The moderating influence of competitive intensity on the relationship between CEOs’ regulatory foci and SME internationalization.

The international business literature has mainly focused on the impact of top managers’ psychological attributes on firms’ strategic decisions. However, the potential moderating influence of industry conditions such as competition, has not been well explored. Deriving insights from the regulatory focus and upper echelons theories, this paper extends the international business and regulatory focus literature by investigating how the impact influence of CEOs' regulatory foci on firms' degree of internationalization depends on the intensity of competitive market conditions. Using primary data gathered from 289 small and medium-sized enterprises (SMEs) in Ghana, the findings of the study revealed when competition is intense in the domestic market, the potency of a CEO's promotion focus as a driver of internationalization is amplified. In addition, the research shows that intense domestic market competition weakens the negative influence of a CEO's prevention focus on a firm's degree of internationalization. These findings have important research and managerial implications for international business.

1. Introduction

One of the most critical strategic decisions for small and medium-sized enterprises (SMEs) is to expand into foreign markets. Though many factors account for SMEs’ internationalization behaviors, the psychological attributes of CEOs have been identified as particularly important contributors (Carpenter et al., 2004; Hambrick and Mason, 1984). Consequently, substantial research effort has been made to investigating the influence of CEOs’ characteristics on firms’ degree of internationalization (e.g., Herrmann, and Datta, 2006, Laufs et al., 2016; Maitland and Sammartino, 2015; Zucchella et al., 2007).

Overall, the results from these studies suggest that CEOs' psychological attributes have profound impact on firms’ degree of internationalization (Abedo and Florin, 2006; Pinho, 2007; Oesterle et al., 2016; Sommer, 2010). Moreover, other studies show that the decision-making behavior of top management is also affected by the organizational and exogenous factors (Lanaj et al., 2012; Hambrick, 2007). For example, extant research indicates that the influence of individuals' regulatory focus - a major psychological attribute of CEOs -on their respective behaviors, depends on contextual factors such as domestic market competition (Cesario et al., 2004; Hmieleski and Baron, 2008). Moreover, Lanaj et al (2012) have observed that the impact of chronic regulatory focus on firms' internationalization is influenced by the environmental context. This is because elements in this milieu (environment) may change how CEOs perceive their goal achievement trajectory.

Despite the potential moderating influence of environmental conditions, the specific ways in which these may affect CEOs’ psychological attributes in driving firms’
internationalization activities remain less understood. As result, some scholars have called for new enquiries which model and test environmental variables, which affect an individual’s freedom of action in the upper echelon (Carpenter et al., 2004). Thus, it is crucial for new studies to investigate the external environmental conditions under which CEOs' psychological attributes helps to drive international venturing decisions of firm. This research enquiry may help explain when CEOs’ psychological attributes are more or less potent in driving a firm’s internationalization. To address gap, this study draws on fundamental premise in upper echelons (Hambrick and Mason, 1984) and regulatory focus (Higgins, 1997, 1998) theories to model environmental context as a mechanism that may explain when a CEO’s regulatory focus may drive a firm’s internationalization behavior.

Chronic regulatory focus reflects a relatively stable personality trait (Higgins et al., 2001) that explains decision-making behavior of top management. Within the realm of regulatory focus theory (Higgins, 1997, 1998), an individual can attain his/her goals through two strategic paths—a promotion or prevention focus. A promotion focus reflects a specific motivational tendency and eagerness to succeed or achieve a goal while a prevention focus describe a situation of vigilance where individuals tend to be careful in attaining their goals (Higgins and Spiegel, 2004). An individual’s chronic regulatory focus orientation impacts on his or her strategies for achieving goals and how he or she allocates resources for achieving organizational goals (Wallace et al., 2010). Accordingly, a chronic regulatory focus orientation of a CEO is also likely to be influenced a firm's decision to go international. This study therefore argues that when competitive intensity is high, the potency of a CEO’s regulatory foci in driving firms’ internationalization is greater. In contrast, when the environment is less competitive, firms tend to accrue fewer internationalization activities given the effect of CEOs’ regulatory foci. Thus, the following research question is examined:

*How does competitive intensity moderate the relation between CEOs' chronic regulatory foci (i.e. promotion and prevention foci) and firms’ degree of internationalization?* Addressing this research question is crucial given that a firm’s external environment determines the level of managerial discretion a CEO has in his or her decision making.

This study contributes to the regulatory focus and international management research in two specific ways. First, it examines the relevance of the notion of regulatory fit (Higgins, 2000), by showing that the effects of promotion and prevention foci on a firm’s degree of internationalization are differentially moderated by competitive intensity. Specifically, this study advances existing regulatory focus research (e.g., Higgins, 1997, 1998; Wallace et al., 2010) by considering competitive intensity as central moderating factor of the relationship
between CEOs' chronic regulatory foci and firms’ international expansion behavior. To date, the literature has mostly examined the direct impact of regulatory foci on firm-level outcomes (e.g., Tunçdogan, Bosch, and Volberda, 2015; Wanberg, Zhu, Kanfer, and Zhang, 2012). However, it remains less understood with regards to the buffering factors that may affect the impact of regulatory foci on firm-level outcomes such as a firm’s degree of internationalization.

Second, the paper aims at contributing to the literature on international management (e.g., Carpenter et al., 2004; Herrmann, and Datta, 2006, Laufs et al., 2016; Maitland and Sammartino, 2015; Oesterle et al., 2016; Sommer, 2010) by examining the external environmental conditions that influence the relationship between CEOs’ psychological attributes and SMEs’ internationalization. Thus, we argue theoretically that intense domestic competition has a significant influence on managerial discretion: Thus, intense market competition may enhance the potency of a CEO’s regulatory foci in embarking on foreign market entry (Johanson and Vahlne, 1977). In doing so, we provide a step toward understanding the environmental conditions that may enhance the potency of a CEOs’ psychological attributes in driving a firm’s internationalization process.

