Social Ties, Absorptive Capacity, Entrepreneurial Orientation, and Performance of SMEs in Transition Economy: A Contingency Framework

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ABSTRACT

What are the influential factors determine SME’s performance in transition economy? From the resource-based view, researchers have explored the effects of social ties, absorptive capacity and entrepreneurial orientation on firm performance. This study adds to this literature by distinguishing the types of social ties based on the resources they supply, while prior studies generally focus on the sources of such resources. This study also advance a holistic framework outlining not only the three main effects, but also two interaction effects (social ties with absorptive capacity and social ties with entrepreneurial orientation) to demonstrate how they facilitate SMEs filling the gap of institutional voids and achieving superior performance in transition economies.

Keywords: Entrepreneurship, Strategic Management, Small-and-Medium Enterprises, Emerging Economy, Social Network

INTRODUCTION

Transition economies have been experiencing rapid growth in the last decades. In order to spur the sustainable economic growth and employment, they emphasize the growth of small and medium enterprises (SMEs). China for instance, has more than 4.3 million officially registered SMEs contributing 60 percent of the gross national product and about 80 percent of new jobs (China Daily, 2010). Despite the essentiality of SMEs to the development of economy and the difficulties they face, most studies that relate to institutional voids were concentrated on MNCs (Multi-national Corporations) or large firms (e.g. Peng & Luo, 2000; Khanna & Palepu, 2000; Cuervo-Cazurra & Genc, 2008). This study addresses this gap in the literature by focusing on how SMEs can fill the institutional voids to survival and achieve good performance in transition economies.

Institutional voids describe a situation where absent and/or weak institutional arrangements prevent those excluded by poverty from participating in market activities (Khanna & Palepu, 2010). Transition economies are characterized by institutional voids due to underdeveloped regulation system,
lack of intermediaries to capital, product and labor markets (Khanna & Palepu, 2010). Compared to more established firms, such as large State owned enterprises (SOE), SMEs often suffer more from institutional voids, as they are constrained by insufficient financial, managerial and technological resources, established brands and innovation capabilities (Aulakh, Kotabe, & Teegen, 2000; Zhu, Hitt, & Tihanyi, 2006). More importantly, due to the lack of financial, market intelligence or other intermediaries, and underdeveloped supporting institutions, the barrier for SMEs to access to those external resources are extremely high. Therefore, in order to secure long term survival, SMEs cannot operate in emerging market without encountering institutional voids. Researchers (Khanna & Palepu, 2010) suggest that institutional voids cannot be avoided, but could be overcome as long as SMEs can identify them and find the way to bridge the gap.

Firms in emerging economies utilize social ties to overcome (and even capitalize on) institutional voids (Peng & Luo, 2000; Peng, 2003; Peng & Heath, 1996; Peng, Lee & Wang, 2005; Zhu et al., 2007). Research suggests that SMEs can gain legitimacies and external resources through network ties to confer their constrained internal resources and enhance their capabilities. Even with the rapid transformation from regulated market towards liberalized market, as an economy that during the transition process, knowing the right person is still very important in obtaining critical resources and gaining legitimacy.

This research contributes to this literature by advancing our understanding the role of social ties in SME’s operation in emerging economies. While prior studies generally conceptualize social ties based on the source of the ties (e.g. Peng & Luo, 2000; Park & Luo, 2001; Luo, 2003), we provide an alternative conceptualization based on the function of the ties, i.e. the kinds of resources SMEs can acquire via their ties to fill the gap of institutional voids. Moreover, we theoretically integrate the direct effect of social ties on firm performance with firm-level moderating factors, i.e. absorptive capacity and entrepreneurial orientation. In a holistic framework, this study not only investigates the main effects of three widely used constructs in SME research (namely social ties, absorptive capacity and entrepreneurial orientation) on SME’s performance; but also examines the differential effects of social ties in interaction with absorptive capacity and entrepreneurial orientation. Absorptive capacity as a type of firm’s dynamic
capability has been proven to increase firm performance (e.g. Gao et al., 2008; Zhang & Li, 2008; Zahra & Hayton, 2008). Similarly, the literature of entrepreneurship indicates that entrepreneurial orientation, with its three core dimensions of risk-taking, acting proactively and innovativeness has a positive impact on firm performance (e.g. Covin & Slevin, 1991; Smart & Conant, 1994; Wiklund, 1999; Keh, Nguyen, & NG, 2007). Beyond these direct effects, the proposed integrated framework demonstrates the logic that key constructs can magnify the effects of each other in terms of boosting SME performance.

