francis, A. 1992. The process of national industrial regeneration and competitiveness. Strategic Management Journal, 13: 61-78.
- Franke, R. H., Hofstede, G., and Bond, M. H. 1991. Cultural roots of economic performance: A research note. Strategic Management Journal, 12-165-173.
- French, M., and Jarrett, P. 1994. The United States: Restoring productivity growth. OECD observer, 185: 46-49.
- Garelli, S. (2014), "The fundamentals and history of competitiveness", *IMD World Competitiveness Yearbook 2014*, IMD World Competitiveness Centre, Lausanne, pp. 492-507.
- Garelli, S. 2003. Competitiveness of nations: The fundamentals. IMD World Competitiveness Yearbook, Lausanne: Switzerland.
- Gelfand, M.J., Raver, J.L., Nishii, L., Leslie, L.M., Lun, J., Lim, B.L. et al. 2011. Differences between tight and loose cultures: A 33-nation study. Science, 332: 1100-1104.
- Goncalves, V., Ribeiro Mendes, F., Dias Sardinha, I. and Rodrigues, R. 2015. Twenty years after the porter report for Portugal. *Competitiveness Review*, 25 (5), 540-554.
- Gwartney, J., Lawson, R., and Block, W. 1996. Economic freedom of the world. Washington, D.C.: Cato Institute.
- Haj Youssef, M., & Christodoulou, I. 2017. Assessing the Generalisability of Managerial Discretion: An Empirical Investigation in the Arab World. *Journal of Management and Strategy*, 8(1), 28-36.
- Haj Youssef, M., & Christodoulou, I. 2017. Strategizing in a Focused Context: Managerial Discretion in the Arab World. *Journal of Strategy and Management*, 10(4).
- Hambrick, D. C. and Mason, A. P. 1984. Upper Echelons: The organization as a Reflection of its top Managers. The Academy of Management Review, 9(2): 193-206.
- Hambrick, D. C., and Finkelstein, S. 1987. Managerial discretion: A bridge between polar views of organizational outcomes. Research in Organizational Behavior, 9: 369-406.
- Hambrick, D. C., and Quigley, T. J. 2014. Toward more accurate contextualization of the CEO effect on firm performance. Strategic Management Journal, 35: 473-491.
- Hammer, L. B., Kossek, E. E., Yragui, N. L., Bodner, T. E., ad Hanson, G. C. 2009. Development and validation of a multidimensional measure of family supportive supervisors behaviors

- (FSSB). Journal of Management, 35(4): 837-856.
- Hanafi, M. Wibisono, D. Mangkusubroto, K. Siallagan, M., and Badriyah, MJK. 2017. Modelling competitive advantage of nation: a literature review. Competitiveness Review, 27(4), 335-365.
- Hannan, M. T., and Freeman, J. 1977. The population ecology of organizations. American Journal of Sociology, 82: 929-964.
- Hennart, J. F., and Larimo, J. 1998. The impact of culture on strategy of multinational enterprises: Does national origin affect ownership decisions? Journal of International Business Studies, 29, 515-538.
- Herciu, M., and Ogrean, C. 2008. Interrelations between competitiveness and responsibility at macro and micro-level. Management Decision, 46(8): 1230-1246.
- Ho, C. K. 2005. Corporate governance and corporate competitiveness: An international analysis. Corporate Governance, 13: 211-223.
- Hofstede G. 1980. Culture's Consequences: International Differences in Work-Related Values. Sage: Thousand Oaks, CA.
- Hofstede, G. 2001. Culture's Consequences: Comparing values, behaviors, institutions, and organizations across nations (2nd ed.). Thousand Oaks, CA: Sage.
- House, R., Hanges, P., Javidan, M., Dorfman, P., Gupta, V. (Eds..). 2004. Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies. Sage: Thousand Oaks, CA.
- Huggins, R., Izushi, H., Prokop, D. and Thompson, P. (2014), *The Global Competitiveness of Regions (Regions and Cities*), Routledge, Oxon and New York, NY.
- Johnson, J. P., and Lenartowicz, T. 1998. Culture, freedom and economic growth: Do cultural values explain economic growth? Journal of World Business, 33(4): 332-356.
- Kao, C., Wu, W.Y., Hsieh, W.J., Wang, T.Y., Lin, C. and Chen, L.H. (2008), "Measuring the national competitiveness of Southeast Asian countries", *European Journal of Operational Research*, Vol. 187 No. 2, pp. 613-628.
- Keegan, J., and Kabanoff, B. 2008. Indirect industry- and sub-industry-level managerial discretion measurement. Organizational Research Methods, 11: 682-694.
- Ketelhohn, N., Artavia, R., Arce, R., and Umana, V. 2015. The Central American Competitiveness initiative. Competitiveness Review, 25(5), 555-570.
- Khanna, T., and Palepu, K. 2000. The future of business groups in emerging markets: Long-run evidence from Chile. Academy of Management Journal, 43(3): 268-285.
- Kim, E. H. 2013. Deregulation and differentiation: Incumbent investment in green technologies. Strategic Management Journal, 34: 1162-1185.