Aside of the theoretical contributions, the outcomes of this study are useful for SME managers and policy makers alike. This is because it provides further insights regarding the types of CEOs who are likely to embark on international expansion of their firms given varying levels of domestic market competition.

The rest of the paper is structured as follows. Section two presents the theoretical background and research hypotheses of the study. Section three describes the methods employed to carry out this research. This is followed by the data analyses, findings and implications in section four. Finally, section five presents the limitations of the study and direction for future research.

2. Theoretical background and hypotheses

2.1 Internationalization of firms

Internationalization has been described as the process of extending a firm’s activities beyond the borders of the domestic market (Hitt, Hoskisson, and Ireland, 1994; Oesterle et al., 2016). Firms’ international involvement is crucial for scholars and practitioners because a firm can achieve higher growth through internationalization (Lin, Liu and Cheng, 2011) and this presents an important strategic growth trajectory for SMEs. Some traditional theories of internationalization offer divergent views of internationalization. First, the Uppsala theories
(e.g., Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975; Welch and Luostarinen, 1988), suggest that there is a linear process that firms pass through to internationalization. Alternatively, born global theories (Knight and Cavusgil, 1996; Madsen and Servais, 1997; Rennie, 1993) suggests that some firms automatically embark on the internationalization journey as soon as their born. These 'born globals' or 'international new ventures' are categories of internationalization with a distinctive and strong entrepreneurial dimensions.

Accordingly, scholars have explored the reasons why companies pursue international strategies (e.g., Hutzschenreuter, Pedersen, and Volberda, 2007; Lu and Beamish, 2001; Schotter and Beamish, 2013). Though many factors intertwine to explain internationalization behaviour of firms, two major perspectives have emerged in the international business literature. First, “objective” internationalization motives reflect firm-level goals that affect a firm’s profit outcomes of embarking on internationalization (Oesterle et al., 2016). This perspective suggests that a firm’s experience and its resources help drive its internationalization behavior.

Second, “subjective” motives reflect the personal influence of managers on international business decision making. The perspective suggests that managers frequently purse international business venturing activities because they stand to gain some benefit privately. A key aspect of internationalization pertains to the strategic decision making process (Francioni et al., 2015; Reuber and Fischer, 1997). Accordingly, scholarly research has highlighted the need to include the decision making process of top management in the international management literature (e.g., Barkema and Shvyrkov, 2007). For example, scholars have investigated internationalization outcomes of top management characteristics, such as demographic characteristics (Cavusgil and Naor, 1987; Fernández-Ortiz and Lombardo, 2009; Leonidou et al., 1998), top managers’ attitude and perceptions including risk exposure (e.g., Dimitratos and Plakoyiannaki, 2003; Francioni, Musso, and Cioppi, 2015; McDougall and Oviatt, 2000; Leonidou, Katsikeas and Piercy 1998; Calof and Beamish,1995), CEO narcissism (e.g., Oesterle, Elosge, and Elosge, 2016), and managerial cognition (e.g., Acedo, and Florin, 2006; Maitland and Sammartino, 2015). Overall, the results from these studies suggest that CEO attributes have a profound impact on degree of internationalization.

However, the potential moderating influence of external environmental factors such as competition on these models, is under-explored. Accordingly, this paper explores the potential buffering effect competitive intensity on the link between CEOs’ regulatory foci and
the development of a firm’s international expansion behavior. Investigating the moderating impact of intense competitive market conditions on CEOs’ regulatory foci holds significant potential for improving our understanding about firms’ internationalization. This is because it will highlight the reasons why some CEOs sometimes put in much effort in taking their firms to the international market despite potential threat of having limited benefits to the firm.

2.2 Chronic regulatory focus

Researchers from management and entrepreneurship have paid much attention to the concept of chronic regulatory focus (e.g., Hmieleski and Baron, 2008; Kammerlander et al., 2015). The concept of self-regulation takes its roots from socio-cognitive perspective which suggests that individuals are likely to seek pleasure and avoid pain (Crowe and Higgins, 1997).

An important theory that explains self-regulation is regulatory focus theory (Higgins, 1998). This theory suggests that there are two ways in which decision-making behavior of individuals are regulated. These two modes of self-regulate are promotion focus and prevention focus. The theory suggests that a promotion focused individual is motivated by the need to enhance their growth and achieve higher status in society. This is reflected in the quest for higher gains and higher achievements or ‘hits’. Thus, an individual’s promotion focus orientation energizes him or her to anticipate positive outcomes for his or her effort (Brockner et al., 2004). Accordingly, when an individual employs a promotion focus, he or she tends to be keen on what ought to be attained.

Contrarily, a prevention focus orientation tends to make individuals very vigilant in performing their tasks. As such, individuals applying this orientations tend to be careful in order to avoid errors (Higgins, 1998, 2000). These individuals apply a vigilant strategy that allows them to avoid pain and loss. (Higgins and Spiegel, 2004). Individuals with this orientation are inclined to avoid punishment and therefore try hard to perform all activities with extra care. Based on the foregoing discussion, it can be argued that both promotion and prevention foci affect human behavior.

