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Cultural distance, innovation and export performance

An examination of perceived and objective cultural distance

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Abstract

Purpose – This paper aims to examine the relationship between cultural distance (both perceived and objective), innovation and firm export performance.

Design/methodology/approach – Hypotheses were tested here by structural equation modeling using data from 186 export ventures into 23 international markets by Swedish companies.

Findings – The results indicate that managers' perceptions of substantial cultural differences as well as objective cultural differences (gauged using Hofstede's (1980, 2001) scores for dimensions of national culture) and subsequent environmental uncertainty when expanding into culturally distant markets triggers strategies for interacting and integrating with the market environment. These include producing and adopting innovations to processes and products and to organizational strategy, structure and administrative procedures to cope with the new environment and overcome uncertainties. These innovations and the associated competitive advantages improve firm export performance.

Originality/value – Despite much research into the relationship between firm internationalization and innovation, little attention has been paid to the effect of the characteristics of the foreign markets (specifically cultural differences) on firm innovation strategies. Moreover, much research has been devoted to the effect of innovation on firm export performance, but such research has mainly focused on one type of innovation, i.e. technological innovation, while the influence of organizational innovation on firm export performance has been basically ignored. The present study validates the explanatory of cultural distance (both perceived and objective) in relation to innovation strategies (technological and organizational) and export performance.

Keywords Uncertainty, Innovation, Export performance, Cultural distance

Paper type Research paper

Introduction

Internationalization is a process of developing business opportunities outside the domestic market (Lu and Beamish, 2001), though it is a process characterized by a high degree of uncertainty (Miller, 1993; Johanson and Vahlne, 2009). Cultural distance is an

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important source of uncertainty for firms during their internationalization process (Johanson and Vahlne, 1977; Ghemawat, 2001; Shenkar, 2001; Slangen and Van Tulder, 2009). Differences in norms, ideas, values and beliefs in culturally distant markets increase the liability of foreignness and uncertainty that makes the firm see itself as lacking sufficient market information to accurately predict the challenges facing it in the new foreign market (Harzing, 2003; Yamin and Sinkovics, 2006; López-Duarte and Vidal-Suárez, 2010).

Innovation is a crucial component of firms' strategies (Gunday *et al.*, 2011). Innovation is a means to facilitate an organization's adaptive changes to the environment and cope with environmental uncertainties (Damanpour and Evan, 1984; Damanpour *et al.*, 2009), and thus a source of competitive advantage in international markets (Pla-Barber and Alegre, 2007). Firms adopt innovations to gain first or early mover advantages that would lead to superior performance (Damanpour *et al.*, 2009) or to eliminate a performance gap caused by uncertainties in the external environment (Damanpour and Evan, 1984).

Despite much research into the relationship between firm internationalization and innovation (Hitt *et al.*, 1997; Kotabe *et al.*, 2002; Kafouros *et al.*, 2008), little attention has been paid to the effect of the characteristics of the foreign markets on firm innovation strategies (Alvarez and Robertson, 2004; Azar and Drogendijk, 2014). Through an empirical study, Alvarez and Robertson (2004) found that the extent of the foreign market's development influences firms' innovation activities. They revealed that firms which export to developing countries are more likely to have R&D units and to invest in product design, whereas firms which export to developed countries are more likely to invest in new products and production processes. It has been claimed that exporting to developed markets requires upgrading of production processes (technology) to meet the market's specifications, while exporting to developing markets demands leadership in product design and research (Gereffi, 1999). In an empirical study of Swedish exporters, Azar and Drogendijk (2014) concluded that firms which export to psychically distant markets are more inclined to innovate, presumably to cope with the requirements of the foreign market environment and overcome uncertainties (Silva *et al.*, 2010).

Furthermore, innovation has been presented as a crucial determinant of a firm's export performance (Sousa *et al.*, 2008). Accordingly, changes in the firm's environment necessitate changes in the firm's strategies to cope with the environment (Lawrence and Lorsch, 1967). Hence, a fit between firm innovation strategy (as a firm export marketing strategy) and foreign market environment would lead to enhanced firm export performance (Zeithaml and Zeithaml, 1988; Sousa *et al.*, 2008). However, as Pla-Barber and Alegre (2007) argue, knowledge of internal determinants of export performance, specifically innovation, is contradictory and warrants further research.

Much research has been devoted to the effect of innovation on firm export performance (Roper and Love, 2002; Lages *et al.*, 2009; Hortinha *et al.*, 2011; D'Angelo, 2012); yet, such research has mainly focused on one type of innovation, i.e. technological innovation, while the influence of organizational innovation on firm export performance has been basically ignored (Damanpour and Evan, 1984; Armbruster *et al.*, 2008; Birkinshaw *et al.*, 2008; Damanpour and Aravind, 2011). A possible explanation for this omission is that relative to organizational innovation, technological innovation is

generally perceived to have a more clear association with firm performance (Damanpour and Evan, 1984). However, according to Hamel (2006), organizational innovation can also provide sustained competitive advantages for the firm. Damanpour and Aravind (2011) argue that the adoption of a single type of innovation or even a set of only one type of innovation might not enable firms to fully realize the positive consequences of innovation on performance. Coping with changes and uncertainties in the environment and obtaining superior performance require a balanced introduction of a portfolio of different types of innovations, i.e. both technological and organizational innovations (Damanpour and Evan, 1984; Damanpour and Aravind, 2011). According to Camisón and Villar-López (2014), the complex interrelationships among technological and organizational innovations generate valuable, non-substitutable and inimitable strategic assets that create differentiation and lead to superior performance (Barney, 1991; Amit and Schoemaker, 1993).

The present study seeks to extend previous research on cultural distance, innovation and export performance by developing and testing empirically a framework that links these ideas. The main aim is to examine whether cultural distance between the host market and a foreign market stimulates the adoption of innovations, leading to enhanced firm export performance. Thus, the contribution of this study is as follows. First, we examined the importance of uncertainty as a result of cultural distance (perceived and objective) between home and foreign markets in explaining firm innovation strategies. Although much research has examined the effect of uncertainty on innovation, to our knowledge, no previous study has investigated the impact of uncertainty resulting from cultural differences in foreign markets on firm innovation strategies. This knowledge is important, as implementing appropriate innovation strategies enables firms to overcome uncertainties and reap the benefits of business opportunities in culturally distant markets (Evans and Mavondo, 2002). Furthermore, as recommended by previous research (Magnusson *et al.*, 2008a; Ambos and Håkanson, 2014), we measured cultural distance using both objective and perceptual data. Although aggregated data from secondary sources have been the dominant source used in determining the cultural distance between countries, scholars point to the importance of using perceptual data in assessing cultural differences; managerial perceptions of the firm's environment strongly influence the strategic decisions by which the firm responds to its environment (Child, 1972; Beyer *et al.*, 1997). We then tested the influence of a cumulative adoption of innovation types (technological and organizational) – as suggested by previous studies – on firm export performance, to determine the effect of synergistic use of different types of innovation. According to Sousa *et al.* (2014, p. 501), understanding the determinants of export performance is a crucial area of research not only for academics but also for practitioners and policymakers; “successful export operations are crucial to both the firm and national prosperity”.

Cultural distance as a source of uncertainty

Culture is defined as “the collective programming of the mind that distinguishes the members of one group or category of people from another” (Hofstede, 2001, p. 9). According to Brown (1995, p. 8), culture consists of “basic human norms, ideas, values, and beliefs that develop continuously over time, helping to guide what would be

considered acceptable human behavior within a given society". Therefore, cultural distance can be defined as the difference between countries in terms of norms, ideas, values and beliefs (Shenkar, 2001).

The concept of cultural distance is one of the most widely studied concepts in international business (IB) research (Shenkar, 2001; Magnusson *et al.*, 2008a; Zaheer *et al.*, 2012). Cultural distance has been shown to be an important source of uncertainty for firms during their internationalization process (Johanson and Vahlne, 1977; Ghemawat, 2001; Shenkar, 2001; Slangen and Van Tulder, 2009; López-Duarte and Vidal-Suárez, 2010). Differences in norms, ideas, values and beliefs in culturally distant markets increase the liability of foreignness and uncertainty in the new foreign market (Harzing, 2003; López-Duarte and Vidal-Suárez, 2010). Carlson (1974) argues that cultural distance between countries represents a barrier to the international transfer of information, influencing the collection and interpretation costs of critical management information. Cultural distance has therefore been used to explain a variety of strategic decisions made in a firm's internationalization process, *inter alia*, foreign market selection (Dow, 2000; Dow and Karunaratna, 2006; Dow and Ferencikova, 2010; Tang, 2012), entry mode choice (Kogut and Singh, 1988; Harzing, 2003; Drogendijk and Slangen, 2006; Wang and Schaan, 2008; Slangen and Van Tulder, 2009; Chang *et al.*, 2012; López-Duarte, 2013) and international marketing strategy (Singh, 1996; Calantone *et al.*, 2004; Moon and Park, 2011; Shneor, 2012).

Perceived vs "Objective" cultural distance

Despite the dominance of aggregated measures of culture at a national level in determining the cultural distance between countries in IB research (Shenkar, 2001; Harzing, 2003; Drogendijk and Slangen, 2006), scholars suggest using perceptual data in assessing cultural differences (Johanson and Vahlne, 1977; O'Grady and Lane, 1996; Shenkar, 2001; Mezas *et al.*, 2002; Harzing, 2003; Zhao *et al.*, 2004; Håkanson and Ambos, 2010; Azar, 2014b).

A firm's external environment contains a certain degree of uncertainty, i.e. environmental uncertainty (Anderson and Paine, 1975). The degree of this environmental uncertainty depends not only on the absolute characteristics of the environment but also, and perhaps more importantly, on managerial perceptions of the environment, i.e. subjective uncertainty. Based on their perceptions of environmental uncertainty, managers formulate strategies for responding to the environmental demands (Child, 1972; Anderson and Paine, 1975; Robbins, 1996; Starbuck and Mezas, 1996; Beyer *et al.*, 1997; Evans *et al.*, 2008; Giaglis and Fouskas, 2011). To do this, managers match their firm's organizational properties to its external environment (Lawrence and Lorsch, 1967; Miles *et al.*, 1974). *Perceived* cultural distance has therefore been applied to explain a variety of firm's internationalization decisions, *inter alia*, foreign market selection (Håkanson and Dow, 2012; Azar, 2014a), entry mode choice (Kim and Hwang, 1992; Taylor *et al.*, 1998; Drogendijk and Slangen, 2006) and international marketing strategy (Evans and Bridson, 2005; Evans *et al.*, 2008; Azar, 2011; Moon and Park, 2011; Azar and Drogendijk, 2014).

Accordingly, Håkanson and Dow (2012) revealed that managers' perception of cultural differences (along with geographical distance, etc.) negatively and significantly influenced trade flows between countries. The underlying argument referred to the difficulty in obtaining and interpreting information in culturally distant markets.

Drogendijk and Slangen (2006) found that perception of substantial differences in organizational and managerial practices, as well as in communication styles in culturally distant markets, causes multinational enterprise (MNEs) to choose greenfield investments rather than acquisitions as a means to facilitate integrating firms located in those markets into an MNE's corporate network. Moreover, Evans and Bridson (2005) argue that perception of significant cultural differences between the firm's home and export markets make the firm adapt its export marketing strategies to the target market, mainly to comply with the export country's cultural values and preferences (Moon and Park, 2011).