- Krugman, P. D. 1996. Making Sense of the Competitiveness Debate. Oxford Review of Economic Policy, 12(3): 17-25.
- Kwok, C. C. Y., and Tadesse, S. 2006. National culture and financial systems. Journal of International Business Studies, 37: 227-247.
- La Porta, R., Lopez-de-Silanes, F., and Shleifer, A. 1999. Corporate ownership around the world. Journal of Finance, 54: 471-517.
- Lam, C. K., Huang, X., and Chan, S. C. H. 2015. The threshold effect of participative leadership and the role of leader information sharing. Academy of Management Journal, 58(3): 836-855.
- Larrea, J.L., Aranguren, M. J., and Valdaliso, J. M. 2017. Exploring the role of leadership in territorial strategies for competitiveness. Competitiveness Review: An International Business Journal, Vol. 27(40), 390-409.
- Lee, S. M., and Peterson, S. 2000. Culture, entrepreneurial orientation, and global competitiveness. Journal of World Business, 35, 401-416.
- Luo, Y. D. 2001. Determinants of Entry in an Emerging Economy: A Multilevel Approach. Journal of Management Studies, 38(3): 443-472.
- Macher, J. T., and Mayo, J. W. 2015. Influencing public policymaking: Firm-, industry-, and country-level determinants. Strategic Management Journal, 36: 2021-2038.
- Makhija, M., and Stewart, A. 2002. The effect of national context on perceptions of risk: A comparison of planned versus free-market managers. Journal of International Business Studies, 33: 737-756.
- McClelland, P. L., Liang, X., and Barker, V. L. 2010. CEO commitment to the status quo: Replication and extension using content analysis. Journal of Management, 36: 1251-1277.
- Millar, C., Eldomiaty, T., Choi, C., and Hilton, B. 2005. Corporate governance in institutional transparency in emerging markets. Journal of Business Ethics, 59: 163-174.
- Miller, D. T., Kets De Vries, M. F. R., and Toulouse, J.-M. 1982. Top executive locus of control and its relationship to strategy-making, structure, and environment. Academy of Management Journal, 25: 237-253.
- Minkov, M., and Hofstede, G. 2012. Hofstede's fifth dimension: New evidence from the World Values Survey. Journal of Cross-Cultural Psychology, 42(1): 3-14.
- North, D. C. 1990. Institutions, institutional change and economic performance. New York: Cambridge University Press.
- Peteraf, M., and Reed, R. 2007. Managerial discretion and internal alignment under regulatory constraints and change. Strategic Management Journal, 28: 1089-1112.
- Petrakis, P., Kostis, P., and Valsamis, D. 2015. Innovation and competitiveness: Culture as a long-

