# **Northeastern Illinois University NEIU Digital Commons**

Management and Marketing Faculty Publications

Management and Marketing

2015

# Order of Entry into Foreign Countries by US Multinationals Since 1965: Role of Psychic Distance Over Time and Across Sectors

Suresh Singh Northeastern Illinois University, s-singh1@neiu.edu

Follow this and additional works at: https://neiudc.neiu.edu/mm-pub



Part of the International Business Commons, and the Marketing Commons

#### Recommended Citation

Singh, Suresh, "Order of Entry into Foreign Countries by US Multinationals Since 1965: Role of Psychic Distance Over Time and Across Sectors" (2015). Management and Marketing Faculty Publications. 1. https://neiudc.neiu.edu/mm-pub/1

This Article is brought to you for free and open access by the Management and Marketing at NEIU Digital Commons. It has been accepted for inclusion in Management and Marketing Faculty Publications by an authorized administrator of NEIU Digital Commons. For more information, please contact h-owen3@neiu.edu,a-vincent@neiu.edu,l-wallis@neiu.edu.

Pre publication draft (accepted version) of the following paper: Singh, S. (2015). Order of entry into foreign countries by US multinationals since 1965: role of psychic distance over time and across sectors. International Journal of Business and Globalisation, 15(2), 171-192.

Order of entry into foreign countries by US multinationals since 1965:

Role of psychic distance over time and across sectors

Suresh Singh
Northeastern Illinois University
Department of Management and Marketing, College of Business and Management
5500 N. Saint Louis Avenue, Chicago, Illinois, USA 60625
Email: S-Singh1@neiu.edu

#### **Abstract**

Observations of internationalizing manufacturing firms, in the late seventies, revealed that the order in which firms enter foreign countries is influenced by psychic distance (perceived closeness based on factors such as culture, language and development level). Since then, the world has undergone rapid globalization and services have replaced manufacturing as the dominant sector of the world economy. To ascertain whether (a) psychic distance is still relevant and (b) industry sector impacts the relationship between psychic distance and order of entry, this paper analyzed the order of entry into foreign countries by US multinationals in manufacturing and services sectors since 1965. Results indicate that cultural and language differences still play a role and the effect is very similar across sectors.

#### **Keywords**

order of entry; psychic distance; globalization; manufacturing; services; process models; cultural distance; international entry; foreign direct investment; multinationals

#### 1. Introduction

In late seventies, several studies reported observations of internationalizing manufacturing firms and led to the process models of internationalization (Bilkey and Tesar, 1977; Cavusgil, 1980; Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975; Reid, 1981).

These studies showed that foreign country selection for international entry was not a "discrete rational choice" (Benito and Gripsrud, 1992) based on an evaluation of all the potential alternatives (Aharoni, 1966; Ehrman and Hamburg, 1986; Stobaugh, 1969) but rather a gradual path-dependent learning process in which *psychic distance* i. e. the similarity or dissimilarity between countries based on factors like culture, language, industrial development etc. play an important role.

Except for the Uppsala model (Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975), all other process models were based on observations of small and medium sized exporters only. Based on this, Bilkey and Tesar (1977) and Reid (1981) raised the possibility that the process models are more suited for small and medium sized exporters than for relatively larger multinational companies (MNCs) engaged in foreign direct investment (FDI). Some studies that later analyzed FDI rather than exports found no effect of psychic distance on foreign country selection (Benito and Gripsrud, 1992; Engwall and Wallenstal, 1988), prompting Ellis (2008, p. 354) to speculate that, "psychic distance - or any other proxy for information acquisition costs - is likely to be a poor predictor of foreign expansion activities involving substantial commitments or company resources, such as foreign direct investment".

Moreover, the process models and the emphasis these models placed on psychic distance were based on studies of manufacturing firms only. At the time, manufacturing was the dominant sector of the world economy but today services account for a greater percentage of the world output. According to the CIA World Factbook 2013 estimate, services contributed about 80 percent and 73 percent of the gross domestic product (GDP) of US and European Union respectively. Major differences between manufacturing and services have been identified in the literature (Boddewyn et al., 1986; Knight, 1999) but whether these differences affect the relationship between psychic distance and the order in which foreign countries are entered remains an open question.