Innovation as a response to uncertainty

Innovation is a multi-faceted construct encompassing generation, development and implementation of an idea or behavior new to the adopting organization (Damanpour, 1996). During the innovation process, ideas are transformed into new products or services, new process technologies, new organizational structures or new managerial approaches (Damanpour and Evan, 1984; Damanpour and Aravind, 2011).

A variety of typologies of innovation has been proposed (see Damanpour *et al.*, 2009 for a review). The technological–organizational typology[1] is popular among management researchers and refers to a general distinction between the firm's technological and administrative systems in which the former produces changes mainly in the firm's operating system, whereas the latter mainly influences its management systems (Damanpour and Aravind, 2011). According to Damanpour and Evan (1984, p. 394), technological innovation refers to “the implementation of an idea for a new product or a new service or the introduction of new elements in an organization's production process or service operation”. Investment in technological innovations may result in, *inter alia*, developing and licensing new technologies, adopting more efficient production techniques and introducing new products and processes (Hall and Mairesse, 1995; Kafouros *et al.*, 2008), all of which can bring competitive advantages to the firm (Zahra and Covin, 1995). Organizational innovation refers to “new approaches in knowledge for performing the work of management and new processes that produce changes in the organization's strategy, structure, administrative procedures, and systems” (Damanpour and Aravind, 2011, pp. 429-432) that enhance teamwork, information sharing, coordination, collaboration, learning and innovativeness in an organization (Gunday *et al.*, 2011). While technological innovations tend to trickle up from professionals lower in the hierarchy, organizational innovations tend to trickle down from the top management (Damanpour and Evan, 1984).

Environmental uncertainties, threats and also opportunities motivate organizations to seek adaptive change (Damanpour *et al.*, 2009). Previous research maintains that innovation is a crucial component of a firm's strategies that facilitates adaptive change to the environment and coping with environmental uncertainties (Damanpour and Evan, 1984; Damanpour *et al.*, 2009; Gunday *et al.*, 2011). Damanpour *et al.* (2009) maintain that pressure from the external environment, such as competition, isomorphism and customer demand, is one of the main antecedents of the adoption of innovations to ensure a firm's adaptive behavior. Innovativeness enables firms to respond quickly to market changes or to act on market offers before their competitors, and this quick adaptability is an additional basis of competitive advantage (Zahra and

Covin, 1995). The latter is of high importance, as quick changes in technologies and increasing competition in global markets erode the value added of existing products and services (Gunday *et al.*, 2011).

In international markets, firms compete in a more demanding, heterogeneous and hence uncertain environment, which stimulates them to innovate to cope with environmental changes, overcome uncertainties and meet market conditions (Damanpour and Evan, 1984; Nassimbeni, 2001; López *et al.*, 2003; Coronado *et al.*, 2008; Silva *et al.*, 2010; Giaglis and Fouskas, 2011). However, although international markets are generally related to more uncertainty than the domestic market, some international environments may present firms with more uncertainties than others. In particular, host markets with substantial cultural differences may constitute more uncertain environments than host markets with a more similar culture to the domestic market (Carlson, 1974; Johanson and Vahlne, 1977; Evans and Mavondo, 2002). O'Grady and Lane (1996, p. 330) argue that "cultural differences [...] increase a firm's degree of uncertainty, which presents barriers to learning about the market and operating there".

Accordingly, the perception of a high degree of environmental uncertainty resulting from substantial differences in norms, ideas, values, beliefs, organizational and managerial practices along with communication styles (Carlson, 1974; Drogendijk and Slangen, 2006; Håkanson and Ambos, 2010) in culturally distant markets triggers strategies for interacting and integrating with the market environment, by producing and adopting innovations to processes and products and to the organization's strategy, structure and administrative procedures to cope with the new environment and overcome uncertainties (Pierce and Delbecq, 1977; Damanpour and Evan, 1984; Russell and Russell, 1992; Armbruster *et al.*, 2008; Damanpour *et al.*, 2009). Therefore, we hypothesize the following:

- H1.* Cultural distance between the home market and a foreign market is positively associated with adopting innovations in that market.

Innovation and export performance

Cavusgil and Zou (1994, p. 4) define export performance as "the extent to which a firm's objectives [...] with respect to exporting a product into a foreign market, are achieved through planning and execution of export marketing strategy". According to those authors, a firm uses export marketing strategy as the means to respond to the interplay of internal and external forces to meet the objectives of the export venture. Therefore, determinants of export performance can be classified into internal and external factors in which characteristics of the firm and management and export marketing strategy are among the internal factors, whereas characteristics of the foreign and domestic markets are considered as external factors (Sousa *et al.*, 2008).

According to Lawrence and Lorsch (1967), changes in the firm's environment necessitate changes in the firm's strategies to cope with the environment. External determinants of export performance are contingency variables exogenous to the focal firm which represent situational characteristics. In most instances, the firm is not able to control or manipulate these variables. Internal determinants of export performance are, on the other hand, response variables which represent the organizational or managerial actions in response to contingency factors. A fit

between contingency and response variables is expected to enhance firm performance (Zeithaml and Zeithaml, 1988).

This research focuses on cultural differences in foreign markets as the contingency factor and innovation strategy as a firm export marketing strategy categorized as a response factor (Robertson and Chetty, 2000; Sousa *et al.*, 2008; Damanpour *et al.*, 2009; Damanpour and Aravind, 2011). Firms innovate to adjust the external and internal functions to respond to environmental demands, operate efficiently and effectively and improve the performance (Damanpour and Evan, 1984). Damanpour *et al.* (2009) argue that pressure from the external environment is one of the main antecedents of the adoption of innovations to ensure a firm's adaptive behavior to maintain or improve its performance. Hence, an appropriate matching of a firm's innovation strategy to fit the foreign market environment would enhance a firm's export performance (Damanpour and Evan, 1984; Zeithaml and Zeithaml, 1988).

Past research has examined the effect of innovation on export performance; however, the focus has mainly been on technological innovations rather than organizational innovation (Roper and Love, 2002; Lages *et al.*, 2009; Hortinha *et al.*, 2011; D'Angelo, 2012). Scholars argue that having a balanced portfolio of both technological and organizational innovations is necessary for coping with changes and uncertainties in the environment and to ensure a full realization of the positive consequences of innovation on performance (Damanpour *et al.*, 2009; Damanpour and Aravind, 2011). Accordingly, the synergic use of technological and managerial knowledge resources, as a firm's internal resources, can lead to the introduction of different types of innovations (Damanpour and Aravind, 2011) and:

[...] the adoption of sets of innovations types [...] would [then] provide the organization with required capabilities and distinctive competencies to continually outperform other organizations in its population (Damanpour *et al.*, 2009, p. 656).

The influence of technological innovation on export performance is motivated by competitive advantages firms obtain through introducing new technologies, more efficient production techniques and new products and processes resulting from those innovations (Hall and Mairesse, 1995; Zahra and Covin, 1995; Kafouros *et al.*, 2008). According to Zahra and Covin (1995) and Gunday *et al.* (2011), technological innovations enable firms to respond quickly to swift changes in technologies and market environment in a highly competitive global market. The influence of organizational innovation on (export) performance has been largely neglected in past research (Damanpour and Evan, 1984; Han *et al.*, 1998; Armbruster *et al.*, 2008; Damanpour and Aravind, 2011). However, implementing organizational innovation as a response to environmental changes and uncertainties enables firms to enhance their performance (Armbruster *et al.*, 2008). Changes in the organization's strategy, structure, administrative procedures and systems as a result of organizational innovations improve the organization's climate, communication, personal policies, teamwork, information sharing, coordination and collaboration in an organization (Damanpour and Evan, 1984; OECD, 2005; Damanpour and Aravind, 2011; Gunday *et al.*, 2011), all of which can create sustained competitive advantages in the firm (Hamel, 2006). Moreover, the structural improvements brought about by organizational innovations can create an appropriate environment for the initiation and adoption of other types of innovation (Damanpour and Evan, 1984; Gunday

et al., 2011). In an empirical study of Spanish industrial firms, Camisón and Villar-López (2014) found that organizational innovation enhances a firm's performance. Thus, we hypothesize the following:

- H2. The cumulative adoption of innovations (technological and organizational) in response to uncertainties resulting from cultural distance to a foreign market is positively associated with a firm's export performance.

Research methodology

Data profile and research setting

Our study sample consisted of 573 Swedish companies in the forestry, fishing, food products, beverages, garment and furniture industries that satisfied the following criteria:

- exported products for at least three years; and
- exported to at least two foreign markets.

The sample was selected randomly from a population of 963 companies using a stratified sampling method. This approach allowed us to be able to include respondents of all the above industrial sectors in the study and hence a more representative sample of the population (in comparison to, e.g., simple random sampling) (Robson, 2011).

Sweden is well suited to the subject of the study because it is a developed country with a very small domestic market, and its economy is extremely dependent on exporting into international markets. According to the World Bank's (2014) national accounts data, about 50 per cent of Sweden's gross domestic product (GDP) comes from the export of goods and services to international markets. The industries chosen for the study are also appropriate, as these industries contribute a significant share of total manufacturing exports and a high share of employment and have a proven ability to innovate, giving them a vital role specifically in the developed economies of Western countries (Hirsch-Kreinsen, 2008). Moreover, a clear trend toward a more internationalized structure (in terms of exporting) has been observed specifically in those industries in Sweden in the past decade (Statistics Sweden, 2012).

Data collection procedure

Data collection was conducted through TNS SIFO, a recognized marketing research agency in Sweden, from February to April, 2012. A formal structured questionnaire was designed for this study and used to collect data from senior managers as key informants. We assumed that this group would be most able to provide accurate responses for the purposes of this study, given their position, which allows them to review the entire organization (Glick *et al.*, 1990).

We received 158 responses from a total of 573 companies in the sample (approximately 28 per cent), amounting potentially to 316 export ventures. Following Evans and Mavondo (2002) and Evans *et al.* (2008), the respondents were first asked to nominate two foreign markets to which their company had exported products during the previous three years. They were then asked to specify which of these foreign markets they perceived as "not so different" from their home market (Sweden) in terms of culture and business practices and which they perceived as "different" from Sweden. In the next stage, the respondents were asked to answer all questions for both nominated export ventures. The complete case approach (list-wise deletion; Hair *et al.*, 2010) was

used to handle missing data. Accordingly, after removing the cases with missing data, the effective responses corresponded to 186 export ventures in 23 countries (see [Appendix 1](#) for the list of export markets). Consistent with previous research ([Lages et al., 2008](#); [Lages et al., 2009](#)), we assumed a single export venture as the unit of analysis in this study.

We tested for non-response bias by comparing early and late respondents (early respondents were defined as the first 75 per cent to return questionnaires and late as the last 25 per cent) for number of full-time employees, number of years of exporting and number of export markets. The lack of significant differences between the early and late respondents suggests that response bias was not a significant problem in the study ([Armstrong and Overton, 1977](#)).

In terms of characteristics of the sample, the majority of the respondents were CEOs of firms with fewer than 50 full-time employees. The majority of firms in the sample had significant international experience and had engaged in export operations for an average of 20 years (SD = 13.2, range = 2-55). The number of export markets for the firms averaged 8 (SD = 7.4, range = 2-37). Approximately 80 per cent of the export ventures targeted other European Union (EU) countries (including Norway[2]), while the remainder targeted non-EU countries. Firms in the food product and furniture industries were over-represented in the sample (see [Appendix 2](#) for more details about the sample characteristics).