- term strategic instrument during the European Great Recession. Journal of Business Research, 68, 1436-1438.
- Porter, M. E. 1990. The Competitive Advantage of Nations. Macmillan, London.
- Quigley, T. J., and Graffin, S. D. 2016. Reaffirming the CEO effect is significant and much larger than chance: A comment on Fitza (2014). Strategic Management Journal. Early view article: DOI: 10.1002/smj.2503.
- Quigley, T. J., and Hambrick, D. C. 2012. When the former CEO stays on as board chair: Effects on successor discretion, strategic change, and performance. Strategic Management Journal, 33: 834-859.
- Quinn, R. W., and Bunderson, J. S. 2016. Could we huddle on this project? Participant learning in newsroom conversations. Journal of Management, 42(2): 386-418.
- Rajagopalan, N. 1997. Strategic orientations, incentive plan adoptions, and firm performance: Evidence from electric utility firms. Strategic Management Journal, 18: 761-785.
- Rajagopalan, N., and Finkelstein, S. 1992. Effects of strategic orientation and environmental change on senior management reward systems. Strategic Management Journal, 13(S1): 127-141.
- Rajan, R., and Zingales, L. 2003. The great reveals: the politics of financial development in the 20th century. Journal of Financial Economics, 69(1): 5-50.
- Reed, O. L. 2001. Law, the Rule of Law, and Property: A Foundation for the Private Market and Business Study. American Business Law Journal, 38: 441-473.
- Reinert, E. S. 1995. Competitiveness and its predecessors: A 500-year cross-national perspective. Structural Change and Economic Dynamics, 6: 23-42.
- Reve, T. and Sasson, A. (2015), "Theoretical and methodological advances in cluster research", *Competitiveness Review*, Vol. 25 No. 5, pp. 524-539.
- Rugman, A. M. and Verbeke, A. 2004. A perspective on regional and global strategies of multinational enterprises. Journal of International Business Studies, 35(2), 3–18.
- Sachs, J., and Warner, A. 1995. Economic reform and the process of global integration. Brookings Papers on Economic Activity, 1: 1-95.
- Sala-i-Martín, X., Bilbao-Osorio, B., Blanke, J., Hanouz, M.D., Geiger, T. and Ko, C. (2014), "The global competitiveness index 2014-2015: accelerating a robust recovery to create productive jobs and support inclusive growth", in Schwab, K. (Ed.), *The Global Competitiveness Report 2014-2015: Full Data Edition*, World Economic Forum, Geneva, pp. 3-52.
- Sharpman, M. P., and Dean, J. W. 1997. Flexibility in strategic decision making: Information and ideological perspectives. Journal of Management Studies, 34: 191-217.
- Shen, W., and Cho, T. S. 2005. Exploring involuntary executive turnover through a managerial

- discretion framework. Academy of Management Review, 30: 843-854.
- Snowdon, B., and Stonehouse, G. 2006. Competitiveness in a globalized world: Michael Porter on the microeconomic foundations of the competitiveness of nations, regions and firms. Journal of International Business Studies, 37: 163-175.
- Sölvell, Ö. (2015), "The competitive advantage of Nations 25 years opening up new perspectives on competitiveness", *Competitiveness Review*, Vol. 25 (5), 471-481.
- Strange, S. 1998. Who are EU? Ambiguities in the concept of competitiveness. Journal of Common Market Studies, 36(1): 101-114.
- Taggar, S. 2002. Individual creativity and group ability to utilize individual creative resources: a multi-level model. Academy of Management Journal, 45: 315-330.
- Thomas, L. G., and Waring, G. 1999. Competing capitalism: Capital investment in American, German, and Japanese Firms. Strategic Management Journal, 20: 729-748.
- Thompson, E. R. 2004. National Competitiveness: A Question of Cost Conditions or Institutional Circumstances. British Journal of Management, 15: 197-218.
- Wangrow, B. D., Schepker, J. D., Barker III, L. V. 2015. Managerial Discretion: An Empirical Review and Focus on Future Research Directions. Journal of Management, 41: 99-135.
- Weber, M. 1904. The Protestant Ethic and the Spirit of Capitalism. London: George Allen and Unwin.
- Welsh, D. H. B., Kaciak, E., and Thongpapanl, N. 2016. Influence of stages of economic development on women entrepreneurs' start-ups. Journal of Business Research, 69: 4933-4940.
- World Bank. 2014. World Development Indicators Database. World Bank: Washington, DC.
- Yeh, R., and Lawrence, J. J. 1995. Individualism and Confucian dynamism: A note on Hofstede's cultural root to economic growth. *Journal of International Business Studies*, 26(4): 655-669.
- Zahra, S. A. 1999. The changing rules of global competitiveness in the 21st century. *Academy of Management Executive*, 13: 36-42.