Relatedly, the link between regulatory foci and risk-taking has been well-established in the management literature (e.g., Crowe and Higgins, 1997; Hamstra et al., 2011; Florack and Hartmann, 2007; Mullins et al., 1999; Wu et al., 2008). It has been established that individuals’ risky behavior emanate from individuals’ promotion focus orientation to attain much success, while vigilant behaviors arise from a prevention focus orientation to prevent loses and pains (Bryant and Dunford, 2008). Thus, it may be argued that regulatory focus and risk-taking share common construal domain.
Moreover, we acknowledge that risk-taking literature has advanced the international business research considerably (e.g., George, Francioni, Musso, and Cioppi, 2015; Wiklund, and Zahra, 2005). However, the regulatory focus literature (e.g., Burmeister-Lamp, Lévesque and Schade, 2012; Hamstra et al., 2011; Florack and Hartmann, 2007; Mullins et al., 1999; Wu et al., 2008), which partly overlaps with risk-taking literature, offers a few additional insights. For example, it offers a simplified way to process information and highlights decision makers’ salience goals, such as aggressive, achievement oriented goals or defensive, security-oriented goals (Johnson, Chang, and Yang, 2010; Lanaj et al., 2012). In addition, a CEO’s regulatory foci influence the ways in which they make decisions (Crowe and Higgins, 1997). Thus, regulatory focus directly relates to key dimensions of strategic decision making. In short, regulatory focus tends to influence the strategic preferences of decision makers, and therefore makes it a key attribute of top management to examine.

2.3 Moderating influence of competitive intensity

An individual’s regulatory focus does not operate in a vacuum. Rather, the influence of promotion and prevention foci are bounded by the context, such that effects are highlighted when situational characteristics are congruent with a person's foci. This phenomenon is termed as ‘regulatory fit' (Higgins, 2000). Regulatory focus theory is used to explain how a CEO impacts a firm’s degree of international venturing in competitive environments a firm’s domestic market competition influence the risk and uncertainty connected a firm’s activities (Auh and Menguc, 2005). This view seems plausible, particularly, for SMEs because CEOs tend to have more power over resources in SMEs (Lawrence and Lorsch, 1967). A major question arriving from this is why some managers pursue international venturing activities more than other in such competitive situations. Thus, additional enquiry, which examines the potential effect of competitive intensity may help shed more light on specific ways in which regulatory focus influence SMEs internationalization behavior.

This study attempts to address this gap by testing hypotheses regarding the moderating effects of CEOs' chronic regulatory foci (promotion and prevention foci) on a firm’s degree of international activities. Specifically, we contend that the effects of promotion and prevention foci on a firm’s international activities is contingent on domestic competition because CEOs’ psychological attributes allow them to pay particular attention to some specific environmental heuristics and act according to these heuristics (Hmieleski and Baron, 2008). In line with this perspective, we expect that domestic market competition will moderate relations between CEOs’ regulatory foci and a firm’s international activities.
2.4 Competitive intensity, promotion focus, and internationalization

Competitive intensity reflects a condition of rivalry among firms in the same industry in which firms’ behavior largely reflects the action of industry players, ushering in conditions of uncertainty and unpredictability (Auh and Menguc, 2005). According to the literature, competitive intensity influences CEOs’ sense-making and the way managers make decisions (e.g., Dean and Sharfman, 1993; Miller and Friesen, 1983). In addition, a condition of intense competition affects a firm’s behavior (Ang, 2008). Thus, the contention is that competitive intensity may reduce the profit margins that can be earned in a home market, and thus push manager/firms to expand abroad to compensate for the limited profitability at home (geographic diversification).

The paper argues that at higher levels of competitive intensity, CEOs who exhibit high degree of promotion focus will increase their energy aimed at international venturing activities so as to enhance their achievements. Particularly, when competitive intensity is high, the positive relationship between CEOs’ promotion foci and firms’ degree of internationalization should be greater. This is expected because individuals displaying high degree of promotion focus need to explore more in order to achieve hits and satisfy international customers. Additionally, intense domestic market competition offers promotion focus CEOs insights of other firms’ challenges and success with regards to their exploration activities, as this is often a major antecedent of competition in an industry (Fine, 1998). Consequently, it can be argued that as a result of different risk tolerance inherent in both promotion and prevention foci, the influence of a CEO’s regulatory foci on internationalization of SMEs depends on the strength of domestic market competition. Against this backdrop, the first hypothesis is stated as follows:

\[ H_1: \text{Competitive intensity amplifies the positive effect of a CEO’s level of promotion focus on a firm’s degree of internationalization.} \]

2.5 Competitive intensity, prevention focus, and internationalization

Generally, a CEO with high prevention focus tends to demonstrate a high level of creative thinking (Baas, De Dreu, and Nijstad, 2011). As such, the perceived challenges to explore profitable activities in competitive domestic markets serve as “activizers” or “energizers” for managers who exhibit high degree of prevention focus (Förster, Liberman, and Higgins, 2005). In situations of competitive intensity in the domestic market, CEOs tend to feel much tension and often worry about decrease profitability levels. This feeling tends to eclipse their
lower-level goals of avoiding failure when exploring potential business opportunities (Brendl and Higgins, 1996) such as internationalization.

With increasing competitive intensity in a firm’s domestic market, a firm’s strategy and actions become more and more dependent on competitors’ actions. This situation enables CEOs with a prevention focus orientation to be more inclined to achieving success because CEOs with a prevention focus orientation tend find it difficult to attain their goals (Higgins, 1997). This phenomenon is likely to result in fear and worry, and this has been referred to as lack of regulatory closure (Baas, De Dreu, and Nijstad, 2011). Lack of regulatory closure triggers creativity (Clapham, 2001), which leads to the exploration of creative ideas (Baas, De Dreu, and Nijstad, 2011). Thus, a promotion focus orientation among CEOs enhances their ability to explore creative opportunities that are likely to bring more success when competition is intense in the domestic market. Consequently, it is argued that the negative linkage between a CEO’s prevention focus and a firm’s degree of internationalization is attenuated in highly competitive domestic market settings. Therefore, the second hypothesis is stated as:

**H**\textsubscript{2}: The negative effect of a CEO’s prevention focus on a firm’s degree of internationalization is attenuated when domestic market competition is intense.