Several decades have passed since the process models and the psychic distance construct were first introduced. Rapid globalization during this period has led many to believe that the impact of psychic distance on foreign country selection has weakened. However, there is little empirical evidence to support this hypothesis. On the contrary, after an analysis of the foreign sales subsidiaries of Swedish manufacturing firms over a century, Nordstrom & Vahlne (1992) concluded that the influence of psychic distance on the order of entry into foreign countries had been very stable over time. More empirical evidence is clearly needed to find out if globalization has diminished the impact of psychic distance.

To address aforementioned issues, this study analyzed the choice of foreign countries for FDI by US manufacturing and service firms since 1965. The purpose was to ascertain (a) if globalization has indeed weakened the relationship between psychic distance and the order in which foreign countries are entered and (b) if the role of psychic distance differs across industry sectors.

#### 2. Literature Review

Entry into a foreign country is a major decision for every firm because it involves significant commitment and is not easily reversible. It is remarkable, therefore, that before making such an important decision, firms do not always perform a careful analysis of all the available alternatives (Aharoni, 1966), as expected by the prescriptive models of country selection (Ehrman and Hamburg, 1986; Stobaugh, 1969). According to these models, rational profitmaximizing firms should rank countries in the order of their profit potential and enter them accordingly. Several factors have been proposed to guide this ranking. Stobaugh (1969) suggested that both country related factors and product related factors should be considered. Market size, investment climate, availability of local technology and distance from major exporting nations were listed as country related variables, while product related variables included economy of scale, transportation costs and discretionary vs. non-discretionary product nature. Sethi (1971) used 29 different variables and arrived at four major clusters of related factors, namely aggregate production and transportation, personal consumption, trade and health and education. Similarly, Goodnow and Hansz (1972) used 59 country specific variables classified into seven major groups: political stability, market opportunity, economic development and performance, cultural unity, legal barriers, physiographic barriers and geocultural distance, yielding three clusters - "hot, moderate and cold"- depicting country attractiveness. The quest for a superior prescriptive model continued, despite recognition that obtaining information on so many factors about all the countries in the world can be costly, if not impossible, and may in fact overburden or complicate the decision process. To address this issue, Ehrman and Hamburg (1986) proposed a two-stage prescriptive model in which firms first select a subset of countries

and then choose the country with the best potential within the subset. Beim and Levesque (2006) proposed multiple criteria decision analysis as a useful tool for making better country selection decisions. Finally, Zhao and Levary (2002) argued that host country attractiveness may differ across industries and proposed a customized model for the e-retail industry.

Actual observations of internationalizing firms revealed, however, that firms rarely evaluate all alternatives before selecting foreign countries for investment. This finding led to the descriptive models (Bilkey and Tesar, 1977; Cavusgil, 1980; Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975; Reid, 1981). These models described internationalization as an incremental, path-dependent learning process, undertaken by firms who do not possess experiential knowledge of foreign countries and consequently prefer countries that are at a low psychic distance (psychologically close) from the home country. The characterization of foreign entry as a process, is the reason why these descriptive models are also popular as the process models of internationalization.

#### 2.1. Origins of the Psychic Distance Construct

It was Beckerman (1956) who noted, perhaps for the first time, that international trade may be affected not only by physical distance separating countries but also by the psychic distance between them. As he explained, "while the transport costs paid (directly or indirectly) by an Italian entrepreneur on a raw material supplied by Turkey may be no greater (as the material may come by sea) than the same material supplied by Switzerland, he is more likely to have contacts with Swiss suppliers, since Switzerland will be 'nearer' to him in a psychic evaluation (fewer language difficulties, etc.) as well as in the economic sense that air travel will absorb less of his

time" (Beckerman, 1956, p. 38). Ten years later, Linnemann (1966, p. 28) made a similar observation, noting that "perfect knowledge of the market does not exist, either for producers or for consumers", and that dramatic improvements in modern communications notwithstanding, we are still better informed about our immediate environment than about conditions in foreign markets. While acknowledging the importance of psychic distance, both of these studies did not try to measure psychic distance and were limited to the analysis of the impact of geographical distance on international trade. Linnemann (1966) actually used geographical distance as the proxy for psychic distance.

