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Distance, Market Appraisal and Market Attractiveness: Evidence from a Vignette Experiment

ABSTRACT

Recent research calls for the use of perceptual data in assessing distance (country differences) in international business research, mainly grounded on the argument that managers formulate strategies for responding to the environmental demands based on their perceptions of the firm's (external) environment. Despite several efforts to incorporate perceptual measures of distance to explain a variety of firms' internationalization decisions, the large majority of studies are relied on observational data and cross-sectional tests. The findings of these studies therefore suffer from the 'endogeneity' problem where it is difficult to make causal inferences about the question of interest; they measure the decision-makers' perceptions *ex post*. To address the above methodological obfuscation, using the experimental vignette methodology, this study contributes to the international business literature by examining decision makers' perception of distance (cultural, administrative, geographical and economic) in conjunction with and prior to a foreign market appraisal and decision of foreign market selection.

1 INTRODUCTION

“Distance” (i.e. country differences) is the essence of international business (IB) (Zaheer, Schomaker, & Nachum, 2012). Firms engage in IB to find and exploit business opportunities outside the domestic market (Johanson & Vahlne, 2009, Lu & Beamish, 2001). However, exploiting these opportunities entails costs and risks of doing business in a new foreign market, mainly resulting from barriers created by “distance” (Ghemawat, 2001). Distance may originate not only from physical remoteness but also from administrative, economic, and cultural differences (Hutzschenreuter, Kleindienst, & Lange, 2016). The concept of distance has been widely used to explain a variety of strategic decisions made in a firm’s internationalization process, including, among others, foreign market selection, entry mode choice and international marketing strategy (for a comprehensive review, see for example, Beugelsdijk, Kostova, Kunst, Spadafora, & van Essen, 2018, Hutzschenreuter, Kleindienst, & Lange, 2016, López-Duarte, Vidal-Suárez, & González-Díaz, 2016).

The concept of distance is typically defined as degrees of dissimilarity between country pairs and is mostly conceptualized using Kogut and Singh’s (1988) index based on country level data (Ambos & Håkanson, 2014). Despite its popularity, this approach has been questioned by extant research, meaning that the original underlying assumptions and rationale behind the concept have been largely overlooked (Baack, Dow, Parente, & Bacon, 2015, Dow, 2017, Shenkar, 2001). Recent research calls for the use of perceptual data in assessing distance in IB research, mainly grounded on the argument that managers formulate strategies for responding to the environmental demands based on their *perceptions* of the firm’s (external) environment (Baack, Dow, Parente, & Bacon, 2015, Devinney, Midgley, & Venaik, 2003, Hambrick & Mason, 1984, Harzing, 2004, Maitland & Sammartino, 2015). However, Harzing (2004) argues that most studies in IB research have succeeded in completely removing the managers who make the actual decisions from the equation. In response to this criticism, there have been efforts to incorporate perceptual measures of distance to explain a variety of firms’ internationalization decisions. However, these studies have mainly relied on observational data and cross-sectional tests, i.e. measuring the decision-makers' perceptions *ex post* (Dow & Karunaratna, 2006). An underlying reason for the use of observational data and cross-sectional tests in IB literature

is related to difficulty in “*surveying a decision-maker's perceptions immediately prior to a critical decision*” (Dow & Karunaratna, 2006, p. 580).

Foreign market selection is the first and most important question for an international business (Papadopoulos, Chen, & Thomas, 2002). Although, the initial assumption is that foreign markets that are more similar to the home market are generally more attractive for the international businesses (Kogut & Singh, 1988, Nordstrom & Vahlne, 1994), the results of the empirical studies are still inconclusive. Several empirical studies relying on the notion “distance paradox” state that in foreign markets where culture, political and economic environments are very similar to the home market, firms may encounter stronger competition from local firms because of difficulties in establishing a clear basis for differentiation (O'Grady & Lane, 1996). Furthermore, in the specific case of companies based in highly developed markets, the unique opportunities available in terms of first mover advantages and less direct competition in “distant” markets may encourage expansion into those markets (Evans & Mavondo, 2002, Evans, Mavondo, & Bridson, 2008). However, a main concern regarding previous research on “distance” is related to the applied methodological approach meaning that the large majority of studies are relied on observational data and cross-sectional tests (Reeb, Sakakibara, & Mahmood, 2012). These studies subsequently suffer from the ‘endogeneity’ problem where “*it is difficult to make causal inferences about the question of interest*” (Reeb, Sakakibara, & Mahmood, 2012, p. 212).