LITERATURE REVIEW OF KEY CONSTRUCTS

Social Ties
Research generally divides network into business network and social ties (Ellis, 2011). A business network is normally described as a set of relationships linking one firm with other firms (Easton & Hakansson, 1996), whereas social ties is the relationships linking one person with other people (Burt, 1992). Scholars focus on developed economies have been paying more attention to business network, such as strategic alliance, business partners or other inter-firm relationships (e.g. Goerzen, 2007; Baum, Calabrese & Silverman, 2000; Gulati, Nohria & Zaheer, 2000; Adegbesan & Higgins, 2011). However, researchers of emerging or transition economies have been concentrating on social capital embodied social ties, which are considered as a micro-level construct that affects firm’s performance (e.g. Peng & Luo, 2000; Zhang & Li, 2008; Gao et al., 2008; Danis, Chiaburu & Lyles, 2010; Ellis, 2011; Acquaah, 2007).

Drawing from an institutional perspective, SMEs in institutionally underdeveloped countries rely more on the social ties in order to reduce environmental uncertainties and turbulences (Le, Venkatesh & Nguyen, 2006; Peng, 2003). Some activities such as obtaining market information, interpreting regulations, and enforcing contracts, which are undertaken by the market in developed economies, may rely heavily on firm executives’ personal efforts (Peng & Luo, 2000). The social ties may serve as substitutes of formal institutions, playing an important role in accessing the critical external buffers and overcoming the institutional voids (Xin & Pearce, 1996). Peng and Luo (2000) and Li (2005) identify two
types of social ties: (1) ties with business partners, which are connections with top managers at other corporations, such as buyers, suppliers, and competitors, and (2) connections with government officials. More recently, Gao et al. (2008) argue that it would be more fruitful to categorize managerial ties based upon the kinds of information flowing through them, and they divided social ties with other business entities into three types, namely suppliers and customers, agencies and competitors; and added a new sub-category of social ties that is ties with universities. They claim that as an important source for new scientific knowledge, university ties are dissimilar from other business ties including ties with suppliers, customers, agencies, and competitors; but more like cooperating with the officials.

**Entrepreneurial Orientation**

Miller and Friesen (1982) proposed the construct of entrepreneurial orientation (EO) to explain variance in firm performance. Entrepreneurial orientation is a firm-level construct that has been defined as the propensity by a company’s top management to take calculated risks, be innovative, and demonstrate strategic proactiveness (Covin & Slevin, 1989; Miller, 1983). It is a psychological construct that reflects the intentions and inclinations of the organization’s key players toward entrepreneurial tasks and behaviors. There are three dimensions of EO, **risk-taking** propensity refers to the willingness to commit significant resources to exploit opportunities or engage in business strategies in which the outcome may be highly uncertain. **Proactiveness** reflects entrepreneurial willingness to dominate competitors through a combination of proactive moves, such as introducing new products or services ahead of competition and acting in anticipation of future demand to create change and shape the environment. Finally, **innovativeness** involves a firm’s tendency to engage in creative processes, experimentation of new ideas, which may result in the institution of new methods of production and/or bringing new products or services to current or new markets.

**Absorptive Capacity**
Cohen and Levinthal (1990) conceptualize absorptive capacity (ACAP) as the firm’s dynamic capability to identify, assimilate, and exploit knowledge acquired from external sources. As such, ACAP facilitates knowledge accumulation and its subsequent use. Because exploiting externally acquired knowledge usually requires converting its content into a usable form, Zahra and George (2002) broaden ACAP from the original three dimensions (identify, assimilate, and exploit) to four dimensions (acquire, assimilate, transform, and exploit). It is argued that a firm’s ability to (1) acquire new knowledge and know-how, (2) assimilate the acquired knowledge, (3) transform it to fit the organizational routine and needs, and (4) exploit the acquired knowledge and know-how, are critically important for the firm to adapt to, survive, and succeed in dynamic competitive environments.

AN INTEGRATED FRAMEWORK OF SME PERFORMANCE

In this section we discuss the direct and interaction effects of aforementioned key constructs on the performance of SMEs in emerging economies. We start by re-conceptualizing the construct of social ties and then investigating the interaction of social ties with both EO and ACAP as they determine a firm’s success in a competitive environment which is featured with both institutional voids and a high level of dynamisms. We discuss the framework in several specific theoretical propositions.

