Marketing capabilities, institutional development, and the performance of emerging market firms: A multinational study

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ABSTRACT

Data on 19,653 firms from 73 emerging economies on four continents were analyzed to examine how a firm’s marketing capabilities affect its performance. The results show that the relationship is systematically moderated by the level of institutional development in an emerging market. Economic conditions, legislative institutions and social values all have an impact. Superior marketing capabilities have a stronger performance impact in countries with higher levels of economic development and in individualistic societies. These capabilities have a weaker impact in countries with strong legislative systems.

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1. Introduction

In recent decades, there has been an unprecedented interest in capabilities and their effect on a firm’s competitive advantage. Capabilities are the accumulated, complex bundles of skills and knowledge embedded in organizational processes (Eisenhardt & Martin, 2000; Helfat & Peteraf, 2003). Previous scholarly research has identified technological capabilities (e.g., Song, Droge, Hanvanich, & Calantone, 2005), operational capabilities (e.g., Worren, Moore, & Cardona, 2002), marketing capabilities (e.g., Kotabe, Srinivasan, & Aulakh, 2002) and management capabilities (e.g., Desarbo, Di Benedetto, Song, & Sinha, 2005) as important. That work has shown empirically that all such capabilities can significantly affect a firm’s performance (e.g., Krasnikov & Jayachandran, 2008).

In spite of the growing consensus that capabilities are critical sources of superior firm performance, the previous research has two important deficiencies. First, most studies have been conducted in developed markets, and only a few were undertaken in emerging markets (Burgess & Steenkamp, 2006). This lacuna is surprising because emerging markets offer a fertile ground for establishing the generalizability of the research findings obtained from developed markets and to assess the extent to which they are specific to the institutional context (Steenkamp, 2005). Emerging markets not only provide a natural laboratory for testing theories and developing new ones, but they also offer practical relevance because success in emerging markets is crucial to the future of many companies (Burgess & Steenkamp, 2006).

The second problem with the body of scholarly work to date has been inattention to the role of institutional environments in shaping the effects of capabilities. Researchers have long recognized that the utility of capabilities is likely to vary with the nature of the market and the social environment (Eisenhardt & Martin, 2000), but previous studies have nevertheless overwhelmingly focused on developed markets where the institutional context can be assumed to vary relatively slightly. This focus represents a serious limitation because institutions in emerging markets normally differ markedly from those typical of developed markets (Burgess & Steenkamp, 2006). Compared with developed markets, emerging markets are characterized by rapid changes in their economic, political and social institutions (Hoskisson, Eden, Lau, & Wright, 2000; Peng, 2003). This volatility renders it less obvious whether firms operating in an emerging market should build market-based capabilities to achieve competitive advantage, considering how fast the institutional environment can change (Kim, Kim & Hoskisson, 2010; Peng, Wang, & Jiang, 2008). It is important, therefore, to look at the hidden assumptions and examine how institutional variations condition the role of firm capabilities.

To address these gaps, this study was designed to link marketing capabilities with firm performance and to examine how the role of marketing capabilities varies among different institutional environments. The study hypothesized that marketing capabilities have a stronger performance impact in more developed countries and in individualistic societies and have a weaker impact in countries with stronger legislative systems. These hypotheses were tested using comprehensive survey data on

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19,653 firms from 73 emerging economies. The contribution of this study is threefold. First, this study develops a contingent, institution-based perspective on firm capabilities. This study extends prior academic work to emerging markets and examines to what extent and within what limits capabilities matter in emerging markets. Second, this study contributes to an institution-based view of capabilities by theoretically arguing and empirically showing the moderating effect of economic, legislative and social institutions on the utility of a firm’s capabilities. Third, the findings provide empirical evidence relating capabilities and institutional factors with firm performance in a large number of emerging economies, which generalizes the findings to a broader context.

2. Theoretical development and hypotheses

2.1. Marketing capabilities in emerging markets

Marketing capabilities have long been recognized as one of the key capabilities firms rely on to outperform their competitors and provide superior value to customers (Day, 1994). Compared with technological, operational and other such capabilities, marketing capabilities are less susceptible to imitation and replication due to the tacit and idiosyncratic knowledge involved and its imperfect mobility (Krasnikov & Jayachandran, 2008; Simonin, 1999). Superior capabilities are difficult to observe from the market, difficult to acquire elsewhere and difficult to imitate (Krasnikov & Jayachandran, 2008). These capabilities can thus support a sustainable market advantage (Morgan, Vorchies, & Mason, 2009; Vorchies, Morgan, & Autry, 2008). Marketing capabilities can be studied in terms of their utility for adaption and integration. The adaption perspective focuses on how marketing capabilities help a firm adapt to the evolving requirements of customers and markets. For example, Day (1994) has emphasized an outside-in process that connects “...organizational processes to the external environment and [enables] the business to compete by anticipating market requirements ahead of competitors [while] creating durable relationships with customers, channel members, and suppliers” (1994: 41). A firm with strong marketing capabilities is better able to target and position its products, identifies customers’ needs better and understands better the factors that influence customer choice (Dutta, Narasimhan, & Rajiv, 1999). The integration perspective on marketing capabilities, conversely, focuses on “the combinative capabilities that derive from the integration of embedded marketing routines and practices” (Vorchies et al., 2009: 1316). Grant (1991) has suggested that reconfiguring and re-integrating internal routines plays an important role in exploiting external opportunities and that both are essential if a firm’s capabilities are to be distinctive. Integrating marketing capabilities will lead to better performance because “...such integration reconfigures competencies, reduces the resources deficiency, and generates new applications” (Song et al., 2005: 262).