Figures & Tables

Figure 1: Heterogeneity of Managerial Discretion Across Countries

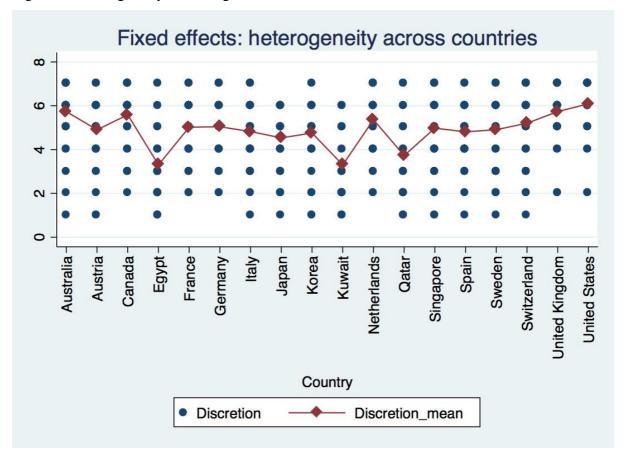


Table 1: National-level variables: Independent, dependent and control variables

Country	Discretion	GCI	LnGDP Per	EFI	OD	LO	ELI	EB	IC	In-Group IC	UA	PD	FO	НО	РО	GENDERE	AA	CL
Australia	5.73	5.04	Capita 4.53	81.76	0.4	Common Law	0.35	6.88	4.38	4.98	4.19	3.76	4.65	4.94	5.18	4.21	4.06	-4.40
Austria	4.90	5.14	4.61	71.21	0.02	Civil Law	0.5	4.98	4.54	5.11	4.41	3.74	4.81	4.70	5.28	3.96	3.74	-6.80
Canada	5.59	5.28	4.56	79.26	0.52	Common Law	0.26	6.69	4.29	5.08	4.16	3.78	4.89	5.04	5.31	4.37	4.10	-5.30
Egypt	3.30	3.88	3.17	56.36	0.1	Civil Law	0.37	4.61	4.61	5.44	4.65	4.06	4.73	4.93	4.99	3.08	3.57	-9.20
France	5.02	5.10	4.54	63.13	0.22	Civil Law	0.74	2.55	4.60	5.27	4.54	4.12	4.42	4.66	5.11	4.18	3.85	-6.30
Germany	5.04	5.42	4.6	71.09	0.26	Civil Law	0.7	3.23	4.32	4.90	4.45	4.05	4.66	4.44	5.21	4.05	3.93	-7.00
Italy	4.82	4.37	4.5	61.70	0.09	Civil Law	0.65	2.85	4.44	5.38	4.16	3.97	4.63	4.60	4.85	4.06	3.97	-6.80
Japan	4.53	5.39	4.58	72.06	0.47	Civil Law	0.17	3.71	4.60	5.08	4.24	3.94	4.86	4.92	4.80	3.80	4.72	-8.60
Korea	4.76	5.09	4.27	68.95	0.31	Civil Law	0.45	6.03	4.52	5.61	4.15	4.00	4.90	4.71	4.98	3.37	4.05	-10.00
Kuwait	3.33	4.59	4.42	65.17	0.1	Civil Law	0.53	4.34	4.77	5.51	4.43	4.07	4.44	4.79	4.92	3.04	3.62	-9.20
Netherlands	5.36	5.38	4.62	74.89	0.2	Civil Law	0.73	5.3	4.61	4.59	4.02	3.36	4.93	4.64	5.02	4.30	3.73	-3.30
Qatar	3.73	5.02	4.79	67.01	0.1	Civil Law	0.53	6.75	4.80	5.31	4.41	3.96	4.85	4.87	4.70	3.56	3.92	-9.20
Singapore	4.98	5.55	4.48	87.63	0.17	Common Law	0.31	4.17	4.66	5.56	4.70	3.92	5.27	4.58	5.30	4.07	4.23	-10.40
Spain	4.81	4.62	4.4	68.77	0.12	Civil Law	0.74	4.53	4.55	5.68	4.39	3.88	4.59	4.48	4.93	3.92	4.22	-5.40
Sweden	4.91	5.53	4.63	71.33	0.11	Civil Law	0.74	3.9	4.57	4.86	4.39	3.67	4.68	4.91	4.87	4.52	3.44	-9.50
Switzerland	5.20	5.63	4.77	80.18	0.5	Civil Law	0.45	5.3	4.39	4.64	4.35	3.78	4.71	4.71	5.34	4.04	3.78	-6.90
UK	5.73	5.34	4.6	77.27	0.65	Common Law	0.28	4.4	4.33	4.87	4.41	3.99	4.72	4.62	5.06	4.44	3.96	-6.90
US	6.09	5.60	4.67	78.76	0.75	Common Law	0.22	6.12	4.20	5.01	4.07	3.88	4.75	4.84	5.32	4.19	4.46	-5.10

Notes: GCI= Global Competitiveness Index, LnGDP Per Capita= Log GDP per capita, EFI= Economic Freedom Index, OD= Ownership Dispersion, LO= Legal Origin, ELI= Employment Law Index, EB= Entrepreneurial Behaviour, IC= Institutional Collectivism, In-group IC= In Group Institutional Collectivism, UA= Uncertainty Avoidance, PD= Power Distance, FO= Future Orientation, HO= Humane Orientation, PO= Performance Orientation, GENDER= Gender Egalitarianism, AA= Assertiveness and CL= Cultural Looseness.