### 3. Methods

#### 3.1 Study setting

The study's hypotheses were tested using survey data collected from CEOs of SMEs operating in Ghana. Ghana was chosen as the study’s context for several reasons. First, in some important respects, the country can be described as a representative of sub-Saharan African emerging economies (Hoskisson et al., 2000). Second, Ghana has successfully operated an open market economy for more than three decades, which has attracted significant foreign investments, mostly from Western multinationals. Third, Ghana’s stable democratic tradition and rule of law, has given her a favorable investor confidence in the sub-region (OECD, 2008). These developments have made Ghana a serene environment for doing business in West Africa (World Bank, 2011). Thus, studying the conditions in which CEOs’ personalities impacts firms’ internationalization behavior in Ghana provides a typical emerging market perspective on SMEs’ internationalization processes.

#### 3.2 Sample and data collection
The sampling criteria for the study was developed by following previous research (e.g., De Clercq, Sapienza, and Zhou, 2014). First, we selected the participating SMEs based on condition that they have engaged in cross-border activities such as exporting since their inception. Second, the SMEs have engaged in their first internationalization within five years of their inception. Third, we selected SMEs that were owned independently. In all, 1200 SMEs (600 each from both northern and southern sectors of Ghana) were randomly selected from a database containing 15,460 exporting SMEs held by the Ghana Export Promotion Authority. In defining SMEs, Ghana Statistical Service’s standard definition of SMEs (companies with 250 or fewer employees) was adopted (Ghana Statistical Service, 2006).

The CEOs of the 1,200 firms were approached with a questionnaire in person. Following previous studies in the current study research setting (e.g., Boso, Story and Cadogan, 2013; Hinson and Sorensen, 2006), we collected data by using a team of data collectors who were trained on data collection techniques and spearheaded by the research team. After the data collection, the research team made sure the data were collected from the right firms in our sample frame. To do, we made several phone calls to the CEOs who participated in the study in order to confirm their participation. We received a final sample of 289 SMEs which yielded a response rate of 24%. The response rate was relatively low compared to other surveys in entrepreneurship and management studies. Yet, the distribution of the sample was quite similar to the population. Indeed, response rate in Ghana has shown to be relatively low (Ofori and Hinson, 2007). We assessed non-response bias by comparing early and late responses. No substantial differences were found in the study’s constructs. Hence, we concluded that non-response bias was not a major concern in this study (Armstrong and Overton, 1977).

3.3 Measures

All the measures in the study were taken from existing literature. Table 1 provides details of the items used in this study.

Regulatory focus: To measure CEOs’ regulatory foci (promotion and prevention focus), the Regulatory Focus Questionnaire (Higgins et al., 2001) was used. The procedure used to measure regulatory focus in this study is consistent with previous management research (e.g., Bryant, 2009). Six items were used to measure promotion focus whiles five items measured prevention focus. A seven-point Likert scale with anchors 1 (“strongly disagree”) and 7 (“strongly agree”) was used to capture CEOs’ regulatory focus. The
reliability of the promotion focus ($\alpha = .93$) and prevention focus ($\alpha = .88$) scales were within the acceptable threshold (Bryant, 2009).

**Competitive intensity:** Competitive intensity ($\alpha = .86$) scale was adapted from Jansen et al., (2006). A seven-point Likert scale comprising four items with anchors 1 (“strongly disagree”) and 7 (“strongly agree”) was used.

**Degree of internationalization:** Internationalization ($\alpha = .89$) items were taken from Zahra et al., (2000). Four items measured a firm’s propensity to embark on international venturing activities and these items specifically asked the respondents to respond to the extent of their firms’ internationalization intensity within the last two years using a seven-point Likert scale ranging from 1 (very small extent) and 7 (very large extent). The robustness of this scale has been established (Yiu et al., 2007).

**Control variables:** Four variables (firms’ international experience, firm size, firm age, CEO age and financial resources) were controlled for in our study. International experience was controlled for because it may influence its learning activities in international markets (Goerzen and Beamish, 2003). A log-transformed of number of employees measured firm size. The firms’ year of incorporation was used as proxy to measure firm age. That is, number of years since their inception was used to measure firm age (George, 2005). CEO’s age was also controlled for in this study. This is because a CEO’s age may show a level of his or her decision-making confidence. As CEOs get more experience on the job, they gain significant international experience that may influence their decision making process regarding internationalization (Oesterle, Elosge, and Elosge, 2016). Finally, SMEs suffer from limited financial resources, which can constrain their foreign market commitment in terms of their entry mode (Ripollés et al., 2012). Therefore, the availability of firms’ financial resources to venture abroad was also controlled for in this study. Financial resource items were taken from previous research (Cooper et al., 1994; Wiklund and Shepherd, 2005). Financial resource capability was measured using a seven-point Likert scale with anchors 1 (strongly disagree) and 7 (strongly agree). Respondents were asked to provide responses to the degree to which their firms have sufficient financial resources to enter a foreign market.

### 3.5 Validity and reliability tests

We performed a confirmatory factor analysis (CFA) using LISREL 8.5 and covariance matrices input data. The final CFA results showed excellent fit heuristics confirming convergent validity of our measures (Bagozzi and Yi, 2012). Indices which exceeded the minimum cut-off criteria of 0.70, 0.60 and 0.50 were obtained respectively. Thus, the results
showed that the composite reliability and discriminant validity of the variables are acceptable. Discriminant validity of our constructs was also established (Table 3) by comparing the correlation of each construct with the square root of its average variance extracted. The findings showed that the correlation of each construct lower than the square roots of its average variance extracted. This confirms discriminant validity for the study’s measures (Fornell and Larcker, 1981). Therefore, we could safely proffer that our measured constructs differed significantly from each other (Bagozzi and Philips, 1982).