A defining feature of emerging markets is the rapid changes in their economic, political, and social institutions (Burgess & Steenkamp, 2006; Hoskisson et al., 2000). A fundamental challenge for firms operating in such environments is to predict the changes and respond to them, which would appear to make the adaption perspective particularly relevant in emerging markets. Consistent with that perspective, the marketing capabilities of the firms examined in this study were defined in terms of their ability to decipher the trajectory of customer needs through effective information acquisition and to respond through marketing planning, investment and execution. To a large extent, this conceptualization reflects a firm’s ability to use its accumulated knowledge regarding the market and customers’ needs to anticipate and respond to events and trends ahead of competitors (Day, 1994). A firm accumulates its market knowledge through learning and experimentation over time. Such market knowledge is distributed across groups and business units within the organization. Therefore, a substantial part of market knowledge, which is tacitly held, is difficult to replicate and supports a market position that is hard to match (Krasnikov & Jayachandran, 2008).

2.2. The role of the institutional environment

The institution-based view of the firm (IBV) has emerged as a useful paradigm for explaining firms’ strategies and competitive advantages in emerging markets (Peng et al., 2008). The IBV suggests that an economy’s institutional environment significantly shapes how firms operate and their performance (Peng et al., 2008; Scott, 1995). As market-supporting institutions develop in emerging economies, firms can rely less on network-based, personal relations-oriented strategies and more on arm’s-length contracts and capability-based strategies (Peng, 2003). The importance of marketing capabilities, therefore, depends on the institutional context in which a firm is operating.

In the same vein, Burgess and Steenkamp have noted that “institutional contexts in emerging markets present significant socioeconomic, demographic, cultural, and regulatory issues from the assumptions of theories developed in the Western world and challenge our conventional understanding of constructs and their relations” (2006: 338). Drawing on Scott’s (2001) and North’s (1990) work, Burgess and Steenkamp distinguished three distinct but interrelated institutional subsystems—socioeconomic, cultural, and regulative—each of which is important in emerging markets (see also Etzioni & Lawrence, 1991). Following this stream of research, this study focused on economic, legislative, and social institutions and examined how they moderate the relationship between marketing capabilities and firm performance.

2.2.1. Economic development

Economic development is usually indicated by an economy’s annual GDP per capita (Berry, Guillén, & Zhou, 2010). In economies with low levels of economic development, customers’ purchasing power is usually limited. With limited purchasing power, customers prefer affordable products that offer basic functionality over products with new features at a premium price (Burgess & Steenkamp, 2006; Day & Wensley, 1988). To succeed, a company must minimize its costs of labor, advertising, sales and much else. Marketing capabilities are therefore less influential when the market’s economic development is low.

As the economy progresses, customers’ purchasing power increases, and customers’ preferences diversify. Customers come to prefer better-quality products that address their unique preferences. In such conditions, firms must accurately sense the needs of particular market segments and quickly respond to them. Superior marketing capabilities enable firms to acquire and decipher market information and predict the trajectory of customer preferences better. A firm can accordingly anticipate market requirements ahead of competitors and respond better to customers’ evolving demands (Roth & Jackson, 1995).

Hypothesis 1. Marketing capabilities have a stronger effect on firm performance in more developed countries.

2.2.2. Legislative institutions

A market’s “legislative institutions” refers to the structures, processes, and legal rules that regulate the market. The legal system defines the formal structure of rights and obligations in an exchange. An inadequate legal system makes market transactions costly because time and resources (including management attention) must be devoted to gathering information concerning such factors as the financial condition of potential buyers and suppliers, the rationality of competitors, police protection, and security systems, all of which entail substantial costs (Khanna & Palepu, 1997; North, 1990; Wu & Chen, 2012). The quality of a market’s legislative institutions also involves the extent to which legislation and regulations are effectively enforced (Rodriguez, Uhlenbruck, & Eden, 2005). In emerging markets, despite the existence of legal codes, inconsistent and unpredictable legal enforcement can result in the prevalence of unethical or even unlawful behavior (e.g., cheating, false advertising, counterfeiting), which creates high levels of uncertainty in market transactions (Sheng, Zhou, & Li, 2011). Firms operating in an economy with
weak legislative institutions encounter not only high transaction costs but also high uncertainty.

In such a situation, marketing capabilities help firms to reduce transaction costs and uncertainty in market exchanges. Firms with strong marketing capabilities are better placed to cooperate closely with other channel members, suppliers and customers (Day, 1994; Song et al., 2005). Day has argued that marketing capabilities enable firms to build “durable relationships with customers, channel members, and suppliers” (1994: 41). The durable relationship aligns the incentives of the partners, promotes mutual commitment, and discourages opportunistic behavior (one important source of transaction costs) (Das & Teng, 2000; Wu, 2012). It also helps firms acquire information about the financial situation of customers and suppliers less expensively and thus reduces uncertainty in business exchanges (Uzzi, 1997).