Re-conceptualizing Social Ties

Following Gao et al.’s (2008) focus on the kind rather than the origin of information flow through the social ties, we argue that social ties can be re-conceptualized based on their functions. While the kind and the origin of information embedded in social ties are naturally related, recognizing the kind, and thus the specific functions of social ties are especially important when examining their effects on firms’ dealing with institutional voids, which pose various difficulties to firms and require different kinds of resource input (Khanna & Palepu, 2010). Based on prior studies of institutional voids in emerging economies and network ties of SMEs (e.g. Walter, Auer & Ritter, 2006; Zhang, Souitaris, Soh & Wong, 2008), we re-conceptualize social ties into five functional categories – the social ties that enable SMEs to access (1)
technological knowledge, (2) market intelligence, (3) financial capital, (4) high-end human resource and (5) institutional benefits. This re-conceptualization is based on the resource-based view, which sees a firm as a unique bundle of tangible and intangible resources (Barney, 1991). Valuable, rare, inimitable, and non-substitutable resources are the origin of the firm’s competitiveness and support the firm to overcome institutional voids and to achieve better performance. Specifically, technological knowledge, market intelligence, financial capital, high-end human resource and institutional benefits are vital resources to the survival, development and performance of SMEs. However, it is unlikely that SMEs possess all of these tangible and intangible assets. From network perspective, if a firm lacks certain assets or capabilities, alternatively, it can compensate for this disadvantage by acquiring complementary resources externally through social ties (Lee, Lee & Penning, 2001; Pennings, Lee, & Wittelloostuijn, 1998; Peng & Luo, 2000; Uzzi, 1997; Yli-Renko, Autio, & Sapienza, 2001). The above arguments form the theoretical foundation of our re-conceptualization of social ties. Below we discuss each functional category of social ties in more details.

First and foremost, technological knowledge is a core asset of firms (Wiklund & Shepherd, 2003). Technology knowledge can lead to a technological breakthrough that may lead to new business opportunity (Abernathy and Utterback, 1978), and can enhance a firm’s performance by determining the product’s optimal design to optimize functionality, cost, and reliability. Therefore, technological knowledge can facilitate SMEs to achieve better performance by providing the ability to rapidly exploit opportunities, reduce the cost, or to be able to respond quickly when competitors make advancements (Cohen & Levinthal, 1990).

Secondly, entrepreneurship and marketing literature have noted that information of customers, suppliers, and competitors has significant effect on marketing decision making (Smeltzer, Fann & Nikolaisen, 1988; Brush, 1992; Menon & Varadarajan, 1992; Deshpandé & Zaltman, 1982). Keh et al. (2007) proposed that market intelligences can improve firms’ performance by helping SMEs to better meet the needs of their customers and compete more effectively against their competitors. Since the shortage of resource and lack of experience, it is extremely difficult for SMEs to get access to market
intelligences, such as purchasing reports or data sets. Alternatively, they may obtain some informal information come through social ties.

Thirdly, it has become a widely held premise that people provide organizations with an important source of sustainable competitive advantage (Pfeffer, 1994; Wright, McMahan, & McWilliams, 1994; Youndt, Snell, Dean & Lepak, 1996; Hitt, Bierman, Shimizu & Kochhar, 2001). The high-end human resources refer to experienced or highly educated people that SMEs required. Many theoretical and empirical studies in economics have demonstrated the significance of knowledge and experience in enabling firms to successfully implement and adapt to changes in technology (Bartel & Lichtenberg, 1990; Siegel, Waldman, & Youngdahl, 1997). Moreover, several scholars (Wright, Liu, Buck & Filatotchev, 2008) argue that experienced practical business experts that have commercial experience are also crucial, in terms of impacting on firm performance. For SMEs, with relatively limited financial incentive and little margin for error, firms rely on social ties to identify, recruit and retain talents for business growth.