**Table 1: Constructs, measurement items and reliability and validity tests**

<table>
<thead>
<tr>
<th>Item description</th>
<th>Loading (t-values)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Promotion focus</strong> (Higgins et al. 2001): α=.93; CR=.91; AVE=.78</td>
<td></td>
</tr>
<tr>
<td>- Compared to most people, are you typically unable to get what you want out of life?*</td>
<td>.78 (fixed)</td>
</tr>
<tr>
<td>- How often have you accomplished things that got you “psyched” to work even harder?</td>
<td>.75 (10.86)</td>
</tr>
<tr>
<td>- Do you often do well at different things that you try?</td>
<td>.77 (11.47)</td>
</tr>
<tr>
<td>- When it comes to achieving things that are important to me, I find that I don’t perform as well as I ideally would like to do*</td>
<td>.88 (14.34)</td>
</tr>
<tr>
<td>- I feel like I have made progress toward being successful in my life.</td>
<td>.78 (12.76)</td>
</tr>
<tr>
<td>- I have found hobbies or activities in my life that capture my interest or motivate me to put effort into them.</td>
<td>.83 (13.44)</td>
</tr>
<tr>
<td><strong>Prevention focus</strong> (Higgins et al. 2001): α=.88; CR=.85; AVE=.69</td>
<td></td>
</tr>
<tr>
<td>- Growing up, would you ever “cross the line” by doing things that your parents would not tolerate?**</td>
<td>.94 (fixed)</td>
</tr>
<tr>
<td>- Did you get on your parents’ nerves often when you were growing up?**</td>
<td>.97 (21.78)</td>
</tr>
<tr>
<td>- How often did you obey rules and regulations that were established by your parents?</td>
<td>.83 (13.44)</td>
</tr>
<tr>
<td>- Growing up, did you ever act in ways that your parents thought were objectionable?**</td>
<td>.82 (15.86)</td>
</tr>
<tr>
<td>- Not being careful enough has gotten me into troubles at times*</td>
<td>.88 (18.28)</td>
</tr>
<tr>
<td><strong>Competitive intensity</strong> (Jansen et al., 2006): α=.86; CR=.79; AVE=.67</td>
<td></td>
</tr>
<tr>
<td>- Competition in our local market is intense.</td>
<td>.83 (Fixed)</td>
</tr>
<tr>
<td>- Our organizational unit has relatively strong competitors</td>
<td>.85 (14.23)</td>
</tr>
<tr>
<td>- Competition in our local market is extremely high</td>
<td>.76 (11.34)</td>
</tr>
<tr>
<td>- Price competition is a hallmark of our local market</td>
<td>.81 (12.52)</td>
</tr>
<tr>
<td><strong>Financial resources</strong> (Cooper et al., 1994; Wiklund and Shepherd, 2005): α=.87; CR=.89; AVE=.72</td>
<td></td>
</tr>
<tr>
<td>- We are satisfied with the financial capital available for the business operations</td>
<td>.85 (fixed)</td>
</tr>
<tr>
<td>- Our company has easy access to financial capital to support its business operations</td>
<td>.88 (12.69)</td>
</tr>
<tr>
<td>- Our business operations are better financed than our key competitors’ operations</td>
<td>.83 (13.44)</td>
</tr>
<tr>
<td>- If we need more financial assistance for our business operations, we could easily get it</td>
<td>.78 (11.23)</td>
</tr>
<tr>
<td>- We are able to obtain financial resources at short notice to support business operations</td>
<td>.83 (11.56)</td>
</tr>
<tr>
<td><strong>Degree of internationalization</strong> (Zahra et al., 2000): α=.89; CR=.92; AVE=.64</td>
<td></td>
</tr>
<tr>
<td>- Entering new foreign markets</td>
<td>.78 (Fixed)</td>
</tr>
<tr>
<td>- Expanding the firm’s international operations</td>
<td>.85 (16.23)</td>
</tr>
<tr>
<td>- Supporting start-up business activities dedicated to international operations</td>
<td>.97 (21.78)</td>
</tr>
<tr>
<td>- Financing start-up business activities dedicated to international operations</td>
<td>.88 (19.28)</td>
</tr>
</tbody>
</table>

**Note:** *Items marked with an asterisk are reversed*

To assess convergent validity of our scales, we inspected factor loadings of the items. We found that each factor loading was extremely higher than the conventional threshold of 0.40 (e.g., Anderson and Gerbing, 1988). We examined the model fit of the CFA using the chi-square (χ²) test. Additionally, a number of fit indices were inspected (e.g., Bagozzi and Yi, 2012). We obtained acceptable fit indices (i.e. RMSEA= 0.05; NNFI=0.92; CFI= 0.94; and SRMSR=0.04) except the χ²= 1969.48 (df=1309; p-value=0.00). The NNFI was 0.92, which
is greater than 0.90 and thereby indicating a reasonable fit (Ping, 2004). Based on these findings, we established the robustness of the items used in this study.

As the data were collected from the same respondents at the same time, it was important test for influence of common method variance (See Zhang et al., 2016). In this study, we approached common variance procedurally and statistically (Podsakoff et al., 2003). Procedurally, great effort was taken to minimize this effect when designing the questionnaire. Specifically, we separated the dependent and independent variables from each other (Fini et al., 2012). Statistically, we tested three competing models in a CFA (Cote and Buckley, 1987). Table 2 presents the common method bias nested models.