According to Aguinis and Bradley (2014) experimental (or quasi-experimental) designs help us to understand causal relationships. Despite several calls regarding the need for experimental designs in management studies (including IB), there has been only a small minority of published papers that implemented those designs (Reeb, Sakakibara, & Mahmood, 2012). The main reason for such a shortcoming has been related to practical and logistical constraints associated to experimental studies, including the amount of time and effort required to create experimental materials, recruit participants and administer experimental treatments (compared to e.g. using archival data or an online survey) (Aguinis & Bradley, 2014).

To address the above methodological obfuscation, using the experimental vignette methodology, this study contributes to IB literature by surveying decision makers' perception of distance (cultural, administrative, geographical and economic) in conjunction with and prior to a foreign market appraisal and decision of foreign market selection.

2 THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

2.1 Distance: a CAGE model

Several frameworks have been presented regarding dimensions of "distance". One of the, so far, most comprehensive frameworks is the CAGE model (Ghemawat, 2001). According to Ghemawat (2001), distance between two countries increases with cultural distance, administrative and political distance, geographic distance and economic distance (known as CAGE model). Cultural distance often refers to the difference between countries in terms of norms, ideas, values and beliefs (Shenkar, 2001).

Cultural distance is one of the most important concepts in IB and has been used to explain a variety of strategic decisions made in a firm's internationalization process (Beugelsdijk, Kostova, Kunst, Spadafora, & van Essen, 2018, Harzing & Pudelko, 2016, Hutzschenreuter, Kleindienst, & Lange, 2016, López-Duarte, Vidal-Suárez, & González-Díaz, 2016). Administrative and political distance refers to differences between countries in terms of political environment, e.g. stability of political structure and the ideology of national environment (Evans, Mavondo, & Bridson, 2008).

Geographical distance is related to the physical remoteness and lack of common border between the countries (Ghemawat, 2001). Finally, economic distance refers to differences in the economic environment and level of development in foreign markets (e.g. gross domestic product, GDP) (Campa & Guillén, 1999).

2.2 Distance and foreign market appraisal

Market appraisal refers to the extent to which decision makers perceive a market as an opportunity (or threat¹) where the firm could experience an increase in sales and/or profits. Previous research shows that the more managers appraise a market as an opportunity, the greater is their propensity to commit

¹ Although threat can be potentially considered as a separate concept, in this study we defined it as opportunity's other side of the coin.

more resources to that market (White, Varadarajan, & Dacin, 2003). In the context of IB, expansion decisions are often attributed to the perception of opportunities in foreign markets (Cavusgil, Kiyak, & Yeniyurt, 2004, Ellis, 2011) to enhance productivity or to seek rent (Li, Quan, Stoian, & Azar, 2018). Recognition of an opportunity is therefore critical to the success of international businesses (Eckhardt & Shane, 2003, Kim, Choi, Jean, & Cadogan, 2018).

According to White, et al. (2003), compared to less-controllable market situations, decision makers more likely appraise a controllable market situation as an opportunity. They argue that in more controllable market situations managers perceive that they can control the outcomes of their decisions and hence are better able to visualize a concrete series of action steps leading to a desired outcome. As a result, they appraise the market as an opportunity. Distance (country differences) creates uncertainty for decision makers, since they see themselves as lacking sufficient market information to accurately predict the challenges facing the firm in the new (distant) foreign market environment (Maitland & Sammartino, 2015, Yamin & Sinkovics, 2006). Subsequently, a foreign market with substantial differences from the home market is highly likely to be perceived as less-controllable, since the decision maker can barely control the outcomes of its decisions. We, therefore hypothesize that:

H₁: All other things being equal, the more a foreign market is perceived as different/distant (in terms of CAGE) to the home market, the less the decision marker appraises the market as an opportunity.