#### 2.2. Psychic Distance and the Process Models of Internationalization

The concept of psychic distance was introduced to the international management literature by the process models of internationalization (Bilkey and Tesar, 1977; Cavusgil, 1980; Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975; Reid, 1981). Based on a study of the export behavior of small and medium sized manufacturing firms in Wisconsin (USA), Bilkey & Tesar (1977) concluded that firms initiate exports on an experimental basis to psychologically proximate countries and target psychologically remote countries only after gaining experience. A psychologically close country was defined as one that had the same culture and was at a similar stage of economic development as the home country of the exporter. Highlighting the departure from prescriptive models, the authors stated that the exploratory stage of the export development process is influenced by "managements' general images of exporting and of foreign lands than of immediate economic considerations" (Bilkey and Tesar, 1977, p. 94). Later variants of the process models (Cavusgil, 1980; Reid, 1981) made similar observations (see Andersen, 1993 for a review).

Johanson & Vahlne's (1977) model stands out among the process models in that it extends beyond exports and describes not only the selection of a foreign country but also the evolution of the internationalizing firm's commitment within a particular foreign country (from exports to FDI). The model was based on studies of Swedish firms conducted at the University of Uppsala, Sweden, and so became popular as the Uppsala model. It proposed that psychic distance, defined as the "sum of factors preventing the flow of information from and to the market" (Johanson and Vahlne, 1977, p. 24), was the primary barrier to international expansion. Differences in language, education, business practices, culture and industrial development were listed as factors that together give rise to psychic distance. The model assumed that firms are risk averse, and so prefer low psychic distance countries in order to avoid the uncertainty caused by the lack of experiential knowledge about foreign countries. The Uppsala model maintained that firms establish operations in foreign countries in increasing order of the psychic distance between the home and the host country.

Barring a few exceptions (for example Benito and Gripsrud, 1992), the predictions of the Uppsala model were well supported by empirical studies across different home countries.

Davidson (1980) analyzed FDI projects by 180 largest US multinationals and concluded that the order in which American firms entered foreign countries could not be explained by economic factors like market size alone and that firms showed a preference for near and similar countries, especially for initial entries. The preference for culturally similar countries was also supported by Erramilli (1991) and Flores and Aguilera (2007). In a study tracking the foreign sales subsidiaries of Swedish manufacturing firms for a period of about 100 years, Nordstrom and Vahlne (1992) found that the negative impact of psychic-distance on the order of international

entries had been very stable over time. Amdam (2009) found similar results in the case of Norwegian firms.

### 2.3. Revised Uppsala Model and Psychic Distance

The Uppsala model was first proposed in the seventies and has been discussed and debated for decades. It was revised recently to address the latest "changes in business practices and theoretical advances" (Johanson and Vahlne, 2009, p. 1411). The new model is called the 'business network model of the internationalization process' (Johanson and Vahlne, 2003; 2009) and extends prior literature that recognized the role of networks in the internationalization process (Coviello and Martin, 1999; Etemad, Wright, and Dana, 2001). As the name suggests, the new model emphasizes the business network a firm is embedded in and the relationships within that network. Internationalization is seen in the new model as a process to strengthen network positions and relationships rather than a process to reduce knowledge barriers related to a particular country. Moreover, the focus has changed from uncertainty reduction to opportunity development (Johanson and Vahlne, 2006). However, psychic distance continues to play a role in the new model. As Johanson and Vahlne (2009, p. 1425) stated, "Short psychic distance will facilitate the establishment and development of relationships, which is a necessary but insufficient condition for identification and exploitation of opportunities". Empirical studies based on the new model support the inclusion of networks and relationships to strengthen the original Uppsala model. Amdam (2009) studied the order of FDI entry by Norwegian firms and concluded that after adding the network dimension to the psychic distance, "a surprisingly large number of firms followed the patterns suggested by the internationalization process theory" (p. 459). Based on a study of Malaysian firms, Zain and Ng (2006) concluded that firms are highly

dependent on network relationships not only for initial entry but also for post-entry activities. Lindstrand et. al. (2012) showed that networks may have multiple layers, and firms may use not only their own networks but also the networks of their customers in the internationalization process. Family firms, however, were found to be less likely to engage in network building and more likely to follow traditional process of internationalization (Graves and Thomas, 2004). Dana, Hamilton, and Wick (2009) found support for the idea that psychic distance may influence the formation of network relationships, which in turn affects the selection of foreign countries for international expansion. They studied internationalization by Singaporean entrepreneurs and found that "cultural, linguistic, business conduct and social norm similarities, as well as proximity and transportation costs" (p. 84) influenced the creation of 'Asian networks' that then determined the foreign country selection process. On the other hand, Pio and Dana (2014) found that relationships based on ethnic ties might influence psychic distance. In conclusion, there is considerable evidence to suggest that business networks play a crucial role in the internationalization process, as proposed by the revised Uppsala model. However, more work is needed to tease out the drivers of network formation, and to establish the conditions under which psychic distance influences the network formation and vice versa.