Financial Capital is another key factor that influences firm’s performance, since SMEs need financial capital to get their firm off the ground and grow. Access to finance resource is a key determinant for SMEs’ success (Ahlstrom & Bruton, 2006; Le, Venkatesh, & Nguyen, 2006). This is particularly true in emerging economies because such financing channels are severely constrained. For example, capital markets, venture capital, and angel investors are typically at nascent stages of development; and in terms of bank loans, lending to SMEs is perceived to be risky by banks, as the institutional environment in emerging economies is less developed (Le & Nguyen, 2009). Therefore, personal ties are often regarded as an alternative substitution for formal institutions (Ahlstrom & Bruton, 2006; Xin & Pearce, 1996). A number of studies suggest that networking between entrepreneurs, bankers, government officials, and friends and relatives may play an important role in helping both lending institutions and corporate borrowers (Le et al., 2006; Peng & Luo, 2000).

Last but not least, institutional benefits refer to the supportive benefits, incentives or reduction of institutional costs that firm could have obtained. In previous study (Peng & Luo, 2000), researchers have found that these types of institutional benefits can be acquired through social ties with government
officials and lead to better performance. It is because the government still controls significant portions of strategic factor resources and has considerable power to approve projects, allocate resources (Li & Zhang, 2007) and even guarantee the enforcement of the contracts. SMEs can benefit from institutional preferences in terms of reduction of taxes, free land, or simplification of administration procedure, and register of business, etc.

To sum up, from the resource-based view, diverse social ties that enable SMEs to gain access to different valuable, unique and intangible resources can give firms significant advantages and enable them to achieve superior performance. Hence, we propose that:

Proposition 1: SMEs’ utilization of social ties, which enable them to gain access to different essential resources, is positively related to their performance.

EO and ACAP in an Emerging Economy Context

Studies in developed economy have found a positive relationship between EO and firm performance (Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005; Keh, Nguyen, & Ng, 2007; Lee et al., 2001), because high EO is closely related to first-mover advantages and the tendency to take advantage of emerging opportunities, which ultimately has a positive influence on performance (Wiklund, 1999). This positive relationship, however, is often not replicated in emerging economies, which may be explained by differences in constraints faced by firms operating in different contexts (Lumpkin & Dess, 1996; Tang, Tang, Marino, Zhang, & Li, 2008). Specifically, the lack of internal resources and capabilities (e.g., networking capabilities and financial resources) and external formal institutions (e.g., immature financial and labor market and the restrictive regulation of government) can influence managerial risk taking, innovativeness, and proactiveness, which affect firm performance (Peng, 2003; Yamakawa, Peng, & Deeds, 2008). Accordingly, research suggests that a contingent approach should be adopted to investigate relationship between EO and firm performance (Walter et al., 2006; Wiklund, 1999; Wiklund & Shepherd, 2003, 2005). For instance, Tang and Tang’s (2010) study indicates that the effects of strategies can be a moderator between EO and performance; Walter et al. (2006) also found that a network capability is
another moderating factor. Moreover, several researchers have tried to explain the curvilinear effect by identifying mediating factors between EO and performance (e.g. Wang, 2008; Zhao, Li, Lee, Chen, 2011). They argue that lack of internal resources and under the uncertain circumstance, being entrepreneurial may be too risky for SMEs because too many factors are out of control. Considering the institutional context of emerging economies, especially China (e.g. Covin & Slevin, 1991; Smart & Conant, 1994; Wiklund, 1999), we propose:

*Proposition 2*: The relationship between entrepreneurial orientation and firm performance is curvilinear (inverse U-shaped); with the best performance occurring at an intermediate level of EO.

ACAP is also critical to firm’s performance in dynamic environment notably in emerging economies. Research has shown that ACAP influences business performance (e.g. Gao et al., 2008; Zhang & Li, 2008; Zahra & Hayton, 2008). Specifically, the four dimensions of ACAP play different but complementary roles in explaining how ACAP can influence the organizational outcomes. The assimilation, transformation and exploitation capabilities are likely to influence a corporation’s innovation, generate competitive advantages and lead to good performance. For example, after assimilated the new information or technology, transformation capabilities help corporations to develop new blueprints of products, and then exploitation capabilities can convert knowledge into new products. Of course, acquisition capabilities is the first and foremost dimension of ACAP, because without this very first step, no information or technology knowhow would be assimilated, transformed or exploited by the firms. Therefore, SMEs with a high level of ACAP are more likely to enhance their performance. Thus:

*Proposition 3*: SME’s possession of absorptive capacity is positively related to its performance.

**Interaction of Social Ties and Absorptive Capacity**

Prior studies imply that social ties and absorptive capacity (ACAP) should be jointly considered as sources of value creation (Gao et al., 2008; Zhang & Li, 2008). While ACAP focuses on internally accumulated resources or capabilities, social ties, as a relational capability, emphasizes acquiring external
resources through networks. In other words, ACAP and social ties are complementary sources of competitiveness.