2.3 Distance and foreign market attractiveness

The general assumption in IB literature is that geographically closer foreign markets that are more similar (in terms of cultural, political, economic) to the home market are more attractive for the international businesses (Kogut & Singh, 1988, Nordstrom & Vahlne, 1994). The similarity and physical proximity presumably lead to ease of learning about the market, and hence low levels of uncertainty (Johanson & Vahlne, 1977). Firms expect that because of these similarities they can transfer their knowledge of their own market to the close markets, resulting in potentially better performance than in more distant markets (Chelariu, Bello, & Gilliland, 2006, Luo & Peng, 1999). Using the trade flow among the nations as a proxy for market attractiveness, Dow and Karunaratna

(2006) found that country differences are negatively associated with the intensity of trade between countries. Previous research shows that differences in terms of culture represent a barrier to the international transfer of information, influencing the collection and interpretation costs of critical management information, which increase the liability of foreignness and uncertainty in the new foreign market (Carlson, 1974, Håkanson & Dow, 2012, Harzing, 2004, Ojala, 2015, Zaheer, 1995). Difference in the political environment can also have crucial implications for firm internationalization (Holmes Jr., Miller, Hitt, & Salmador, 2013). For example, political instability may lead to frequent and arbitrary changes in economic policy, which in turn can increase uncertainty and discourage entry by foreign firms or lead to companies' withdrawal from the foreign market (García-Canal & Guillén, 2008, Henisz, 2000). Geographical distance is associated with 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. Finally, Campa and Guillén (1999) argue that the economic environment can also affect the attractiveness of foreign markets through its effects on innovation, competition and general institutional quality. Accordingly, we hypothesize that:

H₂: All other things being equal, the more distant a foreign market (in terms of CAGE) to the home market, the less attractive the decision maker perceives the market for its potential expansion.

3 RESEARCH METHODOLOGY

We applied the experimental vignette methodology (EVM) to test our hypotheses. EVM is particularly useful when variables are known to correlate but there is a need to determine the nature and direction of causal relationships; a common obfuscation in IB research (Reeb, Sakakibara, & Mahmood, 2012). Accordingly, we presented the participants with carefully constructed and realistic scenarios to assess the impact of distance (CAGE) on foreign market appraisal and attractiveness. Kirkman, et al. (2006) state that using experimental methodology in IB research can enhance the internal validity of those studies. In this study, we followed Aguinis and Bradley's (2014) recommendations for designing and implementing EVM. EVM allows us to exercise control of our independent variables (distance variables) to gather evidence regarding causation and hence to include

factors that are relevant to our research question while excluding those that might confound the results.

3.1 Experimental Design

We employed a between-subject design in which each respondent was randomly assigned to a case scenario, describing a foreign country as a potential target market for the firm's international expansion. Following Aguinis and Bradley's (2014) recommendation, we provided the participants with adequate contextual background. Following the CAGE model (Ghemawat, 2001), we developed four scenarios in which the country's national culture, administrative and economic environment and its geographical distance to the home market (the UK) were balanced. In developing scenarios, we endeavored to provide realistic yet balanced market situations. To avoid self-selection bias (Olsen, 2008) we did not mention the country's name in the scenarios. The first scenario described a country similar (close) to the UK (the home market) in regard to all four dimensions (CAGE). The second scenario was related to a country which was close to the UK in all dimensions but geographical distance. The third scenario described a country which was different (distant) from the UK in all dimensions but geographical distance and finally, the fourth scenario was related to a country which was distant from the UK in regard to all dimensions (Table 1).

****Table 1 about here****

3.2 Measures

We relied on the measures from the extant literature but modified them for the current research context (Churchill, 1979) (Appendix).