#### 3. Hypotheses

Since the concept of psychic distance was first proposed, the world has seen increased integration and rapid rise in cross border investments. The KOF index of globalization (Dreher, Gaston and Martens, 2008), for example, rose about 50% between 1980 and 2011 (ETH Zurich press release, 2014). The rapid pace of globalization has led many to believe that differences between countries are either disappearing or do not matter (Levitt, 1983). Specifically, Melin

(1992, p. 104) hypothesized, "as the world becomes more homogeneous, the explanatory value of psychic distance tends to decrease". Johanson & Vahlne (2009, p. 1421) concurred, "the correlation between the order in which a company enters foreign markets and psychic distance has weakened". However, this possibility has been presumed rather than tested and empirical evidence in its support is conspicuous by its absence. To fill this gap, the following hypothesis will be tested in this paper:

Hypothesis 1. The relationship between psychic distance and the order of entry into foreign countries has weakened over time.

The concept of psychic distance and the Uppsala model was developed using observations of manufacturing firms and it is an open question whether the predictions of the Uppsala model, specifically the relationship between psychic distance and order of entry into foreign countries, is equally applicable to firms in other sectors. Industries differ in their levels of internationalization (Porter, 1986) and it is reasonable to expect that the importance of psychic distance may also differ from one industry to another (Ghemawat, 2001). In this paper, the role of psychic distance in manufacturing has been compared to that in services. While a number of studies have explored the role of psychic distance or individual elements of psychic distance (geographical, cultural, institutional differences) for service firms, comparative studies across manufacturing and services are rare. Also, order of entry has been studied much less than country selection or FDI flows in general. Moreover, the results are mixed. Some studies have concluded that psychic distance affects FDI by service firms as it does FDI by manufacturing firms (Eramilli 1991; Pogrebnyakov and Maitland, 2011; Sanchez-Peinado, 2003; Weinstein, 1977) while others have found little to no impact of psychic distance on FDI by service firms (Engwall and Wallenstål,

1988; Coviello and Martin, 1999).

The literature identifies important features that distinguish services from manufacturing. These are intangibility, inseparability of production and consumption, perishability and heterogeneity of customer experience (Boddewyn et al., 1986; Goerzen and Makino, 2007; Knight, 1999). These characteristics make internationalization a more complex and risky process for service firms as compared to manufacturing firms (Carman and Langeard, 1980; Grönroos, 1999; Javalgi and Martin, 2007). Intangibility makes it harder for service providers to demonstrate the value of their offering and this effect gets exacerbated in foreign countries due to cultural and language barriers. The inseparability of production and consumption forces intimate interaction with customers and increases the need for detailed knowledge of foreign countries. Services are perishable and cannot be stored as inventory. This makes it harder to balance supply and demand and increases vulnerability due to market fluctuations, especially for firms operating in multiple markets. Finally, the heterogeneity or variability of customer experience from one interaction to another makes it harder to standardize services and maintain quality. This becomes even more problematic for multinational firms. Internationalization models based on psychic distance emphasize that risk arising from lack of experiential knowledge of foreign countries is the main reason why firms prefer low psychic distance countries. As explained above, such a risk is much higher for service firms compared to manufacturing firms due to the unique attributes of services. However, service firms also tend to have lower fixed costs and can transfer resources across markets more easily than manufacturing firms (Erramilli, 1991; Goerzen and Makino, 2007; Von Nordenflycht, 2010) and these factors may reduce the risks associated with internationalization of services. Rugman and Verbeke (2008) considered these contradictory

factors together and concluded that the risk reducing factors are weaker than the risk enhancing factors for internationalizing service firms. They showed that services are significantly more home-region based in contrast to manufacturing firms because successful adaptation to unfamiliar foreign countries is much more complex for service firms compared to manufacturing firms. Cicic et al. (1999) also argued that cultural factors have a greater impact on service firms than on manufacturing firms while proposing a conceptual model of the internationalization of service firms. This discussion leads to the following hypothesis:

Hypothesis 2. The relationship between psychic distance and the order of entry into foreign countries will be stronger in services than in manufacturing.