Measures

We based our measures on the extant literature but modified them for the study context ([Churchill, 1979](#)). A list of all measured items is provided in [Appendix 3](#).

Cultural distance. Culture is a complex, intangible and subtle phenomenon which is difficult to conceptualize ([Shenkar, 2001](#)). As [Sullivan \(1994\)](#) argues, using a single indicator to measure complex concepts (such as culture) inevitably entails methodological biases, for example, misrepresenting the construct, impossibility of determining the reliability, and not taking measurement error into account in analyses. According to [Schwartz \(2011, p. 314\)](#), “culture itself is a hypothetical, latent variable measurable only through its manifestations”. Furthermore, scholars state that relying on one measure of (cultural) distance alone is potentially misleading, and therefore, researchers should incorporate more than one (cultural) distance measure ([Ambos and Håkanson, 2014](#)). [Shenkar \(2001\)](#) suggests that national-level data should be supplemented by cognitive cultural distance measures. [Magnusson et al. \(2008a\)](#) maintain that incorporating individual and national-level measures of cultural distance enhance our understanding of these concepts.

The measures of the dimensions of *perceived* cultural distance used here were adapted from [Evans and Mavondo \(2002\)](#) and [Evans et al. \(2008\)](#). These dimensions were measured based on [Hofstede's \(1980, 2001\)](#) definitions and descriptions of the four dimensions of national culture: power distance (PDI), individualism (IND), masculinity (MAS) and uncertainty avoidance (UAI) ([Appendix 3](#)). Following [Evans and Mavondo \(2002\)](#) and [Evans et al. \(2008\)](#), we asked respondents to indicate the degree to which the foreign market was similar to the home market (Sweden) on a seven-point scale (1 = totally the same; 7 = totally different). The index for each dimension of perceived cultural distance for each country was then calculated as sum of the scores for the measurement items (indicators) for each dimension ([Appendix 3](#)).

Previous research has developed a number of frameworks as basis for operationalizing the construct cultural distance (Hofstede, 1980; Schwartz, 1994; House *et al.*, 2004). Kogut and Singh's (1988) index, which is based on Hofstede's (1980) dimensions of national culture is among the most popular methods of calculating cultural differences between countries (Drogendijk and Slangen, 2006). According to Hofstede (1980), national cultures differ substantially along four dimensions, PDI, IND, MAS and UAI. Based on standardized factor analysis of questionnaires from more than 117,000 national employees in more than 40 overseas subsidiaries of IBM (1967-1973), Hofstede created ordinal scales for countries for each dimension.

Despite increasing criticism regarding theoretical and methodological issues (Spector *et al.*, 2001; Mcsweeney, 2002), Hofstede's framework is still among the most influential (Oyserman *et al.*, 2002; Kirkman *et al.*, 2006). Kogut and Singh (1988) argue that Hofstede's study has appealing attributes in terms of, for example, sample size, codification of cultural traits along a numerical index and an emphasis on attitudes in the workplace. Moreover, extensive evidence attests to the applicability of Hofstede's (1980, 2001) national cultural scores (Kogut and Singh, 1988; Shane, 1992; Morosini *et al.*, 1998; Hofstede, 2001; Drogendijk and Slangen, 2006; Burchell and Gilden, 2008; Kim and Gray, 2009; Brock *et al.*, 2011; Minkov and Hofstede, 2011; Taylor and Wilson, 2012; Dikova and Rao Sahib, 2013; Lee *et al.*, 2013). By investigating different operationalizations of cultural distance, Magnusson *et al.* (2008b) found that the cultural distance construct based on Hofstede's scores had strong convergent validity. According to Tung and Verbeke (2010, p. 1259), Hofstede's seminal work, "Culture's Consequences: International Differences in Work-Related Values (1980), succeeded in putting cross-cultural analysis at the forefront of international business research".

Consistent with previous studies (Brock *et al.*, 2011; Moon and Park, 2011; Azar, 2014b), we used Hofstede's (1980, 2001) scores for the four above-mentioned dimensions of national culture as the basis for calculating "objective" measures of cultural distance. We applied Hofstede's framework, owing to – in addition to its appealing attributes – its comparability to the *perceived* measures of cultural distance in the present study and also its large scope that cover all the foreign markets[3] nominated by the respondents in this study.

To calculate the cultural distance to the foreign markets, the deviation between the index for each dimension of each country (I_{ij}) and the corresponding index for Sweden (i.e. the home country) (I_{is}) was calculated[4]. The deviations were then corrected for differences in the variance of each dimension (V_i) (Kogut and Singh, 1988; Evans *et al.*, 2008). Algebraically, the following formula was used:

$$D_j = (I_{ij} - I_{is})^2/V_i \quad (1)$$

where D_j is the difference (distance) in the i th cultural dimension of the j th foreign market from Sweden, I_{ij} represents the index of the i th cultural dimension and the j th market, s indicates Sweden, and V_i is the variance of the index of the i th dimension. To calculate a composite index of both *perceived* and "objective" cultural distance, the average of all values of D_j was calculated (Kogut and Singh, 1988). Algebraically, the following formula was used:

$$CD_j = \sum \{I_{ij} - I_{is}\}^2/V_i/4 \quad (2)$$

This approach has been frequently used in IB research (Yeganeh, 2014). However, recently, several scholars criticized treating cultural distance as an aggregated construct (Shenkar, 2001). The main concern is the “assumption of equivalence” in the Kogut and Singh’s (1988) formula, i.e. the four Hofstede dimensions are assumed to be of equal importance, whereas scholars argue that different dimensions include different values and hence might have a variety of effects and implications (Shenkar, 2001; Yeganeh, 2014). To address this issue, we also conceptualized the cultural distance constructs (both perceived and objective) as reflective constructs comprising the distances in each cultural dimension of the foreign markets from Sweden [i.e. D_{js} in equation (1)] that are the manifestations of the overall construct (Jarvis *et al.*, 2003) (Figure 1). Using this approach allowed us to take into account the differences among the indicators (dimensions).

Innovation. Previous research on innovation has often relied on secondary data (e.g. patents) or other proxy measures (e.g. R&D intensity) to operationalize innovation (Archibugi and Planta, 1996; Nam *et al.*, 2014). However, recent research emphasizes the need for more direct measures of innovative outputs (Powell and Grodal, 2005; Freeman and Soete, 2009; Hervas-Oliver *et al.*, 2011; Nam *et al.*, 2014), not only because of shortcomings in patents and R&D intensity as measures of innovations (Freeman and Soete, 2009) but also because of sectoral differences causing bias in the use of these indicators for measuring innovation (Galizzi and Venturini, 2008; Hervas-Oliver *et al.*, 2011).

The scales used for measuring innovation in the present study were based on those developed by Weerawardena (2003b, a). We asked respondents to indicate the intensity of innovation in the foreign market that the firm had undertaken in the previous three-year period on two seven-point scales, one ranging from 1 = limited to 7 = extensive, the other from 1 = incremental to 7 = radical, respectively. We conceptualized the innovation construct as a reflective construct (O’Cass and Weerawardena, 2009) comprising technological (product and process) and organizational (managerial and marketing) dimensions that are the manifestations of the overall construct (Jarvis *et al.*, 2003). We operationalized innovation in terms of type (product, process, managerial and marketing) and degree (limited-extensive; incremental-radical) to rate the intensity of a firm’s innovation (O’Cass and Weerawardena, 2009) (Appendix 3). This method enabled us to use primary sources of data related to innovation within firms and explore their actual innovation activities. According to Nam *et al.* (2014), relying on primary data related to innovation facilitates a more accurate study of the phenomenon. Furthermore, compared with proxy measures for innovation (e.g. R&D intensity), this method is more appropriate for measuring innovation activities adopted by the study sample

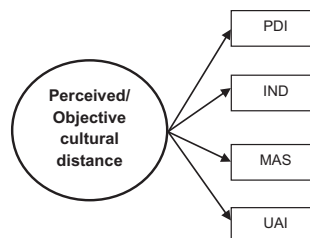


Figure 1.
A reflective model of
cultural distance

where R&D expenditure is low, and hence R&D intensity would provide a misleading view (Hirsch-Kreinsen, 2008).

Export performance. According to Cavusgil and Zou (1994), the extent to which an export venture's economic and strategic objectives are attained would determine its performance. Therefore, export performance in this study was measured through six items within two dimensions: financial performance and strategic effectiveness (Evans and Mavondo, 2002; Evans *et al.*, 2008). Regarding financial performance, the respondents were asked to indicate the degree to which several financial indicators (return on assets, return on investment, return on sales and sales) had changed in the previous three-year period in the foreign market on a seven-point scale (1 = "decrease of more than 20 per cent"; 7 = "increase of more than 20 per cent"). We measured strategic effectiveness by two indicators (achievement of strategic objectives and satisfaction with overall performance) using a seven-point scale (1 = very unsuccessful; 7 = very successful) (Evans and Mavondo, 2002; Evans *et al.*, 2008) (Appendix 3).

Control variables We used the number of full-time employees as a proxy for firm size, and together with industry type, the geographical distance[5] as well as legal and political and economic distance between the home country and foreign markets entered them as control variables in the models. We also controlled for the natural logarithm of per capita GDP of foreign markets (measured in current US dollars) (World Bank, 2014). Furthermore, to control for the effects of the introduction of free trade areas, a dummy variable was used in which the value "1" indicates that both the exporting and the foreign country belonged to the same free trade area, and "0" otherwise (Håkanson and Dow, 2012). The free trade areas included were the European Economic Community, the European Free Trade Association and the European Economic Area.

As a proxy for the extent of a firm's access to knowledge assets and critical resources for the innovation process, size may increase the firm's propensity to invest in innovations (Acs and Audretsch, 1988). On the other hand, factors such as flexibility and fluidity of communication may bring advantages for small firms in conducting innovations (Rogers, 2004; Shefer and Frenkel, 2005). The relationship between firm size and innovation may also depend on the specific technological conditions of the industry (Rogers, 2004; Shefer and Frenkel, 2005). Previous studies (Audretsch and Acs, 1991; Pla-Barber and Alegre, 2007) found a positive relationship between low-tech firm size and the generation of innovative activities, while they found no evidence of such an association among high-tech firms. Kafourous *et al.* (2008), on the other hand, suggest that returns on innovation are not related to either firm size or industry characteristics. The size of a firm is also suggested to enhance its export performance. Using economies of scale, access to specialized executives, own marketing department and sales force, possibility of financing to a lower cost and higher capacity to develop new products all can provide advantages for larger exporting firms to enhance their performance (Wagner, 1995, 2001). On the other hand, some scholars have found no significant relationship between firm size and export performance (Wolff and Pett, 2000; Contractor *et al.*, 2005). Sousa *et al.* (2008) argue that these inconsistencies may be due to non-uniformly used measures for firm size and variations in the meaning of the terms SME and large firm among the countries.

Geographical distance is associated with the increased transportation and communication costs in cross-border business (Ghemawat, 2001). Carlson (1974)

suggests that geographical distance influences the transmission costs of critical management information that requires face-to-face relations. [Håkanson and Ambos \(2010\)](#) revealed that geographical distance influences managers' perceptions of cultural and other differences in foreign markets. They argue that geographical distance creates significant barriers to international interaction, which leads to reduced international trade and information flows. Therefore, greater geographical distance to the target market increases managerial perceptions of cultural distance in that market. The geographical distance and target market's GDP variables are consistent with the classic gravity approach ([Rauch, 1999](#)).