Some countries did not have a reported OD and ELI data (e.g. Kuwait), here we have used geographical proximity according to House et al.'s (2004) regional clusters. Such approach is widely used in the management literature particularly for cross-cultural studies (Freeman, 2002; Crossland and Hambrick, 2011).

Table 2: Bivariate correlations: All variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Managerial Discretion ¹	4.88	0.77	-																
Global Competitiveness Index ²	5.11	0.47	.658**	-															
Control Variables																			
GDP Per Capita ²	4.49	0.35	.526*	.742**	-														
Economic Freedom Index ²	72.03	7.91	.697**	.771**	.529*	-													
Ownership Dispersion ³	0.28	0.22	.661**	.525*	.278	.554*	-												
Legal Origin ³	0.28	0.46	.614**	.341	.150	.719**	.636**	-											
Employment Law Index ³	0.48	0.20	176	179	.108	451	656**	649**	-										
Entrepreneurship Behaviour ³	4.80	1.32	.187	.146	.093	.405	.329	.413	429	-									
Institutional Collectivism ³	4.51	0.17	786**	340	186	412	730**	532*	.306	165	-								
In Group Collectivism ³	4.70	0.72	640**	594**	476*	393	461	212	054	100	.518*	-							
Uncertainty Avoidance ³	4.34	0.19	493*	232	381	194	427	114	.090	427	.433	.410	-						
Power Distance ³	3.89	0.18	423	394	328	441	017	066	146	370	.092	.590**	.513*	-					
Future Orientation ³	4.75	0.19	.161	.385	.042	.553*	.089	.350	439	.333	.061	.089	018	336	-				
Humane Orientation ³	4.74	0.17	128	048	171	.020	.231	.227	513*	.521*	.025	204	211	133	.057	-			
Performance Orientation ³	5.07	0.20	.602**	.444	.132	.621**	.429	.539*	300	.201	611**	253	.022	165	.212	098	-		
Gender Egalitarianism³	3.95	0.43	.853**	.641**	.590*	.574*	.389	.446	.078	053	555*	779**	287	508*	.115	115	.376	-	
Assertiveness ³	3.96	0.32	.362	.287	.247	.387	.539*	.401	560*	.117	295	.136	303	.153	.328	.004	.083	.131	-
Cultural Looseness ³	-7.24	2.07	.643**	.138	.290	.241	.341	.252	.128	.219	533*	525*	574*	509*	231	092	.359	.543*	.133

n¹= 792; n² = 180; n³= 18; *p<0.05; **p<0.01; ***p<0.001

Table 3: HLM: The effect of managerial discretion on national-level competitiveness

	Global Competitiveness Index
Constant	0.244***
	(0.058)
Managerial Discretion	2.505***
	(0.477)
GDP Per Capita	2.627***
·	(0.541)
Economic Freedom Index	0.012*
	(0.006)
Ownership Dispersion	2.755***
	(0.362)
Legal Origin	-0.871***
	(0.179)
Employment Law Index	3.825***
,	(0.577)
Entrepreneurial Behaviour	-0.603***
	(0.127)
Institutional Collectivism	-5.932***
moticational concentrism	(1.360)
In Group Collectivism	1.136***
in Group Concettivisiii	(0.312)
Uncertainty Avoidance	7.708***
oncertainty Avoidance	(1.537)
Power Distance	-2.191***
Fower distance	(0.543)
Future Orientation	6.042***
Tuture Orientation	(1.163)
Humane Orientation	6.686***
Tramane Orientation	(1.239)
Performance Orientation	-4.370***
renormance orientation	(1.084)
Condor Egalitarianism	-5.029***
Gender Egalitarianism	
Assautiveness	(1.079)
Assertiveness	-1.215**
Cultural Language	(0.379)
Cultural Looseness	0.352***
V	(0.101)
Year	-0.000
	(0.007)
lns1_1_1	-3.600***
	(0.217)
lns1_1_2	-2.996***
	(0.604)
Insig_e	-2.293***
	(0.061)
Wald Statistic	525.28***
LR Statistic	26.20***
Log Likelihood	122.80

n= 180; number of groups 18; *p<0.05; **p<0.01; ***p<0.001.