A strong legislative system, by contrast, generates transparency and stability regarding contract enforcement and the boundaries of acceptable behavior (Steenkamp & Geyskens, 2006). Firms can easily acquire information about the credibility of business partners through market intermediaries (Chen & Wu, 2011). The firms can have recourse to a hierarchy of laws and regulations to resolve conflicts with their customers and suppliers (Khanna & Palepu, 1997). The role of marketing capabilities in reducing transaction costs and uncertainty therefore is expected to be less important in countries with a strong legislative system.

Hypothesis 2. Marketing capabilities have a weaker effect on firm performance in countries characterized by stronger legislative systems.

2.2.3. Social institutions

A society’s social institutions are based on the cultural values of the society's members. Though often uncodified, these values guide individual and firm behavior (Hofstede, 2001). This study focused on one important dimension of cultural values—individualism—which has received particular attention in cross-cultural research (Hofstede, 2001; Oyserman, Coon, & Kemmelmeier, 2002; Steenkamp & Geyskens, 2006; Stephan & Uhlane, 2010). Individualism refers to the extent to which people in a society prefer to act as individuals. In individualistic societies, people place their personal goals, motivations, desires and interests ahead of those of others, and the desire for uniqueness and independence is pervasive (Oyserman et al., 2002; Steenkamp & Geyskens, 2006). People in individualistic societies, for example, value consumption experiences customized to their own unique needs more than people in collectivist societies (Steenkamp & Geyskens, 2006). In such societies, individual benefits and preferences are the priority, and the diversity of those preferences means that the market consists of small segments, each of which is characterized by different needs (Vorhies et al., 2009). In an individualistic society, the challenge for firms is to identify significant segments and develop products to satisfy their particular needs. With accumulated knowledge about a market and its customers, superior marketing capabilities enable a firm to perform this segmentation more accurately and invest more wisely in products that are likely to prove profitable (Steenkamp & Geyskens, 2006).

Hypothesis 3. Marketing capabilities have a stronger effect on firm performance in individualistic societies.

3. Data and methods

3.1. Data

The empirical analyses were based on data collected in a Productivity and Investment Climate Survey conducted by the World Bank. The survey covered 79 countries and 44,000 firms, which provided significant variation in institutional contexts. The World Bank has conducted this survey annually since 2002. Typically, 1,200–1,800 interviews are conducted in larger economies (e.g., Brazil), 360 interviews are conducted in medium-size economies (e.g., Sri Lanka), and for smaller economies (e.g., Mali), 150 interviews are conducted. The sample is selected by stratified random sampling with replacement. Firms are classified as small (5–19 employees), medium (20–99 employees) or large.1 (For more details, see World Bank (2003).)

The survey is administered in on-site, face-to-face interviews with general managers, managing directors, accounting managers, human resource managers, and other relevant company staff. The survey included two sections. The first, answered by the general manager, managing director or owner, focused on the business environment, the investment climate, and business strategies. The second part, answered by an accounting or personnel manager, covered product costs, investment flows, firm performance and workforce statistics.

To overcome common method bias, the information from the second part was used to derive firm performance and the information from the first part to indicate firm capabilities. To reduce the possibility of common method bias further, information regarding economic, legislative, and social institutions was collected from separate sources. Information about each economy’s GDP per capita was collected from International Monetary Fund (IMF) reports for 2002–2006, and legislative system information was collected from Kaufmann, Kraay, and Mastruzzi (2007) for 2002–2006. Individualism indicators were collected from the publications of Hofstede (2001). The Appendix reports the details of the measures and their sources. After dropping observations with missing variables, a sample of 19,653 firms in 73 economies emerged.

3.2. Measures

Firm performance was measured with market share because that is not affected by appropriation problems (Coff, 1999; Coff & Lee, 2003). Appropriation problems occur when a portion of the economic value generated from a firm’s resources and capabilities is not captured by the firm’s owners but is appropriated by other stakeholders, such as top managers. Because performance measures, such as accounting returns and stock prices, are set after stakeholders have had an opportunity to try to extract above-market prices for their contributions, such measures suffer from the appropriation problem and may not reveal the true value generated by the firm’s resources and capabilities. In contrast, market share reflects outcomes before any potential appropriation and thus are not affected by any appropriation problem (Crook, Ketchen, Combs, & Todd, 2008); therefore, market share was used as the measure of firm performance.

Marketing capabilities are normally estimated based on either market research, advertising expenditures (e.g., Dutta et al., 1999) or using scales to quantify the factors underlying such capabilities (e.g., Jayachandran, Hewett, & Kaufman, 2004). However, none of those measures can properly reflect the rapid changes so important in emerging markets, and they say little about how a firm has developed its distinctive competencies in predicting market changes, allocating human resources and making appropriate investments.

Following the lead of Vorhies and Morgan (2005) and Morgan et al. (2009), this study developed a composite measure of marketing capabilities that employed three items: (a) the number of months ahead the firm planned its product mix and target markets; (b) based on those plans, the number of months ahead it allocated the necessary human resources; and (c) the number of months ahead it made the necessary investment. Cronbach’s alpha for these items was 0.83, indicating a high reliability for this construct. Using the information from these indicators, a marketing capabilities indicator was constructed for each firm by averaging the three durations. Previous studies (e.g., Morgan et al., 2009; Vorhies & Morgan, 2005) have shown that this measure is

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1 In many emerging economies the majority of firms are small, and firms with 100 or more employees are considered engines of job creation. A detailed description of the sample design and sample frame is available at www.enterprisesurveys.org.
highly correlated with other constructs used to capture marketing capabilities and is a valid proxy for marketing capabilities.