3.2.1 *Culture*

We described and balanced each countries' national culture based on Hofstede's (1980) definitions and descriptions of the four original dimensions of national culture: power distance (PDI), individualism (IND), masculinity (MAS) and uncertainty avoidance (UAI) (Evans & Mavondo, 2002, Evans, Mavondo, & Bridson, 2008) (see Appendix). These dimensions are also consistent with

dimensions identified by other frameworks e.g. the GLOBE study (House, Hanges, Javidan, Dorfman, & Gupta, 2004). We used the UK cultural characteristics (based on Hofstede's scores²) in regard to the above four dimensions as basis to define target countries as either culturally close or distant to the UK. We first calculated the mean of each dimension for all countries in the Hofstede's study³. Accordingly, for scenario development we defined a culturally close country as a country with relatively low levels of PDI and UAI, moderate level of MAS and relatively high level of IND (Hofstede, 2001). We are aware of increasing criticism regarding theoretical and methodological issues in relation to Hofstede's framework (see e.g. McSweeney, 2002, Spector, Cooper, & Sparks, 2001). However, this framework is still among the most influential (Kirkman, Lowe, & Gibson, 2006, Oyserman, Coon, & Kimmelmeier, 2002) where there are extensive evidence attests to the applicability of Hofstede's (2001, 1980) national cultural scores (c.f. Brock, Johnson, & Zhou, 2011, Burchell & Gilden, 2008, Dikova & Sahib, 2013, Morosini, Shane, & Singh, 1998, Taylor & Wilson, 2012). By investigating different operationalizations of cultural distance, Magnusson et al. (2008) found that the cultural distance construct based on Hofstede's scores has strong convergent validity. Furthermore, Beugelsdijk, Maseland and van Hoorn (2015) analyzed scores of societies on culture dimensions using a cohort analysis, and found that although absolute scores of societies on culture dimensions have changed slightly over time, relative differences have remained.

3.2.2 *Administrative/political and economic environment*

We described and balanced the countries' administrative environment in two dimensions: legal and political environment (Evans, Mavondo, & Bridson, 2008, Ghemawat, 2001). We used the UK administrative characteristics in regard to its stability of political structure, ideology of national government, consumer protection legislation and business ownership legislation as basis to define target countries as either 'administratively' close or distant to the UK. We used the World Bank's political stability index (WGI, 2017) to measure the UK degree of stability of political structure. The index ranges from -2.5 (low degree of stability) to +2.5 (high degree of stability). According to the

² The scores for the UK are PDI = 35, IND = 89, MAS = 66 and UAI = 35.

³ The mean values are as follows: PDI = 57 (SD = 22), IND = 43 (SD = 25), MAS = 49 (SD = 18) and UAI = 65 (SD = 24)

stability index 2015 (WGI, 2017), the UK's score is 0.56 which is above the average (the average for 2015 was -0.04) indicating relatively high degree of stability. The UK is also considered as a country with high standards for consumer protection and business ownership legislation. The UK has a democratic political structure with a pluralist governmental system based on majority vote (Norris, 1997). Accordingly, for scenario development, an 'administratively' close country was defined as a country with high stability of political structure, a pluralist governmental system based on majority vote in which consumer rights, and business ownership are highly protected.

We described and balanced the countries' economic environment using two indicators: per capita gross domestic product (GDP) and level of demand for goods and services (Evans, Mavondo, & Bridson, 2008, Ghemawat, 2001). According to International Monetary Fund⁴, the UK is a highly developed country and is the fifth-largest national economy in the world (GDP = 39,899 USD as of 2016) (Kupelian, 2018). Thus, for scenario development we defined an 'economically' close country as a developed country with a GDP of more than 40,000⁵ USD per capita with high level of demand for goods and services in general.

3.2.3 *Geographical distance*

We operationalized the geographical distance in terms of the actual physical distance (in miles) (Malhotra, Sivakumar, & Zhu, 2009, Ojala & Tyrväinen, 2007) and the absolute flight hours (Stein & Daude, 2007) between the capital cities of the host countries and London. We obtained the physical distance in miles from Geobytes Database and used the natural logarithm of the values. Countries with more than 5000⁶ miles distance were considered as distant and countries less than 2000 miles away from London (less than 4 hours flight) considered as close.