Finally, previous research revealed that entering foreign markets with substantial differences in legal and political and economic environment entails high level of uncertainties for the firms that influence their performance ([Evans and Mavondo, 2002](#)). To capture such distances, we adopted three indicators for legal and political distance and three indicators for economic distance from [Evans and Mavondo \(2002\)](#). We asked respondents to indicate the degree to which the foreign market was similar to the home market (Sweden) on a seven-point scale (1 = totally the same; 7 = totally different) ([Appendix 3](#)).

We assessed the measurement model properties and analyzed the structural models using maximum likelihood estimation with LISREL 8.8 ([Jöreskog and Sörbom, 2006](#)). We assessed all measures for convergent validity by performing a confirmatory factor analysis and calculating average variance extracted (AVE) ([Fornell and Larcker, 1981](#)) for all constructs ([Appendix 3](#)). All the AVE values were greater than 0.5, indicating convergent validity. We evaluated the second-order models for their psychometric properties and model fit and assessed the second-order constructs for internal consistency by calculating composite reliability (CR) ([Bagozzi, 1980](#)). All second-order constructs met the suggested minimum value for CR (i.e. 0.7) ([Nunnally, 1978](#)). We assessed individual item reliability by examining the standardized loadings of items on their corresponding construct. All items had loadings of 0.7 or more (0.5 is the minimum accepted value), which implies that all items converged on the common construct ([Gerbing and Anderson, 1988](#)). We determined the corresponding Cronbach's alpha values for all of the constructs, as shown in [Appendix 3](#). All values were greater than 0.8, indicating high reliability and consistency of the entire scale (0.6 is the lower limit for Cronbach's alpha) ([Hair et al., 2010](#)).

Following previous research ([Selnes and Sallis, 2003](#); [Evans et al., 2008](#); [Lages et al., 2009](#)) for hypothesis testing, we aggregated the innovation, firm performance, legal and political distance and economic distance constructs by summing the measurement items. Statistical properties of the variables are reported in [Table I](#).

To test for discriminant validity, we compared the AVE for the indicators of each latent construct and the square of the correlation estimate of the latent constructs ([Fornell and Larcker, 1981](#)). The AVE should be greater than the squared correlation estimate, i.e. the latent construct should explain more of the variance in its item measures that it shares with another construct ([Hair et al., 2010](#)). We conducted this test for all latent constructs in the same conceptual domains. In all cases, the AVE values were greater than the squared correlation estimate ([Table I](#)).

Because all the main variables (except "objective" cultural distance) in this study were collected from the same respondents, we used procedural and statistical remedies

No.	Constructs/variables	Internal consistency	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Perceived cultural distance	0.984	3.79	3.64	0.970															
2	Objective cultural distance	N/A	1.79	2.19	0.565**	N/A														
3	Product innovation	0.805	6.38	3.01	0.077	0.092	0.826													
4	Process innovation	0.866	5.14	3.06	0.150*	0.125	0.581**	0.883												
5	Managerial innovation	0.916	4.98	2.92	0.187*	0.045	0.455**	0.547**	0.928											
6	Marketing innovation	0.908	5.31	2.99	0.131	0.083	0.568**	0.548**	0.603	0.913										
7	Financial performance	0.924	16.27	4.85	-0.067	0.006	0.1105	0.129	0.025	0.122	0.882									
8	Strategic effectiveness	0.909	7.29	3.00	-0.010	-0.022	0.341**	0.345**	0.283**	0.382**	0.636	0.909								
9	Legal and political distance	0.932	8.7	0.370	0.835**	0.624**	0.055	0.134	0.160*	0.143	-0.020	0.038	0.907							
10	Economic distance	0.880	8.89	4.66	0.731**	0.484**	0.059	0.119	0.119	0.170*	0.018	0.157*	0.776**	0.938						
11	Firm size ^a	N/A	1.42	0.790	0.018	0.002	0.001	-0.27	0.033	0.031	0.030	0.131	-0.018	-0.013	N/A					
12	Industry type ^a	N/A	4.34	1.56	-0.050	-0.090	0.032	-0.008	-0.004	-0.013	-0.200**	-0.155*	-0.064	-0.032	-0.198**	N/A				
13	GDP per capita (in)	N/A	10.71	0.964	-0.421**	-0.615**	-0.014	-0.042	0.023	-0.044	-0.043	-0.030	-0.531**	-0.420**	-0.023	0.090	N/A			
14	Geographical distance (in)	N/A	6.75	0.992	0.477**	0.731**	-0.034	0.056	-0.012	-0.033	0.052	-0.016	0.523**	0.366**	-0.071	-0.119	-0.478**	N/A		
15	Free trade area (dummy)	N/A	0.80	0.040	-0.552**	-0.774**	-0.081	-0.140	-0.021	-0.070	-0.044	-0.005	-0.604**	-0.434**	0.029	0.076	0.492**	-0.834**	N/A	

Notes: * Correlation is significant at the 0.05 level (2-tailed); ** correlation is significant at the 0.01 level (two-tailed); diagonal figures (in bold) are square root of the average variance extracted; ^a firms were grouped into four/six size/industry categories (Appendix 2)

Perceived and
objective
cultural
distance

Table I.
Correlations, internal
consistency, means,
standard deviations and
average variance
extracted

as suggested by Podsakoff *et al.* (2003) to safeguard the findings against common method variance (CMV) (Fiske, 1982). In terms of procedural remedies:

- we used paper and pencil-administered questionnaires instead of face-to-face interviews as the medium to gather data;
- we protected respondent anonymity to reduce evaluation apprehension; and
- we improved scale items by defining terms used in the questionnaires and provided examples to clarify the concepts.

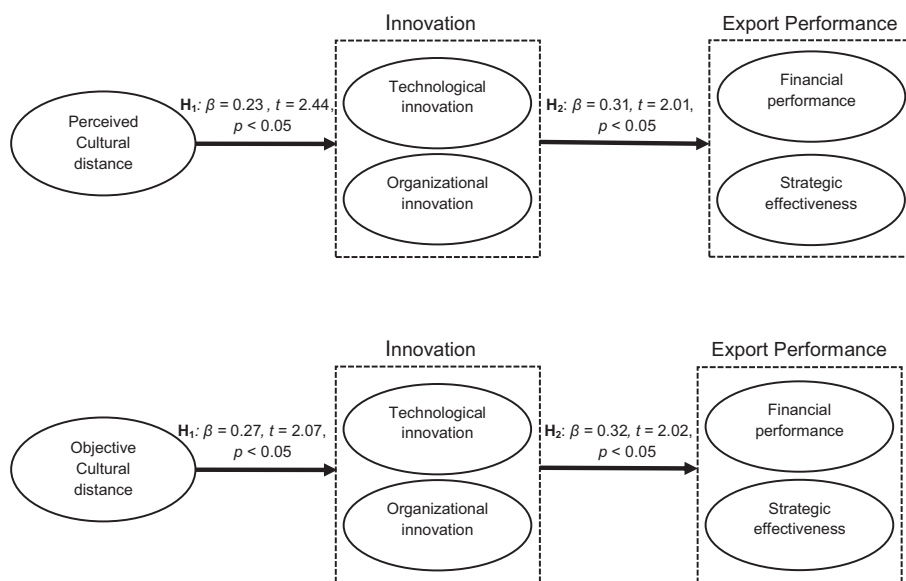
In terms of statistical remedies, we conducted Harman's one-factor model test (Podsakoff *et al.*, 2003), in which a worse fit for the one-factor model would suggest that CMV does not pose a serious problem. The rationale of this test is that if CMV poses a serious threat to the analysis, a single latent factor could account for all manifest variables (Podsakoff *et al.*, 2003). The one-factor model fit statistics [$\chi^2 = 913.28$ (90 df, $p = 0$); RMSEA = 0.222; NFI = 0.62; CFI = 0.65; IFI = 0.65; RFI = 0.56; SRMR = 0.17; GFI = 0.60 and AGFI = 0.47] indicated that this model did not fit the data, suggesting that CMV is not likely to be a problem threatening the findings.

Research findings

Initially, we used two path models, one with the construct *perceived cultural distance* (Model 1, Figure 2) and one with *objective cultural distance* (Model 2, Figure 2), to test the hypotheses. In both models, we controlled for firm size, industry type, free trade area, GDP of the foreign market and geographical, legal, political and economic distance to the foreign market. All indices indicated that the hypothesized models had adequate fit to the data (Figure 2).

The path coefficient between perceived cultural distance and innovation was positive and significant ($t = 2.44$, $p < 0.05$) (see Model 1, Figure 2). Likewise, the path coefficient between objective cultural distance and innovation was positive and significant ($t = 2.07$, $p < 0.05$) (see Model 2, Figure 2). These findings confirm *H1*. The positive and significant path coefficient ($t = 2.01/2.02$, $p < 0.05$) between innovation and export performance in both models confirmed *H2*, i.e. adopting cumulative innovations as response to uncertainties resulting from cultural distance to a foreign market is positively associated with a firm's export performance. The results also showed that the effects of control variables on innovation or firm performance were not statistically significant.

In the next step, we replaced the cultural distance constructs in Models 1 and 2 (Figure 2) with reflective constructs comprising the distances in each cultural dimension of the foreign markets from Sweden (Figure 1). By controlling for the effect of firm size, industry type and geographical distance to the foreign markets, we (re)examined the influence of cultural distance (as reflective constructs) on innovation and export performance. We used this approach to overcome criticisms of cultural distance when treated as an aggregated construct (Shenkar, 2001). In general, the results appeared to be alike the aggregated models. The path coefficient between the *reflective* perceived and objective cultural distance constructs and innovation were positive and significant ($t = 2.51/2.53$, $p < 0.05$). Moreover, the path coefficient between innovation and export performance remained as well positive and significant ($t = 1.98/2.08$, $p < 0.05$).

Perceived and
objective
cultural
distance

191

Notes: Model 1: The conceptual model with *perceived* cultural distance; $\chi^2 = 50.86$ (46 df, $p = 0.287$); RMSEA = 0.024; NFI = 0.97; CFI = 1.00; IFI = 1.00; RFI = 0.94; SRMR = 0.037; GFI = 0.96; AGFI = 0.914; Model 2: The conceptual model with *objective* cultural distance; $\chi^2 = 48.47$ (46 df, $p = 0.373$); RMSEA = 0.017; NFI = 0.97; CFI = 1.00; IFI = 1.00; RFI = 0.94; SRMR = 0.041; GFI = 0.96; AGFI = 0.924; RMSEA = root mean square of approximation; NFI = normed fit index; CFI = comparative fit index; IFI = incremental fit index; RFI = relative fit index; SRMR = standardized root mean residual; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index

Figure 2.
The conceptual
models

As scholars maintain, despite the globalization of markets, national borders still matter, and differences between national cultures, along with other differences, contribute to the distinctiveness of national markets. This distinctiveness in turn provides not only challenges for firms to confront but also business opportunities to exploit using appropriate strategies (Ghemawat, 2001; Magnusson *et al.*, 2008a). This study examined the relationship between cultural distance, innovation and firm export performance. The results showed that cultural distance (both perceived and objective) has a positive effect on innovation, i.e. substantial differences and the subsequent liability of foreignness and uncertainty in culturally distant markets increase the intensity of a firm's efforts toward innovation (both technological and organizational innovations), presumably to cope with the requirements of the foreign market environment and overcome uncertainties (Damanpour and Evan, 1984; Silva *et al.*, 2010). Previous studies also cite uncertainty as a cause of innovation (Pierce and Delbecq, 1977; Hrebiniak and Snow, 1980; Ettlie, 1983; Huber *et al.*, 1993; Ozsomer *et al.*, 1997; Garg *et al.*, 2003; Freel, 2005) and a driver of an organization's adaptive changes to the environment (Damanpour and Evan, 1984; Damanpour *et al.*, 2009).