Previous work by Berry et al. (2010) has suggested that economic development can be captured adequately by an economy's GDP per capita. The information on GDP per capita for each economy used in this study was obtained from data for 2002–2006 published by the International Monetary Fund.

National legislative systems have previously been measured in academic studies using information on rule of law from Kauffman and his colleagues' governance indicators (e.g., Kauffman et al., 2007; Kaufmann, Kraay, & Zoido-Lobatón, 1999) (see, for example, Steenkamp & Geyskens, 2006). Rule of law measures "the respect of citizens and the state for the institutions that govern their interactions." (Steenkamp & Geyskens, 2006: 142) Rule of law includes several indicators that measure the extent to which people have confidence in and abide by the rules of society and these indicators together measure the success of a society in developing an environment in which fair, predictable, impartial, and enforceable rules form the basis of economic and social interactions (Kaufmann et al., 1999). Therefore, this study measured the legislative system of each economy for 2002 through 2006 based on the information on rule of law obtained from the Kaufmann et al. (2007).

An index developed by Hofstede is used widely in academic work to measure cultural individualism (e.g., Steenkamp & Geyskens, 2012). The information on cultural individualism for each economy was obtained from Hofstede's recent index calculation (Hofstede, 2001).

Several other variables that may influence firm performance were also included in the models as controls. Because large firms often have more resources to devote to improving their performance (Chen & Wu, 2011), two dummy variables were created to indicate that large and medium-size firms with small as the reference group. Next, as older firms may be more likely to be trapped in rigidity and competence traps (Sorensen & Stuart, 2000; Wu, 2012), firm age was also included. Prior studies have shown that in China, government ownership enables a firm to gain exclusive distribution channels, subsidies and tax rebates (Wu, 2011). This property is also likely to be true to some extent in other developing economies; therefore, each firm's percentage of government ownership was included. Conversely, foreign ownership can offer emerging market firms access to advanced knowledge and expertise (Elango & Pattnaik, 2007); therefore, the percentage of foreign ownership was also included. Whether a firm was an exporter (1 = yes; 0 = no) was also included because the need to confront international competition gives exporters an incentive to provide high-quality products at lower prices (Aulakh, Kotabe, & Teegen, 2000). Finally, because the sample covered five years, four year dummy variables were created using 2002 as the reference group.

Table 1 provides summary information concerning the countries, the firms sampled, and the economic development and legislative system scores for each of the 73 economies.

### 3.3. Statistical modeling

The conceptual model of the relationship between institutional development and marketing capabilities involves both firm and country level variables. The firm-level model (Level 1) was of the form

Level 1:

\[
MS_{ij} = \beta_{0j} + \beta_{1j}MC_{ij} + \beta_{2j}AG\_E_{ij} + \beta_{3j}MSZ_{ij} + \beta_{4j}LSZ_{ij} + \beta_{5j}SO_{ij} + \beta_{6j}FO_{ij} + \beta_{7j}EX_{ij} + \beta_{8j}Year\_2003_{ij} + \beta_{9j}Year\_2004_{ij} + \beta_{10j}Year\_2005_{ij} + \beta_{11j}Year\_2006_{ij} + \epsilon_{ij}
\]  

where \(i\) and \(j\) represent firms and countries, respectively; \(MS\) denotes market share; \(MC\) represents marketing capabilities; \(GD\) is the GDP per capita, \(LAW\) measures the legislative system and \(IND\) is individualism. \(AGE\) denotes the firm's age variable; \(MSZ\) denotes a medium-sized firm and \(LSZ\) a large one; \(SO\) represents state ownership and \(FO\) foreign ownership. \(EX\) represents an exporter. Year\_2003, Year\_2004, Year\_2005 and Year\_2006 are the year dummies.

On the country level (Level 2) the model took the form

\[
\beta_{0j} = \gamma_{00} + \gamma_{01}GD\_P_{j} + \gamma_{02}LAW_{j} + \gamma_{03}IND_{j} + u_{0j}
\]  

\[
\beta_{1j} = \gamma_{10} + \gamma_{11}GD\_P_{j} + \gamma_{12}LAW_{j} + \gamma_{13}IND_{j} + u_{1j}
\]  

\[
\beta_{2j} = \gamma_{20} + u_{2j}\text{for }j=2–11.
\]

where \(i\) and \(j\) represent firms and countries, respectively; \(MS\) denotes market share; \(MC\) represents marketing capabilities; \(GD\) is the GDP per capita, \(LAW\) measures the legislative system and \(IND\) is individualism. \(AGE\) denotes the firm's age variable; \(MSZ\) denotes a medium-sized firm and \(LSZ\) a large one; \(SO\) represents state ownership and \(FO\) foreign ownership. \(EX\) represents an exporter. Year\_2003, Year\_2004, Year\_2005 and Year\_2006 are the year dummies.