SMEs should develop their internal ACAP while obtaining complementary resources through their social ties; the two concepts ought to be synthesized (Lee et al., 2001). Imaging a firm without social ties and restricted to cultivating resources internally, it is less likely for the firm to access intangible external assets, such as technological knowledge, market intelligence, capital or any other type of resources resident in other firms, institutes or government authorities, which may result in a limited opportunity set for firm growth. Furthermore, social ties also can affect the internal resources exploiting activities of the firms. For instance, SME may obtain financial or technological supports from other entities during the commercialization process of new products (Lee et al., 2001; Zaheer & Bell, 2005). Similarly, the value of social ties is also contingent on ACAP. While social ties enhance firm performance directly through information sharing and resources acquisition; firms well-endowed with absorptive capacity are better positioned to leverage external resources. With a low level of ACAP, no matter how many resources available through its social ties, a firm still cannot acquire the valuable assets and transform them into competitive advantages. In sum, the enhanced firm performance is likely to be a joint result of internal resources, providing the basis for absorptive capability to managerial ties, enabling the firm to mobilize and leverage more external resources. Hence:

**Proposition 4:** Social ties and absorptive capacity have a positive interaction effect on SMEs’ performance.

**Interaction of Social Ties and Entrepreneurial Orientation**

Research has found that the effect of EO on firm performance is contingent on various contextual and organizational factors. They argue that greater insight into performance might be gained through investigating the integrative mechanisms that ensure complementarity among a firm’s diverse aspects. For instance, Lumpkin and Dess (1996) in their conceptual model suggest that factors internal and external to the firm may moderate the relationship between EO and performance. Empirically, Tang et al. (2008)
point out that high-EO firm may not obtain a competitive advantage because of the lack of institutional support, financial capital, human capital or technological capabilities, which are required for firms to engage in high-risk and innovative projects. Walter et al. (2006) empirically support this argument by examining the positive moderating effect of network capabilities on the EO–performance relationship.

Wiklund and Shepherd (2005) even conclude a configurational model (three way interaction) and reveal that EO is not only contingent on environment dynamics, but also on the firm’s access to the financial capital. As discussed above, SMEs without sufficient resources may be alternatively conferred through their social network ties, and therefore, social ties may moderate the effect between EO and firm performance.

Similarly, the effect of social ties is also contingent on EO. In terms of proactiveness, Luo (2003) states that from an industry perspective, more proactive firms in China have to interact more frequently via network ties with industrial stakeholders, especially buyers, suppliers, distributors, and regional governments because more proactive firm who are constrained by industrial conditions would depend more heavily on managerial networks. Therefore, in order to reap the benefits of market opportunities or subdue competitive or threats, proactive firms need to strengthen social network ties in response to structural conditions. Furthermore, risk taking propensity (another dimension of EO) is another contingent factor. The assets obtained via social ties are not “free lunch” that firms can take for granted. It is always governed by informal norms of reciprocity (“You help me, I help you”). The implication is that those complementary buffers obtained through ties are never free, as reciprocity is expected to maintain the social norm. The firm may have to return the favor somehow in the future. Second of all, occasionally the firms have to commit time and resources to foster the ties upfront, however, there is no guarantee that SMEs who invested in network ties could get expected payoff all the time. Therefore, in some special circumstances, firm with low risk tolerance may be not willing to invest or use social ties. Thus, the risk taking propensity may have moderating effect on the relation between possession of social ties and SMEs performance, because firms with higher risk taking tendency are more likely to use social ties to get
access to external buffers. Given that EO and social ties are contingent on each other in terms of influencing firm performance, we propose:

**Proposition 5:** Social ties and entrepreneurial orientation have a positive interaction effect on SMEs’ performance.

Figure 1 depicts the synthesized framework where the above discussed five propositions are derived. This framework offers future research opportunity to both theoretically expand and empirically validate the theoretical arguments proposed in this study. As a guide for future empirical studies, we outlined possible measurements for the key constructs in the appendix of this paper.