The present study also showed that the combined adoption of technological and organizational innovations enhanced firms' export performance, confirming previous findings (Damanpour *et al.*, 1989, 2009; Damanpour and Aravind, 2011). Introducing new technologies, more efficient production techniques and new products and processes resulting from technological innovations enables firms to respond quickly to changes in a highly competitive global market (Hall and Mairesse, 1995; Zahra and Covin, 1995; Kafouros *et al.*, 2008; Gunday *et al.*, 2011). Introducing organizational innovations improve, for example, communication, information sharing, coordination, learning and innovativeness (Damanpour and Evan, 1984; Damanpour and Aravind, 2011; Gunday *et al.*, 2011).

In the present study, we controlled for a number of variables. The results indicated that the effects of those control variables on innovation and firm performance were not statistically significant. This indicates that for instance regardless of size and industry type, firms innovate when expanding into culturally distant markets in which they perceive a high level of uncertainty, and their innovations in response to the uncertain environment of a culturally distant market result in increased performance. These results are consistent with those of Shefer and Frenkel (2005) and Kafouros *et al.* (2008), who also found no association between firm size, industry type, propensity to innovation and returns on innovation.

Concluding remarks

The findings of this study have theoretical and managerial implications. The present study produced results that enrich the literature on IB and innovation by:

- empirically validating the explanatory power of cultural distance (both perceived and objective) in relation to innovation strategies and firm performance and
- confirming that the synergistic use of both technological and organizational innovations in response to uncertainties resulting from expansion into culturally distant markets generate strategic assets that lead to superior performance.

The sample analyzed comprised Swedish firms from the forestry, fishing, food products, beverages, garment and furniture industries, which are highly important in developed economies, contributing a significant share of exports, employment and innovation ability. Adopting technological and organizational innovations is highly important in these industries because their products are generally strongly associated with customer tastes, habits and customs, which differ from market to market, and implementing product innovations allows these firms to meet the conditions and requirements of the new foreign market. Furthermore, the products of firms in these industries are often manufactured at a high level of automation using integrated process technologies originally developed in other industries, so the improvements in intra-organizational coordination and cooperation mechanisms obtained by adopting organizational innovations facilitate the adoption of technological innovations in these sectors.

From a methodological perspective, as recommended by previous research, we measured cultural distance using both individual and national-level data. To mitigate the methodological biases, we used multi-dimensional measures to assess the cultural differences between countries. The results attest to the applicability of *perceived* measures of cultural distance as well as Hofstede's (1980, 2001) national cultural scores

as “objective” measures for calculating cultural distance; as [Drogendijk and Slangen \(2006, p. 376\)](#) state “It may thus be premature to dismiss Hofstede’s work as outdated or as misrepresenting national cultures”. Furthermore, to address the concern regarding the “assumption of equivalence” in the [Kogut and Singh’s \(1988\)](#) formula of cultural distance, we also conceptualized the cultural distance constructs as *reflective* constructs and examined their explanatory power in relation to innovation and export performance. Moreover, we operationalized innovation as a multi-faceted construct encompassing both technological and organizational innovations to determine the synergistic effects of combining innovation types on export performance and to compensate for the lack of previous research examining the influence of organizational innovation on firm export performance.

The findings of this study have some implications for international marketing managers. Entering markets that are similar to the home market often appears to be the easier choice for an expanding firm. However, the challenges related with internationalizing into culturally distant markets may be compensated for by business opportunities arising through a firm’s greater ability to differentiate itself from the competition and to access unexploited market environments. This study showed that to reap the benefits of those market opportunities, the firm must make innovations not only to processes and products but also to its organizational strategy, structure and administrative procedures. Moreover, the benefits of organizational innovations can assist in adopting other technological innovations (e.g. integrated process technologies).

Limitations and further research

This study provided some insights into cultural distance, innovation and export performance research, but there were several limitations to the approach used. We assumed that uncertainty as a consequence of cultural distance would stimulate innovation, but it would be beneficial to measure uncertainty directly and add it as an additional variable in the conceptual model of the relationships between cultural distance and innovation. Furthermore, we used Hofstede’s country scores as “objective” measures for cultural distance in this study. It can be argued that those scores are also based on the perceptions of individuals. Yet, the validity and reliability of Hofstede’s national cultural scores ([Kogut and Singh, 1988](#), [Magnusson et al., 2008b](#)) may allow researchers to use them as “objective” or “hard” data in assessing cultural differences between countries. [Brock et al. \(2011\)](#) developed a cultural distance measure based on the Hofstede’s framework as a proxy for “objective” assessment of cultural distance. Future studies may replicate this investigation using other frameworks to conceptualize cultural distance. In this study, we measured cultural distance constructs based on Hofstede’s four original dimensions. We used those dimensions due to comparability with dimensions of *perceived* cultural distance and also availability of scores for the foreign markets covered by the study. However, we encourage future research incorporating other dimensions (e.g. long-/short-term orientation and indulgence/restriction) where appropriate. We used scales developed by [Weerawardena \(2003b, 2003a\)](#) to measure firms’ innovation activity. Although these scales have advantages in, e.g. multi-dimensionality, capturing direct innovation activities fitting the low-tech sector, future studies should perhaps apply more comprehensive measures of both technological and organizational innovations. Moreover, the cross-sectional

method applied in this study could not capture the dynamic aspects of strategy formulation in international markets and causality among constructs. Future studies should address the relationships proposed in the hypothesized models using longitudinal data to overcome such limitations and to allow for a more accurate evaluation of the causality in the relationship among cultural distance, innovation and export performance. An especially important consideration is the empirical possibility that the innovative capacity of the firm allows them to enter culturally distant markets. Previous research states that uncertainties in the external environment prompt innovations, but longitudinal research on this issue is still necessary and is a fruitful direction for further research following our findings. Finally, the composition of the sample may limit the generalizability of our findings, as we restricted our study to Swedish companies in fishing, food products, beverages, garment and furniture industries. Future studies should replicate this research in other regional and industrial contexts.

Notes

1. Technological innovation is also called “Technical” innovation. Organizational innovation has been referred to as administrative, managerial, management and non-technological innovation (Damanpour and Evan, 1984; O’Cass and Weerawardena, 2009; Damanpour and Aravind, 2011).
2. Norway is a member of European Free Trade Association (EFTA).
3. The scores on Schwartz’s (1994) dimensions are not available for Sweden (the home market in this study). Likewise, the scores on the Globe’s (House *et al.*, 2004) dimensions are not available for Norway (the main nominated close market to Sweden in this study).
4. In calculating the deviations in the perceptual model, the indices for all cultural dimensions ($I_{i,j}$) for Sweden were considered to be equal to 1 (Evans *et al.*, 2008).
5. Geographical distance was calculated in terms of the natural logarithm of actual distance in kilometers between the capitals of the home country (Sweden) and the foreign country j . The distance in kilometers was obtained from the Geobytes Databases (2014). This approach is consistent with previous research (Malhotra *et al.*, 2009; Brock *et al.*, 2011).

References

- Acs, Z.J. and Audretsch, D.B. (1988), “Innovation in large and small firms: an empirical analysis”, *The American Economic Review*, Vol. 78 No. 4, pp. 678-690.
- Alvarez, R. and Robertson, R. (2004), “Exposure to foreign markets and plant-level innovation: evidence from Chile and Mexico”, *Journal of International Trade & Economic Development*, Vol. 13 No. 1, pp. 57-87.
- Ambos, B. and Håkanson, L. (2014), “The concept of distance in international management research”, *Journal of International Management*, Vol. 20 No. 1, pp. 1-7.
- Amit, R. and Schoemaker, P.J.H. (1993), “Strategic assets and organizational rent”, *Strategic Management Journal*, Vol. 14 No. 1, pp. 33-33.
- Anderson, C.R. and Paine, F.T. (1975), “Managerial perceptions and strategic behavior”, *Academy of Management Journal*, Vol. 18 No. 4, pp. 811-823.
- Archibugi, D. and Planta, M. (1996), “Measuring technological change through patents and innovation surveys”, *Technovation*, Vol. 16 No. 9, pp. 451-519.

- Armbruster, H. Bikfalvi, A., Kinkel, S. and Lay, G. (2008), "Organizational innovation: the challenge of measuring non-technical innovation in large-scale surveys", *Technovation*, Vol. 28 No. 10, pp. 644-657.
- Armstrong, J.S. and Overton, T.S. (1977), "Estimating nonresponse bias in mail surveys", *Journal of Marketing Research*, Vol. 14 No. 3, pp. 396-402.
- Audretsch, D.B. and Acs, Z.J. (1991), "Innovation and size at the firm level", *Southern Economic Journal*, Vol. 57 No. 3, pp. 739-744.
- Azar, G. (2011), "Food culture distance: an antecedent to export marketing strategy adaptation – an empirical examination of Swedish and Finnish food processing companies", *International Food and Agribusiness Management Review*, Vol. 14 No. 3, pp. 17-44.
- Azar, G. (2014a), "Food culture distance as a predictor of foreign market selection: the case of Swedish food exporters", *Journal of Food Products Marketing*, Vol. 20 No. 1, pp. 75-97.
- Azar, G. (2014b), "How congruent are managers' perceptions of cultural distance with objective reality?", *Cross Cultural Management: An International Journal*, Vol. 21 No. 4, pp. 400-421.
- Azar, G. and Drogendijk, R. (2014), "Psychic distance, innovation, and firm performance", *Management International Review*, Vol. 54 No. 5, pp. 581-613.
- Bagozzi, R.P. (1980), *Casual Models in Marketing*, John Wiley & Sons, NY.
- Barney, J. (1991), "Firm resource and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Beyer, J.M., Chattopadhyay, P., George, E., Glick, W.H., Ogilvie, D. and Pugliese, D. (1997), "The selective perception of managers revisited", *Academy of Management Journal*, Vol. 40 No. 3, pp. 716-737.
- Birkinshaw, J., Hamel, G. and Mol, M.J. (2008), "Management innovation", *Academy of Management Review*, Vol. 33 No. 4, pp. 825-845.
- Brock, J.K.-U., Johnson, J.E. and Zhou, J.Y. (2011), "Does distance matter for internationally-oriented small firms?", *Industrial Marketing Management*, Vol. 40 No. 3, pp. 384-394.
- Brown, A.D. (1995), *Organisational Culture*, Pitman, London.
- Burchell, R. and Gilden, A. (2008), "Measuring cultural perceptions of western project managers operating in the Asian region application of a cultural model", *Management Decision*, Vol. 46 No. 7, pp. 1052-1065.
- Calantone, R.J., Cavusgil, S.T., Schmidt, J.B. and Shin, G.C. (2004), "Internationalization and the dynamics of product adaptation – an empirical investigation", *Journal of Product Innovation Management*, Vol. 21 No. 3, pp. 185-198.
- Camisón, C. and Villar-López, A. (2014), "Organizational innovation as an enabler of technological innovation capabilities and firm performance", *Journal of Business Research*, Vol. 67 No. 1, pp. 2891-2902.
- Carlson, S. (1974), "International transmission of information and the business firm", *Annals of the American Academy of Political and Social Science*, Vol. 412 No. 1, pp. 55-63.
- Cavusgil, S.T. and Zou, S. (1994), "Marketing Strategy-performance relationship: an investigation of the empirical link in export market ventures", *Journal of Marketing*, Vol. 58 No. 1, pp. 1-21.
- Chang, Y.C., Kao, M.S., Kuo, A. and Chiu, C.F. (2012), "How cultural distance influences entry mode choice: the contingent role of host country's governance quality", *Journal of Business Research*, Vol. 65 No. 8, pp. 1160-1170.