Following the lead of previous studies (e.g., Steenkamp & Geyskens, 2006), the firm-level error term \(\epsilon_{ij}\) was assumed to be normally distributed with zero mean and variance \(\sigma^2\). The random effects \(u_{qj} (q = 0, \ldots , 11)\) were multivariate and assumed normally distributed over countries (see more discussion in Steenkamp & Geyskens, 2006). In addition, \(u_{qj}\) is the unique effect of country \(j\) on the intercept \((\beta_{0j})\) or slope \((\beta_{1j}, \beta_{3j})\).

Because firms are nested within countries, applying ordinary least squares linear regression to such multilevel data would lead to biased estimates with unduly small standard errors for the effects. A multilevel mixed-effects linear model, a generalization of standard linear regression for grouped data, can deal with multiple levels of nested groups by enabling the simultaneous estimation of relationships of variables on two (or more) levels considering both fixed effects and random effects (Steenkamp & Geyskens, 2006). Moreover, a multilevel mixed-effects linear model is versatile in specifying the variance-covariance structure of the random-effects equations. This model also allows fitting the model by performing either residual maximum likelihood estimation or maximum likelihood estimation via EM (expectation-maximization) iterations (Rabe-Hesketh & Skrondal, 2008). Therefore, multilevel mixed-effects models with maximum likelihood estimation were used in the analyses. Following the methods of Steenkamp and Geyskens (2006), the Level 1 predictors within countries were group-mean-centered, whereas the Level 2 predictors were grand-mean-centered.

Endogeneity might be present because marketing capabilities may both affect and be affected by firm performance. To address any potential endogeneity, this study followed Lamey’s recommendations (Lamey, Delearsnyder, Steenkamp, & Dekimpe, 2012) and adopted Heckman two-stage modeling. In the first step, the marketing capabilities of firm \(i\) in country \(j\) were regressed against all the other firms from country \(j\). The explanatory variables in this selection model included marketing intensity and all the other predictors. The predicted values from the first-step estimation were then used to construct the inverse Mills ratio \(\lambda\) (also known as the hazard rate). This ratio was calculated by multiplying the predicted values by \(-1\), calculating the density and distribution values, and using them in the equation: \(\lambda = f(z_i)/\{1- F(z_i)\}\), where the \(z_i\) are predicted values from the first-step model. The inverse Mills ratio was then included as a correction in the second-stage regression models to estimate a firm’s performance (Heckman, 1979).

### 4. Results

Table 2 presents the mean and standard deviation of each variable and the correlation matrix among them. The magnitude of the correlations among the independent variables was low to medium, suggesting that multicollinearity was not a major concern. This finding is confirmed by the variance of inflation (VIF). The VIF values ranged from 1.05 to 4.36, well below the cutoff threshold of 10, which indicates that there were no serious multicollinearity problems in the models (Hair, Anderson, Tatham, & Black, 1998).
Hypothesis 1 predicts that marketing capabilities have a stronger impact on firm performance in countries with high levels of economic development. In M3 and M6, the estimated coefficient of the interaction term of marketing capabilities and GDP/capita was consistently positive and significant (β = 1.69, p ≤ 0.001; β = 1.67, p ≤ 0.001), indicating that economic development positively moderates the relationship between marketing capabilities and firm performance. To facilitate interpretation, this significant interaction effect was plotted using a method from Aiken and West (1991) for interaction models. Fig. 1 shows that marketing capabilities had a positive relationship with firm performance and that this effect becomes stronger at higher levels of economic development. Thus, Hypothesis 1 was supported.

Hypothesis 2 predicts that marketing capabilities have a weaker impact on firm performance in countries with strong legislative systems. The results of M4 and M6 show that the estimated coefficient of the interaction term between marketing capabilities and the legislative system was negative and significant (β = −0.18, p ≤ 0.001; β = −0.12, p ≤ 0.01), indicating that the quality of an economy’s legislative system negatively moderates the relationship between a firm’s marketing capabilities and its performance. The interaction of marketing capabilities and the legislative system is plotted in Fig. 2. As the figure shows, marketing capabilities had a stronger relationship with firm performance at low levels of the legislative system variable, and this positive relationship becomes weaker with higher levels of the legislative system indicator. Thus Hypothesis 2 was supported.

Hypothesis 3 predicts that marketing capabilities have a stronger impact on firm performance in individualistic societies. M5 and M6 show that the estimated coefficient of the interaction term between marketing capabilities and cultural individualism was positive and significant (β = 0.12, p ≤ 0.001; β = 0.13, p ≤ 0.001), indicating that individualism positively moderates the relationship between marketing capabilities and firm performance. This effect is plotted in Fig. 3, which shows that marketing capabilities had a weak positive relationship with firm performance when individualism is low, but the positive effect becomes stronger when individualism is high, thereby supporting Hypothesis 3.

The sensitivity of these results was tested in several ways. First, the legislative system was measured using an alternative source — the International Country Risk Guides (ICRG) (Chan, Isobe, & Makino, 2008). The information on law and order for each economy was obtained from the International Country Risk Guides (ICRG) for 2002–2006. An economy was rated 1 if it suffered from a very weak legislative system.
and if it enjoyed a very strong one. All the models were re-estimated. The results using the alternative measure were slightly different, but the main patterns remained unchanged (see Table 4).