⁴ International Monetary Fund, world economic outlook database, April 2018.

⁵ We defined the distant country as a developing country with a GDP of less than 10,000 USD per capita with low level of demand for goods and services (average of GDP per capita of countries ranked by International Monetary Fund in 2017 excluding top 20 countries).

⁶ We defined countries as close or distant based on the average of physical distance between the UK and other countries (i.e. 5000 miles).

3.2.4 *Dependent variables*

Regarding foreign market appraisal, we asked participants to indicate the extent to which they would a) describe the foreign market overall as an opportunity; b) label the venture as something positive; and c) feel the future looks promising for selling the product in that foreign market (1 = to small extent, 5 = to great extent) (White, Varadarajan, & Dacin, 2003). Regarding the attractiveness of the foreign market, participants were asked to determine the likelihood that they would consider the country in question for their firm international expansion (1 = very unlikely, 7 = very likely).

3.3 *Sample*

A major challenge in EVM studies is difficulty in access to an appropriate sample. Despite criticisms regarding student participation in experimental studies (Aguinis & Bradley, 2014), this group are more likely to be homogeneous in relation to certain demographic characteristics such as experience, age and level of education which gives rise to an increased validity of the results (Calder, Phillips, & Tybout, 1981). Furthermore, the findings of previous research suggest that students are appropriate proxies for managers in an experimental setting (Remus, 1986). In this study, the sample consists of under/postgraduate and PhD students in Brunel University London. Participants were recruited through an invitation poster circulated at the campus to a sample of 1,000 students. The invitation poster briefly indicated that the study is related to managerial decision making in international business, but due to the experimental nature of the study and to avoid self-selection bias (Olsen, 2008), the focus of the study (the effect of distance on foreign market appraisal and attractiveness) was not mentioned. Interested participants registered anonymously. Each participant was invited to attend a scheduled session and received the study instructions.

3.4 *Procedures*

During April-May 2018, a total of 10 sessions were held and at least one of the authors attended all the sessions. Participants in each session were randomly assigned to one of the scenario treatments. In all other respects, the participants in the study were treated equivalently and all procedures were

identical in all experimental conditions. The participants were instructed to take the role of a manager and decision maker during the session in which they participated. Each session lasted between 30–45 minutes and started by welcoming the participants, providing information about data confidentiality and procedures, general information about the structure and their role as a manager in the given task, so as to set a common frame for the experiment.

The sequential order of the experiment was as follows:

- (i) Questions about socio-demographic factors and the level of education were answered before the experiment.
- (ii) Information about the case scenarios were provided (randomly assigned).
- (iii) Questions about foreign market appraisal and attractiveness.

4 DATA ANALYSS AND RESEARCH FINDINGS

A summary of demographic sample characteristics is presented in Table 2. Tests for treatment-specific selection bias were not performed since the net differences in observable covariates (sex, residency, and education program) is zero in expectation at baseline, given the randomization of the case scenarios (Deaton & Cartwright, 2017).

****Table 2 about here****

Distribution of mean of market appraisal and attractiveness across case scenarios are shown in Figure 1. Constitutive components pertinent to each case scenario are presented in the Appendix.

****Figure 1 about here****

A one-way multivariate analysis of variance (MANOVA) was conducted to test the hypotheses that there would be one or more mean differences between presented case scenarios and market appraisal as well as market attractiveness. A statistically significant MANOVA effect was obtained, Pillais' Trace= .47, $P < .001$ ($F(290, 3) = 15$, $p < .0005$; Wilk's $\lambda = 0.538$, partial eta squared $\eta^2 = .24$). Multivariate eta-squared of .24 indicates a relatively large effect size (Green, Akey, Salkind, & Akey, 1999, Miles & Shevlin, 2001). Wilks' Lambda varies between 0 and 1 (where 0 means total

discrimination, and 1 means no discrimination) and is the measure of the percent of variance in dependent variables that is not explained by differences in the level of independent variable.