**Table 2: Goodness-of-fit statistics for estimating common method bias**

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>Df</th>
<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>CFI</th>
<th>NNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1: Trait</td>
<td>8441.86***</td>
<td>1649</td>
<td>5.11</td>
<td>.184</td>
<td>.58</td>
<td>.33</td>
</tr>
<tr>
<td>M2: Method</td>
<td>1767.91***</td>
<td>911</td>
<td>1.94</td>
<td>.042</td>
<td>.93</td>
<td>.94</td>
</tr>
<tr>
<td>M3: Trait-method</td>
<td>1113.51***</td>
<td>969</td>
<td>1.14</td>
<td>.49</td>
<td>.97</td>
<td>.95</td>
</tr>
</tbody>
</table>

*** $p < .001$. df, degrees of freedom; RMSEA=root mean square error of approximation; CFI=comparative fit index; NNFI=non-normed fit index.

In Model 1, we estimated trait-only model which allowed the indicators to load on a single latent factor. We estimated a method-only model in Model 2 to allow each indicator to load on its respective latent factor. Finally, in Model 3 a method and trait Models were estimated simultaneously. The Model 3 linked all the indicators in Model 2 to establish a common factor. The three models were compared to see which had a better fit. The results of the comparison showed that Model 2 and Model 3 were better than Model 1. Consequently, we established that common method bias was not a major concern in our study (Cote and Buckley, 1987).
Table 3: Descriptive statistics and correlations\textsuperscript{a} (The square root of average variance extracted in the diagonal)

| Variable                          | Mean | s.d  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1. Firm size (employees)\textsuperscript{b} | 44.21| 16.09|      |      |      |      |      |      |      |      |      |      |
| 2. Firm age\textsuperscript{a}     | 22.11| 7.82 | .13* |      |      |      |      |      |      |      |      |      |
| 3. CEO age\textsuperscript{a}      | 48.17| 5.19 | -.10*| -.22**|      |      |      |      |      |      |      |      |
| 4. Firm international experience  | 8.04 | .94  | .15**| .16**| -.27**|      |      |      |      |      |      |      |
| 5. Financial resources            | 2.83 | .68  | .13**| -.17**| -.12*| .34**|      |      |      |      | (.84)|      |
| 6. Competitive intensity          | 5.09 | 0.92 | -.07*| -.22**| -.18**| -.22**| -.19**|      |      |      | (.81)|      |
| 7. Promotion focus                | 5.04 | 0.98 | -.03 | .07* | .17**| .16**| -.39**| .28**|      |      | (.88)|      |
| 8. Prevention focus               | 5.13 | 0.74 | .09* | -.03 | -.20**| -.13*| -.23 | -.34**| .05  |      | (.83)|      |
| 9. Degree of internationalization | 4.99 | 0.57 | .19**| .23**| .28**| .37**| .28**| .38**| .35**| -.33**| (.80)|      |

Note: N=289
SD=standard deviation
*Correlation is significant at the .05 level.
** Correlation is significant at the .01 level.
\textsuperscript{a} Logarithm transformation of original variable.
4. Analyses and results

Details of means, standard deviations and correlations are presented in Table 3. All the hypotheses were tested using hierarchical regression analysis (Cohen et al., 2003). In this study, the highest variance inflation factors (VIF) was 1.85 (see Table 4). Based on this, we concluded that multicollinearity does not affect our research model (Ryan, 1997). We tested the hypotheses with four regression models (see Table 4).

Table 4: Findings of regression analyses (dependent variable: Degree of internationalization) (N=289)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm age (years)</td>
<td>-.11*</td>
<td>-.09*</td>
<td>-.14**</td>
<td>-.13**</td>
</tr>
<tr>
<td>Firm size (employees)</td>
<td>.16***</td>
<td>.17***</td>
<td>.14**</td>
<td>.19***</td>
</tr>
<tr>
<td>CEO age</td>
<td>-.06*</td>
<td>-.12*</td>
<td>-.04</td>
<td>-.03</td>
</tr>
<tr>
<td>Firm international experience</td>
<td>.15***</td>
<td>.08*</td>
<td>.05</td>
<td>.09*</td>
</tr>
<tr>
<td>Financial resources</td>
<td>.17***</td>
<td>.22***</td>
<td>.24***</td>
<td>.28***</td>
</tr>
<tr>
<td><strong>Main effect variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion focus</td>
<td></td>
<td>.27***</td>
<td>.18***</td>
<td>.21***</td>
</tr>
<tr>
<td>Prevention focus</td>
<td></td>
<td>-.24***</td>
<td>-.09*</td>
<td>-.14**</td>
</tr>
<tr>
<td>Competitive intensity</td>
<td></td>
<td>.12*</td>
<td>.07*</td>
<td>.16***</td>
</tr>
<tr>
<td><strong>Two-way interaction effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H&lt;sub&gt;1&lt;/sub&gt;: Promotion focus x Competitive intensity</td>
<td></td>
<td>.45***</td>
<td>.41***</td>
<td></td>
</tr>
<tr>
<td>H&lt;sub&gt;2&lt;/sub&gt;: Prevention focus x Competitive intensity</td>
<td></td>
<td></td>
<td>-.08*</td>
<td></td>
</tr>
<tr>
<td>Model fit statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-value</td>
<td>1.8</td>
<td>2.9***</td>
<td>3.6***</td>
<td>4.0***</td>
</tr>
<tr>
<td>R&lt;sup&gt;2&lt;/sup&gt;</td>
<td>.10</td>
<td>.25</td>
<td>.27</td>
<td>.29</td>
</tr>
<tr>
<td>ΔR&lt;sup&gt;2&lt;/sup&gt;</td>
<td>-</td>
<td>.05*</td>
<td>.07***</td>
<td>.09***</td>
</tr>
<tr>
<td>Largest VIF</td>
<td>1.60</td>
<td>1.68</td>
<td>1.84</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Note: Prob>chi-square = 0.001 for all models, all models are statistically significant, *** p<0.001; ** p<0.05, * p<0.1.