#### 4. Data and Methodology

All public US based manufacturing and services firms (Standard Industrial Classification of US Census Bureau) that started entering foreign countries during 1956-2012 and foreign countries where they had operations were identified using *Compustat* and Uniworld's *Directory of American firms operating in foreign countries*. The sample was divided into two time periods, 1966-96 and 1997-2012, based on the structural breaks in the time series of international entries (Figure 1). The structural breaks were identified using the *strucchange* package of the R statistical software. Missing values in the time series were filled using linear approximation. The year 1997 was identified as a breakpoint for both manufacturing and services. Breaks were also identified at 1965, 1978 and 1986 for manufacturing and 1980 for services. The breakpoints at 1978, 1980 and 1986 were probably influenced by the year 1984. The Uniworld directory was published in 1984 after a gap of six years and due to this the number of entries in 1984 was

inflated. This was also a problem with the year 1975 but it influenced the breakpoints in manufacturing only because there were very few entries by service firms at that time. The breakpoints at 1978, 1980 and 1986 were therefore ignored. This decision was also guided by the fact that entries before 1997 were considerably fewer in number than those after 1997 in both sectors. Using these three breakpoints would have resulted in time periods with vastly different number of entries. 1965 was used as the starting year because it was identified as a breakpoint for the manufacturing sector.

#### 4.1. Dependent Variable

Each firm was tracked through consecutive editions of the Uniworld directory to obtain the sequence in which it entered foreign countries. The first country entered was assigned a rank of one, the second a rank of two, and so on. Average ranks were used when a company entered more than one country during the same year. The sequence of countries entered by firms were verified against information from the company websites and various editions of the *International Directory of Company Histories* (St. James Press, Michigan, US). The individual ranks for each country were then averaged over all firms to obtain an average rank for each country, for each sector and for each time period. This average rank served as the dependent variable.

#### *4.2. Independent Variables*

Psychic distance is a multi-faceted construct and captures geographical, cultural, economic and institutional/administrative differences among countries. Ghemmawat (2001) also included these four dimensions while proposing the CAGE framework as a tool to understand country differences that are important for firms planning international expansion. Different variables

were used to measure each of these dimensions. To measure differences in culture, Kogut & Singh's (1988) formula was applied separately to Hofstede's (1980, 2001) national culture scores and societal value scores from the Global Leadership and Organizational Behavior Effectiveness (GLOBE) research project (House et. al, 2002). Additionally, religion and language dummies were used based on data from the CIA World Factbook, taking a cue from Flores and Aguilera (2007) and Dow and Karunaratna (2006). Christianity was identified as the major religion and English as the major language in the US. Religion was coded as zero if Christianity was the major religion in the host country, one if Christianity was one of the major religions and two if religions other than Christianity were the major religions. Ethnologue: Languages of the World classifies English into the Indo-European family. Therefore, language was coded as zero if the major language in the host country was English, one if English was one of the major languages, two if a language belonging to the Indo-European family was one of the major languages and three if languages not belonging to the Indo-European family were major languages. Country rank in decreasing order of per capita nominal GDP was used as a measure of economic distance. It serves as a proxy for the macroeconomic differences in the level of industrial development, infrastructure, wages and education levels etc. To control for economic size, nominal GDP rank was used. Country ranks were used instead of raw figures for nominal GDP and percapita nominal GDP guided by the descriptive models of internationalization that suggest that foreign country selection is not based on actual data but on a rough mental ranking of foreign countries. Moreover, unlike nominal GDP that naturally increases over time, ranks are consistently comparable across time periods. Both these variables were obtained from the World Bank's World Development Indicators. Geographical distance was calculated as the great circle distance in nautical miles using Google Maps' distance measurement tool. Institutional or

administrative differences were captured through the 'polity2' variable of the POLITY IV database (Marshall and Jaggers, 2002). It is a composite measure of the degree of democracy and autocracy in a country, ranging from 10 (highly democractic) to -10 (highly autocractic) political system.