Second, as discussed above, the models were fitted using maximum likelihood estimation. One important advantage offered by a multilevel mixed-effects linear model is its versatility in specifying a statistical model for fitting using the variance-covariance structure of the random effects. Therefore, all of the models were re-estimated using restricted maximum likelihood estimation. The results were consistent with those reported. In addition, an exchange

### Table 2

Correlation matrix.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market share</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing capabilities</td>
<td>0.06*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP/capita (US$)</td>
<td>0.02*</td>
<td>0.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulative system</td>
<td>0.01</td>
<td>0.00</td>
<td>0.02*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualism</td>
<td>-0.11*</td>
<td>0.00</td>
<td>0.10*</td>
<td>-0.41*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm age</td>
<td>0.14*</td>
<td>0.04*</td>
<td>0.05*</td>
<td>0.00</td>
<td>-0.01</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium size</td>
<td>0.07*</td>
<td>-0.05*</td>
<td>0.04*</td>
<td>0.04*</td>
<td>-0.05*</td>
<td>-0.02*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large size</td>
<td>0.14*</td>
<td>0.11*</td>
<td>0.07*</td>
<td>0.15*</td>
<td>-0.21*</td>
<td>0.26*</td>
<td>-0.46*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>State ownership</td>
<td>0.09*</td>
<td>0.01</td>
<td>0.00</td>
<td>0.08*</td>
<td>-0.02*</td>
<td>0.24*</td>
<td>-0.04*</td>
<td>0.21*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign ownership</td>
<td>0.03*</td>
<td>0.09*</td>
<td>0.03*</td>
<td>0.06*</td>
<td>0.01</td>
<td>-0.06*</td>
<td>-0.04*</td>
<td>0.17*</td>
<td>-0.09*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td>0.05*</td>
<td>0.05*</td>
<td>0.18*</td>
<td>0.09*</td>
<td>-0.08*</td>
<td>0.09*</td>
<td>-0.04*</td>
<td>0.34*</td>
<td>-0.02*</td>
<td>0.20*</td>
<td>1.00</td>
</tr>
<tr>
<td>Mean</td>
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<td>0.15</td>
<td>1783.71</td>
<td>-0.19</td>
<td>36.30</td>
<td>22.34</td>
<td>0.33</td>
<td>0.30</td>
<td>5.77</td>
<td>12.89</td>
<td>0.22</td>
</tr>
<tr>
<td>S.D.</td>
<td>28.09</td>
<td>5.53</td>
<td>1752.85</td>
<td>0.77</td>
<td>13.39</td>
<td>18.26</td>
<td>0.47</td>
<td>0.46</td>
<td>22.20</td>
<td>30.82</td>
<td>0.42</td>
</tr>
</tbody>
</table>

*Indicates significance at the $p \leq 0.05$ level of confidence.

### Table 3

Results of hypotheses testing.

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<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
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<tbody>
<tr>
<td>Constant</td>
<td>163.59*** (71.27)</td>
<td>165.98*** (64.62)</td>
<td>166.29*** (64.84)</td>
<td>166.05*** (64.61)</td>
<td>166.05*** (64.62)</td>
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<tr>
<td>Firm age</td>
<td>-0.16*** (-21.75)</td>
<td>-0.16*** (-22.04)</td>
<td>-0.16*** (-22.37)</td>
<td>-0.16*** (-22.14)</td>
<td>-0.16*** (-22.17)</td>
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<tr>
<td>Medium size</td>
<td>-6.53*** (-20.64)</td>
<td>-6.61*** (-20.91)</td>
<td>-6.61*** (-20.97)</td>
<td>-6.59*** (-20.88)</td>
<td>-6.57*** (-20.82)</td>
</tr>
<tr>
<td>Large size</td>
<td>-73.05*** (-114.28)</td>
<td>-73.53*** (-115.21)</td>
<td>-73.53*** (-115.76)</td>
<td>-73.53*** (-115.36)</td>
<td>-73.51*** (-115.33)</td>
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<tr>
<td>State ownership</td>
<td>0.06*** (9.26)</td>
<td>0.06*** (9.32)</td>
<td>0.06*** (9.32)</td>
<td>0.06*** (9.29)</td>
<td>0.06*** (9.27)</td>
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<tr>
<td>Foreign ownership</td>
<td>-0.56*** (-101.42)</td>
<td>-0.57*** (-102.30)</td>
<td>-0.57*** (-102.89)</td>
<td>-0.57*** (-102.47)</td>
<td>-0.57*** (-102.53)</td>
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<tr>
<td>Export</td>
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<td>-12.58*** (-38.96)</td>
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<td>-12.57*** (-39.95)</td>
<td>-12.56*** (-39.94)</td>
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<td>-6.49*** (-1.00)</td>
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<tr>
<td>Year2005</td>
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<td>2.18*** (0.38)</td>
<td>2.11*** (0.36)</td>
<td>2.20*** (0.36)</td>
<td>2.17*** (0.37)</td>
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<tr>
<td>Year2006</td>
<td>-36.93*** (-9.69)</td>
<td>-35.98*** (-9.41)</td>
<td>-35.97*** (-9.36)</td>
<td>-35.97*** (-9.36)</td>
<td>-36.07*** (-9.40)</td>
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<td>Inverse Mills Ratio ($\lambda$)</td>
<td>-110.25*** (-154.25)</td>
<td>-110.40*** (-154.98)</td>
<td>-110.60*** (-155.67)</td>
<td>-110.64*** (-155.23)</td>
<td>-110.64*** (-155.28)</td>
</tr>
<tr>
<td>Marketing capabilities</td>
<td>0.24*** (11.86)</td>
<td>0.63*** (15.29)</td>
<td>0.22*** (10.74)</td>
<td>0.21*** (10.17)</td>
<td>0.62*** (11.29)</td>
</tr>
<tr>
<td>GDP/capita</td>
<td>4.69*** (0.72)</td>
<td>4.63*** (0.71)</td>
<td>4.71*** (0.72)</td>
<td>4.71*** (0.72)</td>
<td>4.64*** (0.71)</td>
</tr>
<tr>
<td>Regulative system</td>
<td>0.25*** (0.52)</td>
<td>0.24*** (0.52)</td>
<td>0.26*** (0.52)</td>
<td>0.25*** (0.54)</td>
<td>0.24*** (0.53)</td>
</tr>
<tr>
<td>Individualism</td>
<td>-3.77*** (-2.02)</td>
<td>-3.74*** (-2.00)</td>
<td>-3.77*** (-2.01)</td>
<td>-3.78*** (-2.00)</td>
<td>-3.74*** (-2.00)</td>
</tr>
<tr>
<td>MC x GDP/capita</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC x Regulatory system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC x Individualism</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log-likelihood</td>
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<td>-8220.20</td>
<td>-8249.56</td>
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<td>-8218.09</td>
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<tr>
<td>AIC</td>
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<td>164319.13</td>
<td>164412.57</td>
<td>164400.17</td>
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<td>BIC</td>
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<td>164496.85</td>
<td>164570.29</td>
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<tr>
<td>df</td>
<td>11</td>
<td>15</td>
<td>16</td>
<td>16</td>
<td>16</td>
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<tr>
<td>Wald $\chi^2$</td>
<td>24703.07</td>
<td>25025.64</td>
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<td>25120.21</td>
<td>25148.27</td>
</tr>
<tr>
<td>Prob. $&gt; \chi^2$</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Notes: $N = 19,653$, z-scores are in parentheses.