Model 1 includes all of the control variables. Model 2 contains all the direct effects variables. Although not directly hypothesized Model 2 revealed a significant and positive relationship between promotion focus and firms’ degree of internationalization (β=0.27, p< .01). However, in Model 2, a CEO’s prevention focus orientation negatively relates to a firm’s degree of internationalization (β=0.24, p< .01).
In Model 3, the interaction term for promotion focus and competitive intensity was estimated. Supporting Hypothesis 1, competitive intensity positively moderates the promotion focus-degree of internationalization relationship (β=0.45, p< .01). We followed Cohen et al. (2003) to plot the interactions at ±1 s.d. to enhance interpretation. As Figure 1 illustrates, the interaction between promotion focus and competitive intensity enhances a firms’ degree of internationalization.

**Fig. 1. Interaction of promotion focus, and competitive intensity on the degree of internationalization**

It was proposed in Hypothesis 2 that the negative linkage between a CEO’s prevention focus and a firm’s degree of internationalization is attenuated under high levels of competitive intensity. As shown in Model 4 of Table 4, competitive intensity partially moderates the relation between CEOs’ prevention focus orientation and firms’ degree of internationalization, such that when a CEO perceives greater competition in the industry, the negative effect of prevention focus on degree of internationalization is weakened (β= -.08, p <.10). Figure 2 shows that the negative relationship between prevention focus and a firm’s degree of internationalization is attenuated when CEOs perceive high, as opposed to those with low domestic market competition. Therefore, hypothesis 2 received support.
To establish the robustness of the research model, we examined CEOs with different mix of promotion and prevention focus. Following previous literature devoted to the subject (e.g., Kammerlander et al., 2015), the median was used to divide the sample into four groups: high promotion focus and low prevention focus (“achievers”), high promotion focus and high prevention focus (“rationalists”), low promotion focus and low prevention focus (“indifferents”), and low promotion focus and high prevention focus (“conservatives”). We calculated the mean value for internationalization and the significance of the differences between these groups were established using contrast analysis.

Table 5: Contrast Analyses

<table>
<thead>
<tr>
<th>Groups (mean value)</th>
<th>Contrast value</th>
<th>s.d</th>
<th>T</th>
<th>Significance (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achiever (3.87)-Rationalist (3.66)</td>
<td>.23</td>
<td>.14</td>
<td>1.71</td>
<td>.07</td>
</tr>
<tr>
<td>Achiever (3.87)-Indifferent (3.49)</td>
<td>.32</td>
<td>.15</td>
<td>2.13</td>
<td>.03</td>
</tr>
<tr>
<td>Achiever (3.87)-Conservative (3.25)</td>
<td>.58</td>
<td>.16</td>
<td>4.97</td>
<td>.00</td>
</tr>
<tr>
<td>Rationalist (3.64)-Indifferent (3.49)</td>
<td>.12</td>
<td>.16</td>
<td>.78</td>
<td>.45</td>
</tr>
<tr>
<td>Rationalist (3.66)-Conservative (3.25)</td>
<td>.44</td>
<td>.14</td>
<td>4.03</td>
<td>.00</td>
</tr>
</tbody>
</table>
From Table 5, the results of the contrast analyses reveal that achievers engaged in the highest level of internationalization (mean= 3.87), followed by rationalists (mean= 3.64) and indifferents (mean= 3.49). The degree of internationalization is lowest for conservatives (mean=3.25). The four groups differed significantly in terms of their degree of internationalization, with the exception of rationalists and indifferents (p= .457). These results support the results in Model 2 which show that a CEO’s promotion focus relates to a firm’s degree of internationalization while a prevention negatively affects a firm’s degree of internationalization.

5. Discussion and conclusion

The expansion of small entrepreneurial firms into international markets has been increasing in recent times (Barkema and Shvyrykov, 2007). Though many factors have been identified as explaining the internalization of SMEs in the literature, some scholars have identified top management as the principal force behind the initiation, improvement, and success of such endeavors (Cavusgil and Naor, 1987; Fernández-Ortiz and Lombardo, 2009; Leonidou et al., 1998). In particular, research indicates CEOs' psychological attributes such as their regulatory focus - promotion and prevention foci - have a profound impact on firms’ internationalization behavior. Moreover research further suggests that the effect of individuals' regulatory foci depends on the contextual factors such as the nature of competition in the domestic market (Cesario et al., 2004; Hmieleski and Baron, 2008). However, to date, the specific environmental conditions under which CEOs' regulatory foci are most effective in driving firms’ internationalization activities has not been given enough attention.

To help address this gap, we developed and tested a model that focused on the moderating impact of intense competitive environment on the relationship between CEOs’ regulatory foci; namely promotion focus and prevention focus- on SMEs’ international expansion. Hence, we addressed this research question: How does competitive intensity moderate the relationship between CEOs' chronic regulatory foci (i.e. promotion and prevention foci) and firms’ degree of internationalization? Accordingly, the influence of competitive intensity on promotion and prevention focus on firms’ degree of internationalization was modelled.
The study’s empirical results revealed a strong positive moderating effect of competitive intensity on the relationship between CEOs' promotion focus and SMEs’ degree of internationalization. In addition, it was identified that competitive intensity partially moderates the relation between a CEO’s prevention focus and firms’ degree of internationalization. In the next section, we discuss key theoretical, research and practical implications of these outcomes.