Summary statistics and correlation matrices are presented in Tables 2 and 3. Correlations between certain variables appear to be high but the variance inflation factor was never too high for any of the variables, alleviating concerns about multicollinearity.

"Tables 2 and 3 go about here"

#### 4.3. Methodology

For each time period and for each sector, the average ranks for all foreign countries were calculated as explained earlier, based on the sequence of entry by firms that started venturing abroad in that time period. Median values were used for the independent variables. In order not to bias the sample due to lack of a control sample (countries not entered), for each firm, countries not entered were added in the end such that each notional entry received an average rank higher than the rank of foreign country entered last.

Ordinary least square regression was used to assess the impact of psychic distance on the average rank of each country. Log transformations of distance, nominal GDP rank, percapita nominal GDP rank, and culture distance were used to incorporate the diminishing effect of these variables on later entries, based on the argument that once a firm gains experience after entering a few countries, psychic distance becomes progressively less relevant (Anderson, 1993).

Moreover, an overwhelming majority of the firms entered less than five countries, strongly suggesting that initial few entries are considerably more important. Other functional forms were also tried but the log transformation delivered the best fit (highest R-square). Segmented regression was used to test the weakening of the effect of psychic distance over time and across sectors. The following two models were compared to perform segmented regression:

$$R_i = \alpha_0 + \sum_{i=1}^n \alpha_i X_i + \beta_0 z + \sum_{i=1}^n \beta_i X_i z + \varepsilon_i \dots (1)$$

$$R_{i} = \alpha_{0} + \sum_{i=1}^{n} \alpha_{i} X_{i} + \beta_{0} z + \sum_{i=1}^{n-1} \beta_{i} Y_{i} z + \varepsilon_{i} \dots (2)$$

where,

R = average rank of a foreign country,

X = set of all independent variables,

Y = X excluding a particular independent variable whose weakening is being tested, and z = dummy variable representing the segments (time periods or sectors)

In the first model, each independent variable has a different slope for each segment.

However, in the second model, the slope for only the excluded independent variable is constant for both segments. Analysis of variance between the two models tells us whether the effect of the excluded variable has changed across segments.

#### 5. Results and Conclusions

Tables 4 and 5 show the top 40 foreign countries entered by US firms, in order of the average

rank in both the time periods, for manufacturing and services respectively. United Kingdom (UK), Canada, Germany not only occupy the top three positions in both sectors and in both time periods, but their average ranks are also considerably lower than the rest of the countries. This shows that these three countries are significantly ahead as targets of FDI by US firms compared to other countries. The top 10 positions are occupied, more or less, by the same countries in both time periods across sectors, except for China and India that have gained prominence over time. China climbed twelve spots in manufacturing while both China and India gained eight spots in services. However, despite having relatively lower size of the market, UK and Canada are still ahead of China in manufacturing. Similarly, eight countries including Netherlands and Australia are ahead of both China and India in services. Brazil has gone down in the ranking in both manufacturing and services, despite its growing economy and recent popularity as a BRIC country. Other major Latin American countries like Mexico and Argentina have also gone down in the rankings.

#### "Tables 4 and 5 go about here"

Regression results for the determinants of average country ranks are tabulated in Tables 6 and 7. Economic size (nominal GDP rank) was positive and highly significant in all models, indicating that countries with large economies were entered earlier than those with smaller economies. Religion and polity variables were never significant. Culture distance based on both Hofstede and GLOBE measures was significant during 1966-96 in both sectors while only GLOBE based culture distance was significant during 1997-2012 in both sectors. Language became more significant in one of the models in manufacturing and in both models in services over time. It would, therefore, be premature to conclude that cultural differences are no longer important for

the order of entry. However, the effect of cultural distance and language differences was weaker in manufacturing than in services for the latest time period. Geographical distance and per capita nominal GDP rank (proxy for development level) were not significant for most models. There was little evidence, therefore, to suggest that these variables play any significant role.

### "Tables 6 and 7 go about here"

Tests of invariance of coefficients across time periods and sectors using segmented regression are presented in Table 8. No variable was significant in any of the models except culture distance based on Hofstede scores for manufacturing firms. This raises the possibility that cultural factors have become less relevant over time in manufacturing. However, the result was not robust as cultural distance based on GLOBE measures was not significant for manufacturing. The conclusion, therefore, is that time or industry sector did not have much influence on the relationship between psychic distance and the order of entry.