- Child, J. (1972), "Organization structure and strategies of control: a replication of the Aston study", *Administrative Science Quarterly*, Vol. 17 No. 2, pp. 163-177.
- Churchill, G.A., Jr (1979), "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, Vol. 16 No. 1, pp. 64-73.
- Contractor, F.J., Hsu, C.-C. and Kundu, S.K. (2005), "Explaining export performance: a comparative study of international new ventures in Indian and Taiwanese software industry", *Management International Review*, Vol. 45 No. 3, pp. 83-110.
- Coronado, D., Acosta, M. and Fernández, A. (2008), "Attitudes to innovation in peripheral economic regions", *Research Policy*, Vol. 37 Nos 6/7, pp. 1009-1021.
- Damanpour, F. (1996), "Organizational complexity and innovation: developing and testing multiple contingency models", *Management Science*, Vol. 42 No. 5, pp. 693-716.
- Damanpour, F. and Aravind, D. (2011), "Managerial innovation: conceptions, processes, and antecedents", *Management and Organization Review*, Vol. 8 No. 2, pp. 423-454.
- Damanpour, F. and Evan, W.M. (1984), "Organizational innovation and performance: the problem of organizational lag", *Administrative Science Quarterly*, Vol. 29 No. 3, pp. 392-409.
- Damanpour, F., Szabat, K.A. and Evan, W.M. (1989), "The relationship between types of innovation and organizational performance", *Journal of Management Studies*, Vol. 26 No. 6, pp. 587-602.
- Damanpour, F., Walker, R.M. and Avellaneda, C.N. (2009), "Combinative effects of innovation types and organizational performance: a longitudinal study of service organizations", *Journal of Management Studies*, Vol. 46 No. 4, pp. 650-675.
- D'Angelo, A. (2012), "Innovation and export performance: a study of Italian high-tech SMEs", *Journal of Management and Governance*, Vol. 16 No. 3, pp. 393-423.
- Datta, D.K., Herrmann, P. and Rasheed, A.A. (2002), "Choice of foreign market entry modes: critical review and future directions", *Advances in International Comparative Management*, Vol. 14, pp. 85-153.
- Dikova, D. and Rao Sahib, P. (2013), "Is cultural distance a bane or a boon for cross-border acquisition performance?", *Journal of World Business*, Vol. 48 No. 1, pp. 77-86.
- Dow, D. (2000), "A note on psychological distance and export market selection", *Journal of International Marketing*, Vol. 8 No. 1, pp. 51-64.
- Dow, D. and Ferencikova, S. (2010), "More than just national cultural distance: testing new distance scales on FDI in Slovakia", *International Business Review*, Vol. 19 No. 1, pp. 46-58.
- Dow, D. and Karunaratna, A. (2006), "Developing a multidimensional instrument to measure psychic distance stimuli", *Journal of International Business Studies*, Vol. 37 No. 5, pp. 578-602.
- Drogendijk, R. and Slangen, A. (2006), "Hofstede, Schwartz, or Managerial Perceptions? The effects of different cultural distance measures on establishment mode choices by multinational enterprises", *International Business Review*, Vol. 15 No. 4, pp. 361-380.
- Ettlie, J.E. (1983), "Organizational policy and innovation among suppliers to the food processing sector", *Academy of Management Journal*, Vol. 26 No. 1, pp. 27-44.
- Evans, J. and Bridson, K. (2005), "Explaining retail offer adaption through psychic distance", *International Journal of Retail & Distribution Management*, Vol. 33 No. 1, pp. 69-78.
- Evans, J. and Mavondo, F.T. (2002), "psychic distance and organizational performance: an empirical examination of international retailing operations", *Journal of International Business Studies*, Vol. 33 No. 3, pp. 515-532.

- Evans, J., Mavondo, F.T. and Bridson, K. (2008), "Psychic distance: antecedents, retail strategy implications, and performance outcomes", *Journal of International Marketing*, Vol. 16 No. 2, pp. 32-63.
- Fiske, D.W. (1982), "Convergent-discriminant validation in measurements and research strategies", *New Directions for Methodology of Social & Behavioral Science*, Vol. 12, pp. 77-92.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Freel, M.S. (2005), "Perceived environmental uncertainty and innovation in small firms", *Small Business Economics*, Vol. 25 No. 1, pp. 49-64.
- Freeman, C. and Soete, L. (2009), "Developing science, technology and innovation indicators: what we can learn from the past", *Research Policy*, Vol. 38 No. 4, pp. 583-589.
- Galizzi, G. and Venturini, L. (2008), "Nature and determinants of product innovation in a competitive environment of changing vertical relationships", in Rama, R. (Ed.), *Handbook of Innovation in the Food and Drink Industry*, Haworth Press, New York, NY, pp. 51-79.
- Garg, V.K., Walters, B.A. and Priem, R.L. (2003), "Chief executive scanning emphases, environmental dynamism, and manufacturing firm performance", *Strategic Management Journal*, Vol. 24 No. 8, pp. 725-744.
- Geobytes (2014), "City distance tool", available at: www.geobytes.com/CityDistanceTool.htm (accessed 2 May 2014).
- Gerbing, D.W. and Anderson, J.C. (1988), "An updated paradigm for scale development incorporating unidimensionality and its assessment", *Journal of Marketing Research*, Vol. 25 No. 2, pp. 186-192.
- Gereffi, G. (1999), "International trade and industrial upgrading in the apparel commodity Chain", *Journal of International Economics*, Vol. 48 No. 1, pp. 37-70.
- Ghemawat, P. (2001), "Distance still matters: the hard reality of global expansion", *Harvard Business Review*, Vol. 79 No. 8, pp. 137-140, 142.
- Giaglis, G.M. and Fouskas, K.G. (2011), "The impact of managerial perceptions on competitive response variety", *Management Decision*, Vol. 49 No. 8, pp. 1257-1275.
- Glick, W.H., Huber, G.P., Miller, C.C., Doty, D.H. and Sutcliffe, K.M. (1990), "Studying changes in organizational design and effectiveness: retrospective event histories and periodic assessments", *Organization Science*, Vol. 1 No. 3, pp. 293-312.
- Gunday, G., Ulusoy, G., Kilic, K. and Alpkan, L. (2011), "Effects of innovation types on firm performance", *International Journal of Production Economics*, Vol. 133 No. 2, pp. 662-676.
- Hair, J.F., Jr., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis: A Global Perspective*, Pearson Education, Upper Saddle River, NJ.
- Håkanson, L. and Ambos, B. (2010), "The antecedents of psychic distance", *Journal of International Management*, Vol. 16 No. 3, pp. 195-210.
- Håkanson, L. and Dow, D. (2012), "Markets and networks in international trade: on the role of distances in globalization", *Management International Review*, Vol. 52 No. 6, pp. 761-789.
- Hall, B. and Mairesse, J. (1995), "Exploring the relationship between R&D and productivity in French manufacturing firms", *Journal of Econometrics*, Vol. 65 No. 1, pp. 263-293.
- Hamel, G. (2006), "The why, what, and how of management innovation", *Harvard Business Review*, Vol. 84 No. 2, p. 72.
- Han, J.K., Kim, N. and Srivastava, R.K. (1998), "Market orientation and organizational performance: is innovation a missing link?", *Journal of Marketing*, Vol. 62 No. 4, pp. 30-45.

- Harzing, A.W. (2003), "The role of culture in entry-mode studies: from neglect to myopia?", *Advances in International Management*, Vol. 15, pp. 75-127.
- Hervas-Oliver, J.-L., Albors Garrigos, J. and Gil-Pechuan, I. (2011), "Making sense of innovation by R&D and Non-R&D innovators in low technology contexts: a forgotten lesson for policymakers", *Technovation*, Vol. 31 No. 9, pp. 427-446.
- Hirsch-Kreinsen, H. (2008), "Low-tech innovations", *Industry and Innovation*, Vol. 15 No. 1, pp. 19-43.
- Hitt, M.A., Hoskisson, R.E. and Hicheon, K. (1997), "International diversification: effects on innovation and firm performance in product-diversified firms", *Academy of Management Journal*, Vol. 40 No. 4, pp. 767-798.
- Hofstede, G. (1980), *Culture's Consequences: International Differences in Work-Related Values*, Sage, Beverly Hills, CA.
- Hofstede, G. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*, Sage, Thousand Oaks, CA.
- Hortinha, P., Lages, C. and Lages, L.F. (2011), "The trade-off between customer and technology orientations: impact on innovation capabilities and export performance", *Journal of International Marketing*, Vol. 19 No. 3, pp. 36-58.
- House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W. and Gupta, V. (2004), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage, Thousand Oaks, CA.
- Hrebiniak, L.G. and Snow, C.C. (1980), "Industry differences in environmental uncertainty and organizational characteristics related to uncertainty", *Academy of Management Journal*, Vol. 23 No. 4, pp. 750-759.
- Huber, G.P., Sutcliffe, K.M., Miller, C.C. and Glick, W.H. (1993), "Understanding and predicting organizational change", in Huber, G.P. and Glick, W.H. (Eds), *Organizational Change and Redesign: Ideas and Insights for Improving Managerial Performance*, Oxford University Press, New York, NY, pp. 215-268.
- Jarvis, C.B., Mackenzie, S.B. and Podsakoff, P.M. (2003), "A critical review of construct indicators and measurement model misspecification in marketing and consumer research", *Journal of Consumer Research*, Vol. 30 No. 2, pp. 199-218.
- Johanson, J. and Vahlne, J.E. (1977), "The internationalization process of the firm – a model of knowledge development and increasing foreign market commitments", *Journal of International Business Studies*, Vol. 8 No. 1, pp. 23-32.
- Johanson, J. and Vahlne, J.E. (2009), "The Uppsala internationalization process model revisited: from liability of foreignness to liability of outsidership", *Journal of International Business Studies*, Vol. 40 No. 9, pp. 1411-1431.
- Jöreskog, K.G. and Sörbom, D. (2006), *LISREL 8.80 for Windows*, Scientific Software International, Lincolnwood, IL.
- Kafouros, M.I., Buckley, P.J., Sharp, J.A. and Wang, C.Q. (2008), "The role of internationalization in explaining innovation performance", *Technovation*, Vol. 28 No. 1-2, pp. 63-74.
- Kim, W.C. and Hwang, P. (1992), "Global strategy and multinationals' entry mode choice", *Journal of International Business Studies*, Vol. 23 No. 1, pp. 29-53.
- Kim, Y. and Gray, S. (2009), "An assessment of alternative empirical measures of cultural distance: evidence from the Republic of Korea", *Asia Pacific Journal of Management*, Vol. 26 No. 1, pp. 55-74.
- Kirkman, B.L., Lowe, K.B. and Gibson, C.B. (2006), "A quarter century of 'culture's consequences': a review of empirical research incorporating Hofstede's cultural values framework", *Journal of International Business Studies*, Vol. 37 No. 3, pp. 285-320.