*Signifies significance at the $p \leq 0.05$, **$p \leq 0.01$, ***$p \leq 0.001$ level of confidence (two-tailed tests).
variance-covariance structure for the random effects was chosen to replace the unstructured variance-covariance structure. Again, the results were highly consistent with the findings reported above.

5. Discussion and conclusions

This study examined whether the relationship between a firm’s marketing capabilities and its performance is systematically moderated by the institutional context in which it competes. Data on 19,653 firms in 73 emerging economies suggest that marketing capabilities positively affect firm performance and that the impact is differentially conditional on the market’s economic development, legislative institutions, and social attitudes. Marketing capabilities have a greater effect on firm performance in countries with higher levels of economic development and in individualistic, rather than collectivist, societies. Marketing capabilities have a weaker effect in countries with a strong legislative system. These findings provide broad support for the conceptual model and for the relevance of including country-level institutional constructs when explaining the relationship between marketing capabilities and performance.

These conclusions extend previous scholarly work on this topic by examining the role of firm capabilities in emerging economies. Previous extensive studies on firm-specific capabilities such as marketing capabilities (e.g., Kotabe et al., 2002), technological capabilities (e.g., Song et al., 2005) or operations capabilities (e.g., Worren et al., 2002) have been conducted in Western countries, particularly in the United States, and insufficient attention has been paid to emerging markets heretofore (Steenkamp, 2005). Emerging markets present significant departures from the assumptions of theories developed for Western economies and provide natural laboratories to test those theories’ assumptions and underlying mechanisms and to identify boundary conditions (Burgess & Steenkamp, 2006). Unlike previous studies that have focused on firms in developed markets (Morgan et al., 2009; Vorhies et al., 2009) or in a limited number of cases in emerging markets (Fahy et al., 2000), this study examined the interplay of capabilities and institutions using a comprehensive sample of 19,653 firms in 73 emerging economies. The results clearly show that marketing capabilities have a positive relationship with firm performance and that the impact is contingent on a market’s economic, legislative, and social conditions. These findings thus generalize previous academic work to a much broader context by showing the importance of firm capabilities in emerging markets and complement the findings of previous studies by pointing to the limitations of firm capabilities.

These results also extend the institution-based view of competition by developing a contingent perspective. In response to calls for examining the moderating role of institutional contexts (Burgess & Steenkamp, 2006), this study has developed a contingent view of capabilities by assessing how economic, legislative, and social conditions help determine their value. The results show that the effect of good marketing becomes stronger when economic development is more advanced. This finding suggests the importance of economic development in enabling market-based capabilities to function effectively. With the development of the economy, customer purchasing power increases, and customer preferences diverge. Firms can achieve better performance through investing in marketing capabilities. The results also show that the development of the legislative system weakens the effect of marketing capabilities. As laws and regulations become more transparent, and contract enforcement is more predictable, firms are motivated to invest more resources in developing new products and technologies to attract customers and gain market share. The role of marketing capabilities declines. In addition, marketing capabilities have a stronger effect in individualistic societies. Such societies have diversified preferences, and good marketing enables a firm to sense customers’ specific needs and address them by investing more resources and recruiting and training employees to satisfy them. Taken together, the findings enrich the development of a contingent IBV of capabilities, explaining how they interact with the institutional environment to affect firm performance.