[Insert Figure 1 about here]

**DISCUSSION**

This paper aims for explaining the effects of social ties, entrepreneurship orientation and absorptive capacity on SME performance. It contributes to the SME and strategic management literature by studying SMEs facing institutional voids, which is an underexplored area in the literature. Second, it offers a re-conceptualization of social ties, which opens opportunities for future research to investigate what exactly firms obtain through their social ties and the extent to which such ties influence SMEs’ performance. Third, this study proposes an integrated framework which takes into account the interaction effects of the key constructs which have been independently, but not jointly, investigate in prior research.
REFERENCES


Figure 1: An Integrated Framework SME Performance
APPENDIX: MEASUREMENT OF KEY CONSTRUCTS

**Measurement of firm performance:** The overall performance can be measured from three aspects: financial performance, customer relationship quality, and realized competitive advantages. The major measurement scales are adapted from several entrepreneurship empirical studies (Walter et al., 2006; Tang et al., 2008; Keh et al., 2007). Due to common method variance concern, performance should be measured by two separate raters in each firm, typically the CEO and CTO. Financial performance is measured by four items that asked CEOs and CTOs to evaluate their firms’ performance relative to their principal competitors on (1) sales growth rate, (2) market share, (3) profitability, and (4) overall performance (McDougall, Covin, Robinson, & Herron, 1994). Although there are limitations to perceptual data in terms of increased measurement error and potential for mono-method bias, previous research indicates that perceptual measures correlate positively with objective measures of firm performance (Murphy and Callaway, 2004; Murphy et al., 1996; Gupta and Govindarajan, 1984).

Customer Relationship Quality is also a higher order construct often encompassing three distinct, although related dimensions of business relationships: (1) trust, (2) satisfaction, and (3) commitment (Crosby et al., 1990). Perceived customer relationship quality (CRQ) is measured by obtaining individual responses to the achievement of three customer objectives on a 7-point scale: customer satisfaction, customer trust, and customer retention. A firm’s Realized Competitive Advantages, as nonfinancial performance is measured by four items indicating the extent to which a SME has gained advantages in its (1) generation of knowhow, (2) customization of technologies, (3) cost savings, and (4) securing of long-term survival. Discriminant validity between the three subjective performance measures (financial performance, perceived CRQ, realized competitive advantages) can be evaluated using the criterion suggested by Fornell and Larcker (1981).

**Measurement of social ties:** Managerial ties are decomposed into ties enabling SMEs to gain access to (1) technological knowledge, (2) market intelligence, (3) financial capital, (4) high-end human resource, and (5) institutional benefits. To measure the degree of social ties, one can follow Peng and Luo
(2000) and Luo’s (2003) survey items. Such measurement has advantage compared to name-generator method used in other prior studies. This is because personal relationships are generally regarded as business secrets in emerging economies such as China. The respondents will be reluctant to reveal the names of their contacts, which makes the name-generator method commonly used in network studies less applicable. The reliability of the perceptual measurement has been supported by previous research (Park & Luo, 2001; Peng & Luo, 2000).

Measurement of entrepreneurial orientation: Covin & Wales (2011) have reviewed the EO literature and recommended four measurement scales for EO, which are (1) the Covin and Slevin (1989) EO scale (2) an alternative first-order reflective EO scale corresponding to Miller’s (1983) composite view of EO, (3) the Hughes and Morgan (2007) EO scale, and (4) a “Type II” second-order formative EO scale (i.e., reflective first order, formative second order) based on the item pool generated by Hughes and Morgan (2007) and constructed using the previously-described procedure advocated by Diamantopoulos and Sigauw (2006). Lumpkin and Dess (1996, p. 137) suggest that “the dimensions of EO may vary independently of each other in a given context.” Therefore, we suggest that EO be deliberately treated as a disaggregated set of constructs in light of Hughes and Morgan’s intent to study the independent effects of these sub-dimensions on firm performance.

Measurement of absorptive capacity: Even though Cohen and Levinthal (1990) highlight the multidimensionality of ACAP, prior empirical research has generally measured it as a uni-dimensional construct, often using a firm’s R&D spending intensity as a proxy for this construct. This practice raises questions about the veracity of the claims made in the literature about the nature and contributions of ACAP. Flatten, Engelen, Zahra and Brettel (2011) have developed and validated a multidimensional measurement of ACAP, building on relevant prior literature, a series of pre-tests, and two large survey-based studies of German companies. According to their study, there are three items for acquisition and exploitation; and four items for assimilation and transformation. The Cronbach’s alpha for each dimensions are 0.73 (acquisition), 0.85 (assimilation), 0.93 (transformation) and 0.80 (exploitation)