- Kogut, B. and Singh, H. (1988), "The effect of national culture on the choice of entry mode", *Journal of International Business Studies*, Vol. 19 No. 3, pp. 411-432.
- Kotabe, M., Srinivasan, S.S. and Aulakh, P.S. (2002), "Multinationality and firm performance: the moderating role of R&D and marketing capabilities", *Journal of International Business Studies*, Vol. 33 No. 1, pp. 79-97.
- Lages, L.F., Jap, S.D. and Griffith, D.A. (2008), "the role of past performance in export ventures: a short-term reactive approach", *Journal of International Business Studies*, Vol. 39 No. 2, pp. 304-325.
- Lages, L.F., Silva, G. and Styles, C. (2009), "Relationship capabilities, quality, and innovation as determinants of export performance", *Journal of International Marketing*, Vol. 17 No. 4, pp. 47-70.
- Lawrence, P.R. and Lorsch, J.W. (1967), *Organization and Environment: Managing Differentiation and Integration*, Sage Publication, Boston, MA.
- Lee, S.-G., Trimi, S. and Kim, C. (2013), "The impact of cultural differences on technology adoption", *Journal of World Business*, Vol. 48 No. 1, pp. 20-29.
- López, N., Montes-Peón, J.M. and Vázquez-Ordás, C. (2003), "Innovation in the Spanish food and beverage industry: an integrated approach", *International Journal of Biotechnology*, Vol. 5 Nos 3/4, pp. 311-333.
- López-Duarte, C. (2013), "Trying to solve the cultural distance paradox: a commentary essay", *Journal of Business Research*, Vol. 66 No. 4, pp. 523-524.
- López-Duarte, C. and Vidal-Suárez, M.M. (2010), "External uncertainty and entry mode choice: cultural distance, political risk and language diversity", *International Business Review*, Vol. 19 No. 6, pp. 575-588.
- Lu, J.W. and Beamish, P.W. (2001), "The internationalization and performance of SMEs", *Strategic Management Journal*, Vol. 22 Nos 6/7, pp. 565-586.
- Mcsweeney, B. (2002), "Hofstede's model of national cultural differences and their consequences: a triumph of faith - a failure of analysis", *Human Relations*, Vol. 55 No. 1, pp. 89-118.
- Magnusson, P., Baack, D.W., Zdravkovic, S., Staub, K.M. and Amine, L.S. (2008a), "Meta-analysis of cultural differences: another slice at the apple", *International Business Review*, Vol. 17 No. 5, pp. 520-532.
- Magnusson, P., Wilson, R.T., Zdravkovic, S., Zhou, J.X. and Westjohn, S.A. (2008b), "Breaking through the cultural clutter: a comparative assessment of multiple cultural and institutional frameworks", *International Marketing Review*, Vol. 25 No. 2, pp. 183-201.
- Malhotra, S., Sivakumar, K. and Zhu, P. (2009), "Distance factors and target market selection: the moderating effect of market potential", *International Marketing Review*, Vol. 26 No. 6, pp. 651-673.
- Mezias, S.J., Chen, Y.R. Murphy, P., Biaggio, A., Chuawanlee, W., Hui, H., Okumura, T. and Starr, S. (2002), "National cultural distance as liability of foreignness: the issue of level of analysis", *Journal of International Management*, Vol. 8 No. 4, pp. 407-421.
- Miles, R.E. Snow, C.C. and Pfeffer, J. (1974), "Organization-environment: concepts and issues", *Industrial Relations: A Journal of Economy and Society*, Vol. 13 No. 3, pp. 244-264.
- Miller, K.D. (1993), "Industry and country effects on managers' perceptions of environmental uncertainties", *Journal of International Business Studies*, Vol. 24 No. 4, pp. 693-714.
- Minkov, M. and Hofstede, G. (2011), "The evolution of Hofstede's doctrine", *Cross Cultural Management-An International Journal*, Vol. 18 No. 1, pp. 10-20.

- Moon, T.W. and Park, S.I. (2011), "The effect of cultural distance on international marketing strategy: a comparison of cultural distance and managerial perception measures", *Journal of Global Marketing*, Vol. 24 No. 1, pp. 18-40.
- Morosini, P., Shane, S. and Singh, H. (1998), "National cultural distance and cross-border acquisition performance", *Journal of International Business Studies*, Vol. 29 No. 1, pp. 137-158.
- Nam, D.-I., Parboteeah, K.P., Cullen, J.B. and Johnson, J.L. (2014), "Cross-national differences in firms undertaking innovation initiatives: an application of institutional anomie theory", *Journal of International Management*, Vol. 20 No. 2, pp. 91-106.
- Nassimbeni, G. (2001), "Technology, innovation capacity, and the export attitude of small manufacturing firms: a logit/tobit model", *Research Policy*, Vol. 30 No. 2, pp. 245-262.
- Nunnally, J.C. (1978), *Psychometric Theory*, McGraw-Hill, New York, NY.
- O'Cass, A. and Weerawardena, J. (2009), "Examining the role of international entrepreneurship, innovation and international market performance in SME internationalisation", *European Journal of Marketing*, Vol. 43 Nos 11/12, pp. 1325-1348.
- OECD (2005), *The Measurement of Scientific and Technological Activities Oslo Manual, Guidelines for Collecting and Interpreting Innovation Data*, 3rd ed., OECD EUROSTAT, Paris.
- O'Grady, S. and Lane, H. (1996), "The psychic distance paradox", *Journal of International Business Studies*, Vol. 27 No. 2, pp. 309-333.
- Oyserman, D., Coon, H.M. and Kemmelmeier, M. (2002), "Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses", *Psychological Bulletin*, Vol. 128 No. 1, p. 3.
- Ozsomer, A., Calantone, R.J. and Di Benedetto, A. (1997), "What makes firms more innovative? A look at organizational and environmental factors", *Journal of Business & Industrial Marketing*, Vol. 12 No. 6, pp. 400-416.
- Pierce, J.L. and Delbecq, A.L. (1977), "Organization structure, individual attitudes and innovation", *Academy of Management Review*, Vol. 2 No. 1, pp. 27-37.
- Pla-Barber, J. and Alegre, J. (2007), "Analysing the link between export intensity, innovation and firm size in a science-based industry", *International Business Review*, Vol. 16 No. 3, pp. 275-293.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Powell, W.W. and Grodal, S. (2005), "Networks of innovators", in Fagerberg, J., Mowery, D.C. and Nelson, R.R. (Eds), *The Oxford Handbook of Innovation*, Oxford University Press, Oxford, pp. 56-85.
- Rauch, J.E. (1999), "Networks versus markets in international trade", *Journal of International Economics*, Vol. 48 No. 1, pp. 7-35.
- Robbins, S.P. (1996), *Essentials of Organizational Behavior*, Prentice Hall, Englewood Cliffs, NJ.
- Robertson, C. and Chetty, S.K. (2000), "A contingency-based approach to understanding export performance", *International Business Review*, Vol. 9 No. 2, pp. 211-235.
- Robson, C. (2011), *Real World Research: A Resource for Users of Social Research Methods in Applied Settings*, Wiley, Chichester.
- Rogers, M. (2004), "Networks, firm size and innovation", *Small Business Economics*, Vol. 22 No. 2, pp. 141-153.

- Roper, S. and Love, J.H. (2002), "Innovation and export performance: evidence from the UK and German manufacturing plants", *Research Policy*, Vol. 31 No. 7, pp. 1087-1102.
- Russell, R.D. and Russell, C.J. (1992), "an examination of the effects of organizational norms, organizational structure, and environmental uncertainty on entrepreneurial strategy", *Journal of Management*, Vol. 18 No. 4, pp. 639-656.
- Schwartz, S.H. (1994), "Beyond individualism/collectivism: new cultural dimensions of values", in Kim, U., Triandis, H.C., Kagitcibasi, C., Choi, S.C. and Yoon, G. (Eds), *Individualism and Collectivism: Theory, Method and Applications*, Sage Publications, Thousand Oaks, pp. 85-119.
- Schwartz, S.H. (2011), "Studying values: personal adventure, future directions", *Journal of Cross-Cultural Psychology*, Vol. 42 No. 2, pp. 307-319.
- Selnes, F. and Sallis, J. (2003), "Relationship learning", *Journal of Marketing*, Vol. 67 No. 3, pp. 80-95.
- Shane, S.A. (1992), "Why do some societies invent more than others?", *Journal of Business Venturing*, Vol. 7 No. 1, pp. 29-46.
- Shefer, D. and Frenkel, A. (2005), "R&D, firm size and innovation: an empirical analysis", *Technovation*, Vol. 25 No. 1, pp. 25-32.
- Shenkar, O. (2001), "Cultural distance revisited: towards a more rigorous conceptualization and measurement of cultural differences", *Journal of International Business Studies*, Vol. 32 No. 3, pp. 519-535.
- Shneur, R. (2012), "Influences of culture, geography and infrastructure on website localization decisions", *Cross Cultural Management-An International Journal*, Vol. 19 No. 3, pp. 352-374.
- Silva, A., Africano, A.P. and Afonso, O. (2010), "Do Portugusese manufacturing firms learn by exporting?", *36th EIBA Proceedings, Porto, 9-11 December*.
- Singh, S. (1996), "International marketing of agro-food products by developing country firms: some conceptual issues", *Agribusiness*, Vol. 12 No. 1, pp. 99-103.
- Slangen, A.H.L. and Van Tulder, R.J.M. (2009), "Cultural distance, political risk, or governance quality? Towards a more accurate conceptualization and measurement of external uncertainty in foreign entry mode research", *International Business Review*, Vol. 18 No. 3, pp. 276-291.
- Sousa, C.M.P., Lengler, J.F.B. and Martínez-López, F.J. (2014), "Testing for linear and quadratic effects between price adaptation and export performance: the impact of values and perceptions", *Journal of Small Business Management*, Vol. 52 No. 3, pp. 501-520.
- Sousa, C.M.P., Martínez-López, F.J. and Coelho, F. (2008), "The determinants of export performance: a review of the research in the literature between 1998 and 2005", *International Journal of Management Reviews*, Vol. 10 No. 4, pp. 343-374.
- Spector, P.E., Cooper, C.L. and Sparks, K. (2001), "An international study of the psychometric properties of the Hofstede values survey module 1994: a comparison of individual and country/province level results", *Applied Psychology*, Vol. 50 No. 2, pp. 269-281.
- Starbuck, W.H. and Mezias, J.M. (1996), "Opening pandora's box: studying the accuracy of managers' perceptions", *Journal of Organizational Behavior*, Vol. 17 No. 2, pp. 99-117.
- Statistics Sweden (2012), "Trade in goods and services: imports and exports of goods by commodity groups SITC", available at: <http://scb.se/en/Finding-statistics/Statistics-by-subject-area/Trade-in-goods-and-services/Foreign-trade/Foreign-trade-exports-and-imports-of-goods/> (accessed 10 February 2012).
- Sullivan, D. (1994), "Measuring the degree of internationalization of a firm", *Journal of International Business Studies*, Vol. 25 No. 2, pp. 325-342.