Absence of multivariate outliers is checked by assessing Mahalanobis Distances (Mahalanobis, 1936) among the participants⁷. Few outliers with a Mahalanobis Distance value greater than critical chi square value at $p = .001$ (critical $X^2_{p=.001,df=2} = 13.8$) are identified (Hair, Black, Babin, & Anderson, 2010) but since the data is measured based on group Likert-scale it is not necessary to discard them.

Prior to conducting the MANOVA, a Pearson correlations were performed between the dependent variables in order to examine the assumption that the dependent variables would be moderately correlated with each other (Meyers, Gamst, & Guarino, 2012). As can be seen in Figure 1, a meaningful pattern of correlations was observed amongst the dependent variables, suggesting the appropriateness of a MANOVA. Tabachnick and Fidell (2012) suggest that correlation above $r = .90$ can be considered as a signal of multicollinearity. The Pearson correlation coefficient of 0.69 indicated a moderate correlation between market appraisal and attractiveness. In addition, the Eigen values (1.69 and .31; condition number (k) = 5.5) are about the same magnitude range indicating no significant multicollinearity.

The Box's (1949) M test is significant which means that there are significant differences among the case scenarios in the covariance matrices (critical $X^2_{p=.002,df=9} = 30$). Huberty and Petoskey's (2000) pointed to the cut-off value (i.e. $P < .005$) for Box's M-test, however, since the group sizes are over 30, then the MANOVA is robust against violations of homogeneity of variance-covariance matrices assumption (Allen & Bennett, 2007). Thus, the covariance matrices between the groups were assumed to be equal for the purposes of this MANOVA.

⁷ for detailed discussions on importance of outlier detection refer e.g., Barnett, V. & Lewis, T. 1994. *Outliers in statistical data*. 3rd ed. New York: Wiley., Johnson, R. A. & Wichern, D. W. 2007. *Applied Multivariate Statistical Analysis*. Upper Saddle River, New Jersey: Prentice Hall.; Leroy, A. M. & Rousseeuw, P. J. 1987. *Robust regression and outlier detection*. *Wiley Series in Probability and Mathematical Statistics*, New York: Wiley, 1987, Shekhar, S., Lu, C.-T., & Zhang, P. 2003. A unified approach to detecting spatial outliers. *GeoInformatica*, 7(2): 139-66..

Given the significance of the overall test, the univariate main effects were examined. Prior to conducting a series of follow-up ANOVAs, the homogeneity of variance assumption was tested for both dependent variables. Based on Levene F Test, homogeneity of variance (homoscedasticity) assumption was considered satisfied for variable market appraisal ($p > .05$). Consequently, through ANOVA analysis, a significant univariate main effects were obtained for degrees of market appraisal, $F(3, 51.3) = 19.7, p < .001$, with high effect size (partial eta square $\eta^2 = .29$). Significant pairwise differences were obtained in the level of market appraisal between the scenario 1 and both scenarios 3 & 4 as well as scenario 2 and both scenarios 3 & 4 (Table 3). As shown in Figure 1, the mean of market appraisal is higher in scenarios 1 and 2 than scenarios 3 and 4. These results confirm hypothesis 1 in which there exists an inverse relationship between market appraisal and perception of distance.

Regarding the market attractiveness, we considered Welch's (1951) heteroscedastic F-test procedure because homogeneity of variance is violated for market attractiveness ($p\text{-value} < .001$) (Dag, Dolgun, & Konar, 2018). The Welch ANOVA results indicated significant difference between the mean of market attractiveness across scenarios ($p\text{-value} < .0001$). Consequently, a post hoc test of Games-Howell was performed and the same effect was obtained for the variable market attractiveness. Therefore, hypothesis 2 is confirmed in which distance diminishes market attractiveness.