First, the paper shows the effect of the industry context on the results. Our study reveals that the positive effect of a CEO's promotion focus on the firm's degree of internationalization is amplified under intense competitive conditions. This finding adds to the emerging stream of research which have examined ways in which the effects of regulatory focus on firms' strategic orientations are shaped by industry characteristics (Hmieleski and Baron, 2008).

Relatedly, it was argued that CEOs with high levels of prevention focus invest more efforts in international venturing activities under conditions characterized by high rather than low competitive intensity. This study found partial support for this hypothesis. In addition, the study shows that the negative relationship between prevention focus and a firm’s degree of internationalization, is weakened for CEOs who perceive high levels of domestic competition as opposed to those who perceive low competitive intensity. This can be explained by the fact that CEOs with high levels of prevention focus always have preference for a vigilance (Idson et al., 2000; Hmieleski and Baron, 2008), which can help individuals to be creative (Clapham, 2001; De Dreu et al., 2008). This outcome affirms an earlier view in the literature which suggests that CEOs' with high prevention focus tend to demonstrate the willingness to explore divergent thinking under conditions of intense competition (Baas et al., 2011). In the main, the results reveal that high levels of promotion focus among CEOs might be, particularly, crucial for SMEs’ internationalization in highly competitive markets. Overall, the contribution of this study is that, it goes beyond merely examining the direct main effects of CEOs’ characteristics by modelling how variables in the industry environment potentially moderate the association between CEOs' psychological attributes and SMEs’ degree of internationalization.

Second, our study extends previous internationalization studies that found evidence of a positive correlation between CEOs' attributes and SMEs’ international venturing activities (e.g., Acedo and Florin, 2006; Pinho, 2007; Oesterle et al., 2016; Sommer, 2010). This was achieved including the moderating effect of domestic competition in the relationship. The finding reported here indicates that fierce competition in the domestic market increases the impact of CEOs'
regulatory foci on firms’ degree of internationalization. Though, SMEs which are faced with keen domestic competition may resort to various strategic options-such as niche markets or differentiation focus, internationalization may sometimes present easier escape route, especially, where external markets are in the early or growth stages of product adoption with higher prospects for market share and profitability compared to that of domestic markets.

Third, this study advances research on upper echelons theory by showing how the psychological processes of CEOs may affect firms’ internationalization behavior. For example, even though the upper echelons theory emphasizes the importance of top management’s psychological attributes and their impact on firms' strategic decision making (e.g., Hambrick and Mason, 1984), if fails to account for the influences exerted by the micro and macro milieu of organizations.

Fourth, this study further advances the regulatory focus theory by modelling varying levels of promotion and prevention foci. Consistent with extant research (e.g., Kammerlander et al., 2015; Markovits, 2013), this investigation offers a distinction among rationalists (high promotion and high prevention focus), achievers (high promotion and low prevention focus), conservatives (low promotion and high prevention focus), and indifferents (low promotion and low prevention focus). Although not hypothesized, the results indicate that among CEOs with high levels of promotion focus, firms led by achievers, engage in significantly more internationalization activities than firms led by rationalists.

Our findings have several implications for SMEs’ owners and CEOs. First, the results show that high levels of promotion focus among CEOs might be particularly crucial for SMEs’ internationalization in highly competitive markets. This finding is mainly relevant for SME managers who intend to initiate, plan, and implement international expansion. Thus, to enhance future prosperity of firms, owners of SMEs who intend to exit from or hand over their firms in competitive domestic markets, should evaluate whether the potential successors are characterized by high levels of promotion focus. Such an evaluation may be crucially important as this might affect the firm's future performance, especially, when it comes to internationalization. Second, to improve firms’ international venturing activities, it will be advisable for CEOs to include individuals with high levels of promotion focus in competitive environments in their management or engage them as advisory teams.
The findings are equally relevant for the policy makers. This is because governments and developmental agencies in emerging markets can enhance the internationalization drive of SMEs by undertaking promotional and educational programs to help managers understand how to develop greater levels of promotion focus. The need for such strategic human developments programs is especially vital now in view the globalization of world business, which has spawned high levels of competition in both domestic and international environments. In conclusion, this study illustrates when CEOs’ psychological attributes-promotion and prevention foci-are important drivers of SMEs' internationalization activities in competitive environments.

7. Limitations and future research directions

The limitations of this paper offer avenues some interesting avenues for future research. First, the study’s sample was made up of only Ghanaian SMEs which is not necessarily typical or representative in terms of SME internationalization. This limits the generalizability of the findings. In this regard, the findings must be evaluated in the context of this emerging market. Thus, future cross-country studies involving samples from developed and emerging economies may help validate the results of the current study. Second, we did not control for the nature of ownership of the SMEs investigated in the regression models. Given that many SMEs are family owned, it is likely that their strategic orientations, particularly, with respect to internationalization, are inseparable from the owners’/founders’ personal objectives (Kotey, 2005). Thus, it is possible that a CEO may not necessarily be the most powerful actor in family owned firms. This may be especially so where other family members (with a different personality configuration of promotion/prevention foci) voice opposition and effectively constrain the autonomy of a CEO's strategic decision making. Moreover, family-owned firms may be subject to high degree of processes as distinct to outcome control and hence there is a greater constraint on the decision-making freedom of the CEO. Therefore, future research should control for type of ownership of SMEs to account for exigencies that may influence the research model. Third, individual level variables such as gender and education levels of CEOs were not controlled for in this study. As these variables may impact on a firm’s degree of internationalization, it will be useful for future research to control for these variables in order to improve the internal validity of the model presented here. Finally, environmental munificence and complexity have been noted as important factors which influence firms' strategic behavior.
Unfortunately, we did not control for these variables in our research model. Future research may want to further validate this logic by controlling for these variable or examine whether they play any moderating roles.

References


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