- Tang, L. (2012), "The direction of cultural distance on FDI: attractiveness or incongruity?", *Cross Cultural Management: An International Journal*, Vol. 19 No. 2, pp. 233-256.
- Taylor, C.R., Zou, S. and Osland, G.E. (1998), "A Transaction cost perspective on foreign market entry strategies of US and Japanese firms", *Thunderbird International Business Review*, Vol. 40 No. 4, pp. 389-412.
- Taylor, M.Z. and Wilson, S. (2012), "Does culture still matter? The effects of individualism on national innovation rates", *Journal of Business Venturing*, Vol. 27 No. 2, pp. 234-247.
- Tung, R.L. and Verbeke, A. (2010), "Beyond Hofstede and GLOBE: improving the quality of cross-cultural research", *Journal of International Business Studies*, Vol. 41 No. 8, pp. 1259-1274.
- Wagner, J. (1995), "Exports, firm size, and firm dynamics", *Small Business Economics*, Vol. 7 No. 1, pp. 29-39.
- Wagner, J. (2001), "A note on the firm size-export relationship", *Small Business Economics*, Vol. 17 No. 4, pp. 229-237.
- Wang, H. and Schaan, J.L. (2008), "How much distance do we need? Revisiting the 'National Cultural Distance Paradox'", *Management International Review*, Vol. 48 No. 3, pp. 263-277.
- Weerawardena, J. (2003a), "Exploring the role of market learning capability in competitive strategy", *European Journal of Marketing*, Vol. 37 Nos 3/4, pp. 407-429.
- Weerawardena, J. (2003b), "The role of marketing capability in innovation-based competitive strategy", *Journal of Strategic Marketing*, Vol. 11 No. 1, pp. 15-35.
- Wolff, J.A. and Pett, T.L. (2000), "Internationalization of small firms: an examination of export competitive patterns, firm size, and export performance", *Journal of Small Business Management*, Vol. 38 No. 2, pp. 34-47.
- World Bank (2014), *World Development Indicators*, available at: <http://data.worldbank.org/indicator/NE.EXP.GNFS.ZS/countries> (accessed 2 May 2014).
- Yamin, M. and Sinkovics, R.R. (2006), "Online internationalisation, psychic distance reduction and the virtuality trap", *International Business Review*, Vol. 15 No. 4, pp. 339-360.
- Yeganeh, H. (2014), "A weighted, mahalanobian, and asymmetrical approach to calculating national cultural distance", *Journal of International Management*, Vol. 20 No. 4, pp. 436-463.
- Zaheer, S., Schomaker, M.S. and Nachum, L. (2012), "Distance without direction: restoring credibility to a much-loved construct", *Journal of International Business Studies*, Vol. 43 No. 1, pp. 18-27.
- Zahra, S.A. and Covin, J.G. (1995), "Contextual influences on the corporate entrepreneurship-performance relationship: a longitudinal analysis", *Journal of Business Venturing*, Vol. 10 No. 1, pp. 43-58.
- Zeithaml, V.A. and Zeithaml, C.P. (1988), "The contingency approach: its foundations and relevance to theory building and research in marketing", *European Journal of Marketing*, Vol. 22 No. 7, pp. 37-64.
- Zhao, H., Luo, Y. and Suh, T. (2004), "Transaction cost determinants and ownership-based entry mode choice: a meta-analytical review", *Journal of International Business Studies*, Vol. 35 No. 6, pp. 524-544.

Appendix 1

The following are the export markets covered by the study:

- Belgium;
- Bosnia and Herzegovina;
- China;
- Denmark;
- Estonia;
- Finland;
- France;
- Germany;
- Ghana;
- Japan;
- Kuwait;
- Latvia;
- Lithuania;
- The Netherlands;
- Norway;
- Poland;
- Qatar;
- Russia;
- South Korea;
- Spain;
- UK;
- USA; and
- Venezuela.

Perceived and
objective
cultural
distance

Characteristic	(%)
<i>Position of respondents</i>	
CEO	59.1
Owner	15.6
Marketing director	4.3
Finance director	5.4
Export manager	2.7
Others	12.9
<i>Number of employees</i>	
1-49	71.5
50-249	19.4
250-499	4.3
≥500	4.8
<i>Number of years exporting</i>	
<5	8.1
5-9	10.8
10-14	18.3
15-19	9.7
≥20	53.1
<i>Number of foreign markets to which the firm exports</i>	
<5	6.5
5-9	29.6
10-14	28.5
≥15	35.5
<i>Main export market</i>	
Norway	28.5
Denmark	13.4
Finland	14.0
Germany	7.5
United Kingdom	5.9
USA	4.3
Russia	3.8
<i>Industry type</i>	
Forestry	5.4
Fishing	2.7
Food products	32.8
Beverages	7.0
Garment	15.6
Furniture	36.6

Table A1.
Sample
characteristics

(Perceived) Cultural distance (adapted from Evans and Mavondo, 2002; Evans *et al.*, 2008) (second-order) (AVE = 0.941/CR = 0.984) ($\chi^2 = 110.80$ (50 df, $p = 0$); RMSEA = 0.080; NFI = 0.98; CFI = 0.99; IFI = 0.99; RFI = 0.97; SRMR = 0.037; GFI = 0.91; and AGFI = 0.86)
 Question: To what extent do you perceive that Sweden (the home market) is similar to the nominated markets regarding each of the following statements?
 (Scale: 1 = totally the same; 7 = totally different)

<i>Power distance</i> (PDI) (AVE = 0.698/ α = 0.865)	
CD_PDI1 Degree of inequality among the people	0.90
CD_PDI2 Salary range between the highest and lowest paid in organizations	0.85
CD_PDI3 Importance of social status symbols	0.75
<i>Individualism</i> (IND) (AVE = 0.602/ α = 0.806)	
CD_IND1 Importance of loyalty to family and friends	0.63
CD_IND2 Recognition of the right to privacy	0.83
CD_IND3 Freedom of the press	0.85
<i>Masculinity</i> (MAS) (AVE = 0.678/ α = 0.857)	
CD_MAS1 Importance of caring for others	0.84
CD_MAS2 Importance of material success	0.78
CD_MAS3 Degree to which women are expected to be assertive and ambitious	0.85
<i>Uncertainty avoidance</i> (UAI) (AVE = 0.640/ α = 0.843)	
CD_UAI1 Openness to change and innovation	0.78
CD_UAI2 Tolerance of differences (i.e., religious, political and ideological)	0.82
CD_UAI3 Reliance on rules to govern behavior	0.80

Innovation (adapted from Weerawardena, 2003a, 2003b) (second-order) (AVE = 0.625/CR = 0.893) ($\chi^2 = 53.08$ (16 df, $p = 0.00001$); RMSEA = 0.112; NFI = 0.96; CFI = 0.97; IFI = 0.97; RFI = 0.94; SRMR = 0.037; GFI = 0.93; and AGFI = 0.85)
 Question 1: How extensive have been the following innovation activities your firm has undertaken in relation to the nominated markets during the past three years?
 (Scale: 1 = limited; 7 = extensive)
 Question 2: How radical have been the following innovation activities your firm has undertaken in relation to the nominated markets during the past three years?
 (Scale: 1 = incremental; 7 = radical)

Table AII.
 Items, reliability and convergent validity
 (continued)

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206

<i>Product innovation</i> (e.g. improving existing products and creating new products) (AVE = 0.683/ α = 0.805)		
INN_P1	Product innovations introduced by our firm during the past three years have been ... (Scale: 1 = limited; 7 = extensive)	0.77
INN_P2	Product innovations have mainly been ... (Scale: 1 = incremental; 7 = radical)	0.88
<i>Process innovation</i> (e.g. introducing computer-based production application, automated material handling and introducing manufacturing information systems) (AVE = 0.780/ α = 0.866)		
INN_R1	Process innovations introduced by our firm during the past three years have been ... (Scale: 1 = limited and 7 = extensive)	0.80
INN_R2	Process innovations have mainly been ... (Scale: 1 = incremental; 7 = radical)	0.96
<i>Managerial innovation</i> (e.g. introducing computer-based administrative applications, developing new employee rewarding schemes, obtaining new financing sources and introducing new departments or project teams) (AVE = 0.862/ α = 0.916)		
INN_M1	Managerial innovations introduced by our firm during the last three years have been ... (Scale: 1 = limited and 7 = extensive)	0.84
INN_M2	Managerial innovations have mainly been ... (Scale: 1 = incremental; 7 = radical)	1.0
<i>Marketing innovation</i> (e.g. introducing new pricing methods, new distribution methods, new sales approaches or leasing arrangements) (AVE = 0.837/ α = 0.908)		
INN_K1	Marketing innovations introduced by our firm during the past three years have been ... (Scale: 1 = limited; 7 = extensive)	0.90
INN_K2	Marketing innovations have mainly been ... (Scale: 1 = incremental; 7 = radical)	0.93
Export performance (adapted from Evans and Mavondo, 2002; Evans <i>et al.</i> , 2008) (second-order) (AVE = 0.724/CR = 0.835) (χ^2 = 37.41 (7 df, p = 0); RMSEA = 0.153; NFI = 0.97; CFI = 0.98; IFI = 0.98; RFI = 0.94; SRMR = 0.074; GFI = 0.94; and AGFI = 0.81)		
<i>Financial performance</i> (AVE = 0.778/ α = 0.924)		
Question: To what extent have the following financial indicators changed for your company in the past three years in the nominated markets? (Scale: 1 = decrease of more than 20 per cent; 7 = increase of more than 20 per cent)		
PE_F1	Return on assets	0.91
PE_F2	Return on investment	0.92
PE_F3	Return on sales	0.92
PE_F4	Sales	0.77
<i>Strategic effectiveness</i> (AVE = 0.828/ α = 0.909)		
Question: How successful has your company been regarding the following in relation to the nominated markets in the past three years? (Scale: 1 = very unsuccessful; 7 = very successful)		
PE_S1	Achievement of strategic objectives	0.91
PE_S2	Satisfaction with overall performance	0.91

Table AII.

(continued)

Control variables*Legal and political distance* (AVE = 0.824/ α = 0.932)

BD_L1 Stability of political structure 0.84

BD_L2 Consumer protection legislation 0.94

BD_L3 Competitive practices legislation 0.94

Economic distance (AVE = 0.718/ α = 0.880)

BD_E1 Gross domestic product (GDP) per capita 0.85

BD_E2 Capacity of the banking sector 0.89

BD_E3 Level of demands for goods and service 0.80

Firm size (number of full-time employees) N/A

Industry type N/A

GDP per capita (in current US\$) (export market) N/A

Geographical distance (in km) N/A

Free trade area (dummy) N/A

Notes: AVE = average variance extracted (Fornell and Larcker, 1981); CR = construct reliability (Bagozzi, 1980); α = Cronbach's coefficient alpha; RMSEA = root mean square of approximation; NFI = normed fit index; CFI = comparative fit index; IFI = incremental fit index; RFI = relative fit index; SRMR = standardized root mean residual; GFI = goodness-of-fit index; and AGFI = adjusted goodness-of-fit index. The values next to each item are standardized loadings; the original questionnaire was in Swedish

Table AII.**About the authors**

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