Table 3 about here

5 CONCLUDING REMARKS

The results show that there are significant differences among the scenarios (market situations) regarding the extent to which a market is perceived as an opportunity and degree of its attractiveness for a potential expansion. More specifically, the more a market is perceived as distant (scenarios 3 and 4 in relation to scenarios 1 and 2), the less likely the market is perceived as an opportunity. Therefore, the venture is not specifically perceived as positive or promising for future expansions (White, Varadarajan, & Dacin, 2003). An explanation is that substantial differences in distant markets and subsequent uncertainty make managers perceive that they cannot control the outcome of their

decisions. Therefore, decision makers less likely appraise the market situation as an opportunity (Eckhardt & Shane, 2003, Kim, Choi, Jean, & Cadogan, 2018, Maitland & Sammartino, 2015).

Regarding market attractiveness, the results confirm the initial assumption in IB theories that decision makers perceive distant markets as less attractive and therefore less likely select those markets for international expansion. Once again, Table 3 shows that there are significant differences in relation to market attractiveness between market situations described in scenarios 1 and 2 in relation to 3 and 4.

It is noteworthy that although our data shows a negative significant link between distant/dissimilarity and market appraisal and attractiveness, but we could not find sufficient evidence of direct link between perceived similarity to the home market and either appraisal or attractiveness. Further, interestingly, our results suggest that among CAGE distance dimensions, the geography has the lowest effect on the appraisal of a market as an opportunity.

The main contribution of this study lies on the methodology applied to examine some of the most frequently researched issues in IB literature. Despite several efforts to incorporate boundedly rational decision makers' perceptions to IB research (Maitland & Sammartino, 2015), it is still difficult to make conclusive causal inferences about the question of interest in those studies. A main concern here is that the findings of those studies are mainly based on observational data and cross-sectional tests (Reeb, Sakakibara, & Mahmood, 2012, p. 212). Using the EVM in this study allows us to determine the nature and direction of causal relationships among decision makers' perception of distance and foreign market appraisal and attractiveness. However, alike any other research studies this research have limitations. We have used students as respondents in this study. A major challenge in experimental studies is difficulty to access an appropriate sample. Despite criticisms regarding student participation in those studies, scholars still frequently use this group, owing to their homogeneous demographic characteristics such as experience, age and level of education, which potentially enhance the validity of the findings (Calder, Phillips, & Tybout, 1981). There are also other studies that actually confirm the appropriateness of students as proxies for managers in experimental settings (Remus, 1986).

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Appendix

Constructs and items used in scenarios

Cultural Distance

Power distance (PDI)

- Degree of inequality among the people
- Salary range between the highest and lowest paid in organizations
- Importance of equality before the law

Individualism/collectivism (IND)

- Respect for individual freedom
- Recognition of the right to privacy
- Freedom of the press

Masculinity/femininity (MAS)

- Importance of caring for others
- Importance of material success
- Degree to which women are expected to be assertive and ambitious

Uncertainty avoidance (UAI)

- Openness to change and innovation
- Tolerance of differences (i.e., religious, political, and ideological)
- Reliance on rules to govern behavior

Administrative/political Distance

- Stability of political structure
- Ideology of national government
- Consumer protection legislation
- Business ownership legislation

Economic environment

- Gross domestic product (GDP) per capita
- Level of demands for goods and service

Standard introduction: Assume you are a new managing director of a British medium-sized company (with 50 employees and average annual revenue of £20 million) operating in the IT industry. It is headquartered in London. The company was established five years ago and is expanding rapidly, with a 10% growth rate. The company had successful experience of overseas business last year. Therefore, the company is seeking other potential foreign markets in which to sell its product. This expansion will cost money and the company requires financing for such a venture.

Table 1. Design of case scenarios

	Scenario I	Scenario II	Scenario III	Scenario IV
Cultural distance	Close ^a	Close	Distant	Distant
Administrative distance	Close	Close	Distant	Distant
Geographical distance	Close	Distant	Close	Distant
Economic distance	Close	Close	Distant	Distant

Note: ^aDistance (similarity/dissimilarity/proximity) to the UK (home market)