5.1. Managerial implications

These findings have important implications for managers. Conventional wisdom suggests that managers in emerging economies should build network-based personal relationships with partners...
and government officials because their support is critical to firm growth in such situations (Peng & Luo, 2000; Wu & Chen, 2012). However, the results consistently show that marketing capabilities have a significant positive relationship with firm performance across many emerging markets. Managers in emerging markets should, of course, try to build marketing capabilities that will help their company achieve better performance. Equally importantly, they need to understand under what conditions marketing capabilities are more or less effective and become skilled in developing and deploying such capabilities. Marketing capabilities become more effective as economic development progresses, but the effect becomes weaker as the legislative system improves. Firms should therefore consider investing in marketing capabilities. The governments recognize the importance of this issue, though the effect becomes weaker as the legislative system improves. Firms should therefore consider investing in marketing capabilities.

These findings also offer valuable implications for policy makers. Many emerging markets are deregulating their economies, aiming to foster globally competent firms. The findings suggest that policy makers should encourage firms to develop different capabilities (including marketing, technology and operations capabilities) because certain capabilities may become more valuable than others as the institutional environment evolves. The recently implemented policies in many emerging markets which aim to not only improve the legislative system but also to promote innovation among indigenous firms indicate that the governments recognize the importance of this issue, though the effectiveness of their policies is yet to be demonstrated in many cases.

This study has several limitations that, in turn, suggest interesting avenues for future research. First, the study used data collected by the World Bank from different countries over several years, and the cross-sectional nature of the data prevented the assessment of any causal relationships between capability and performance. Moreover, capabilities evolve over time, and it may take time to experience their full effect. A longitudinal study is needed to address this issue fully.

Second, this study assessed firm performance in terms of market share, which is a market-based performance metric, because in

### Table 4
Further hypotheses testing.

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
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<tbody>
<tr>
<td>Constant</td>
<td>163.59**</td>
<td>165.73**</td>
<td>166.04**</td>
<td>166.17**</td>
<td>165.80**</td>
<td>166.22**</td>
</tr>
<tr>
<td>Firm age</td>
<td>(71.27)</td>
<td>(64.28)</td>
<td>(64.50)</td>
<td>(64.39)</td>
<td>(64.27)</td>
<td>(64.50)</td>
</tr>
<tr>
<td>Medium size</td>
<td>−0.16***</td>
<td>−0.16***</td>
<td>−0.16***</td>
<td>−0.16***</td>
<td>−0.16***</td>
<td>−0.16***</td>
</tr>
<tr>
<td>Large size</td>
<td>−0.17***</td>
<td>−0.17***</td>
<td>−0.17***</td>
<td>−0.17***</td>
<td>−0.17***</td>
<td>−0.17***</td>
</tr>
<tr>
<td>State ownership</td>
<td>0.06***</td>
<td>0.06***</td>
<td>0.06***</td>
<td>0.06***</td>
<td>0.06***</td>
<td>0.06***</td>
</tr>
<tr>
<td>Foreign ownership</td>
<td>(9.26)</td>
<td>(9.31)</td>
<td>(9.31)</td>
<td>(9.24)</td>
<td>(9.26)</td>
<td>(9.27)</td>
</tr>
</tbody>
</table>
fast-growing emerging economies, many companies consider market share a priority for long-term success (Kotler & Gertner, 2002). However, financial performance dimensions, such as return on assets and profitability, are also relevant. Further research should cobborelate the findings with financial indicators.

Third, the study focused on marketing capabilities, but technology and operations capabilities are probably also important in emerging economies, as are network-based resources (Chen & Wu, 2011; Wu & Chen, 2012). Further research should expand the model by considering these alternative capabilities, as well as examining how market-based capabilities and network-based resources interact to affect performance.

In summary, the findings of this study indicate that marketing capabilities are positively related with firm performance in emerging economies and that the effect is moderated by aspects of the economic, legislative, and social environment. Further research is needed to explore the interplay of capabilities, institutions and firm performance.

Appendix A. Variables: Sources and operationalization

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
<th>Operationalization</th>
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<td>Market share</td>
<td>(Crook et al., 2008; Coff, 1999)</td>
<td>Productivity and Investment Climate (PCS) Survey</td>
</tr>
<tr>
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<td>Vorhies &amp; Morgan, 2005; Morgan et al., 2009</td>
<td>Productivity and Investment Climate (PCS) Survey</td>
</tr>
<tr>
<td>GDP/capita</td>
<td>(Berry et al., 2010)</td>
<td>International Monetary Fund</td>
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<td>Legislative systems</td>
<td>Steenkamp &amp; Geyskens, 2006</td>
<td>Kaufmann et al. (2007)</td>
</tr>
<tr>
<td>Individualism</td>
<td>Steenkamp &amp; Geyskens, 2012</td>
<td>Hofstede</td>
</tr>
<tr>
<td>Firm age</td>
<td>Sorensen &amp; Stuart, 2000</td>
<td>Productivity and Investment Climate (PCS) Survey</td>
</tr>
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<td>Medium-sized</td>
<td>Chen &amp; Wu, 2011</td>
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<tr>
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<td>Foreign ownership</td>
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<tr>
<td>Exporter</td>
<td>Aulakh et al., 2000</td>
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References