Table 2. Demographic sample characteristics (shares) by scenario

Variable	S _I ^a	S _{II}	S _{III}	S _{IV}	Total
Gender (=1 if male)	22	16	13	12	63
Age					
< 25 years old	32	32	23	22	109
26-35 years old	12	9	5	7	33
> 35 years old	0	0	6	1	7
Level of highest education					
Year 1	12	11	4	2	29
Year 2	3	5	4	6	18
Year 3	2	6	8	4	20
MSc	24	12	12	14	62
MBA	1	0	0	0	1
PhD	2	7	6	4	19
Program					
Accounting	4	8	2	0	14
Brand Management	2	0	0	0	2
Human	3	0	1	0	4
International Business	14	5	6	6	30
General Management	15	17	21	12	65
Marketing	5	8	3	9	25
Media	1	2	1	3	7
Information Technology	0	1	0	0	1
Experience (=1 if yes)	13	11	7	8	39
Total sample size	44	41	34	30	149

^a S_I to S_{IV} stands for scenarios I to IV presented in Appendix I.

The total of variable program does not equal to 149 since the question was optional.

Table 3. Pairwise post-hoc analysis related to market appraisal and attractiveness

	diff	CI-low	CI-High	t	Df	P.value
Scenario 2-Scenario1	0.12	-0.44	.068	0.56	80	.943 ¹
	(0.35)	(-0.17)	(0.88)			(0.31)*
Scenario 3-Scenario1	-2.34	-3.17	-1.52	7.53	49	<.001
	(-0.91)	(-1.46)	(-0.36)			(0.00)
Scenario 4-Scenario1	-2.17	-3.10	-1.24	6.27	40	<.001
	(-1.06)	(-1.63)	(-0.49)			(0.00)
Scenario 3-Scenario2	-2.46	-3.32	-1.61	7.63	54	<.001
	(-1.26)	(-1.82)	(-0.70)			(0.00)
Scenario 4-Scenario2	-2.29	-3.24	-1.34	6.42	44	<.001
	(-1.41)	(-1.99)	(-0.83)			(0.00)
Scenario 4-Scenario3	0.17	-0.94	1.29	0.41	60	.977
	(-0.15)	(-0.76)	(0.46)			(0.92)

¹Games Howell post hoc test.

*Tukey Honestly Significant Adjusted p-value

Figures in bracket are related to market attractiveness (Welch's ANOVA).

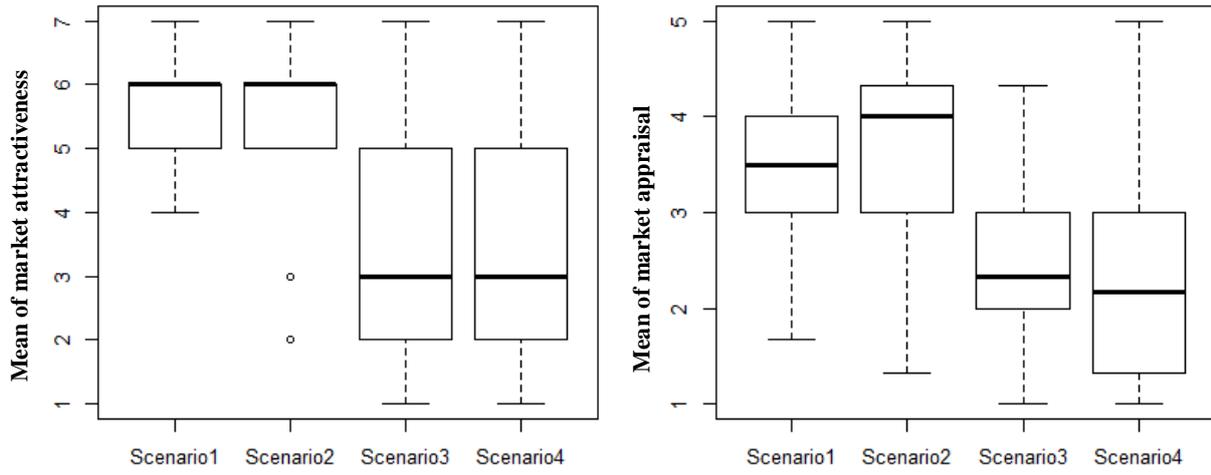


Figure 1. Mean of market appraisal and attractiveness