#### "Table 8 goes about here"

Based on these results, the overall conclusion is that the cultural aspect of psychic distance still influences the order in which foreign countries are entered in both manufacturing and services. However, the impact of cultural factors pales in comparison to the strong effect of economic size. The results were remarkably similar across sectors and over time. Culture distance and economic size variables were log transformed. Therefore, the effect of economic size and cultural factors is significant for the selection of first few foreign countries only. Beyond a certain point, there is not much difference between average country rankings (Tables 4 and 5).

Readers should keep in mind that the results discussed above apply only to US based companies. United States is a special country as far as FDI is concerned because it is both the topmost source and the topmost destination of FDI flows (United Nations Conference on Trade and Investment: World Investment Report, 2014). Therefore, it is important to ask if the results apply to firms from other countries as well. A precise answer to this question can only be provided by studies based on non-US companies, over time and across sectors. However, some clues can be gathered from the outward FDI data for non-US countries. Table 9 shows the top destinations of average outward FDI stock from selected countries between 2001 and 2012. Countries that were in the top ten, either in terms of average outward FDI stock between 2001 and 2012 (traditional top FDI source countries) or in terms of outward FDI flows in 2012 and 2013 (recent top FDI source countries) were chosen. United Nations Conference on Trade and Investment (UNCTAD) data was used for this purpose (United Nations Conference on Trade and Investment: Bilateral FDI Statistics; World Investment Report, 2014). United States was also included in the list to verify whether the aggregate FDI data roughly supports the results presented in this study. UK and Canada both appear as top destinations for US FDI, similar to results in this study. Places like Bermuda, Luxembourg and British Virgin Islands appear next but as UNCTAD notes, these places act primarily as transit centers for FDI flows, and should be ignored. Once that is done, Germany, Japan, Australia and Singapore occupy prominent positions, again roughly consistent with the results in this study. The only exception was China, that was absent from the list of major destinations for US FDI. The fact that aggregate FDI data for US offers clues roughly in line with the results presented in this study suggests that FDI data is worth considering, for hints regarding order of entry by companies based in non-US countries too. For source countries other than US, size of destination economy appears to be lot less

important. This is evident from the absence of both Japan and China from the list of top FDI destinations for UK, Netherlands, Canada and Russia. Also, Japan was not a prominent destination for Germany, Hong Kong (China), China and Sweden. Germany was present in the list for many countries but in most cases it was behind other smaller economies. Regional partners are apparently more prominent for most countries other than United States. Cultural factors also play a role. For example, Belgium was the second most prominent destination for France and vice versa. Similarly, Scandinavian countries were prominent destinations for Sweden ahead of Germany. The overall conclusion, therefore, is that regional proximity and cultural factors are more important than the economic size of destination countries, for many of the top FDI source countries than these are for United States.

#### "Table 9 goes about here"

#### References

Aharoni, Y. (1966) *The foreign investment decision process*, PhD Thesis, Division of Research, Graduate School of Business Administration, Harvard University, United States.

Amdam, R. P. (2009) 'The internationalisation process theory and the internationalisation of Norwegian firms, 1945 to 1980', *Business History*, Vol. 51, No. 3, pp. 445-461.

Andersen, O. (1993) 'On the Internationalization Process of Firms: A Critical Analysis', *Journal of International Business Studies*, Vol. 24 No. 2, pp. 209-231.

Beckermann, W. (1956) 'Distance and the pattern of intra-European trade', *Review of Economics and Statistics*, Vol. 38 No. 1, pp. 31-40.

Beim, G and Lévesque, M. (2006) 'Country Selection for New Business Venturing: A Multiple Criteria Decision Analysis', *Long Range Planning*, Vol. 39 No. 3, pp. 265-293.

Benito, GRG and Gripsrud, G. (1992) 'The Expansion of Foreign Direct Investments: Discrete Rational Location Choices or a Cultural Learning Process?', *Journal of International Business Studies*, Vol. 23 No. 3, pp. 461-476.

Bilkey, W. J. and Tesar, G. (1977) 'Export behavior of smaller-sized Wisconsin manufacturing firms', *Journal of International Business Studies*, Vol. 8 No. 1, pp. 93-98.

Boddewyn, J. J., Halbrich, M. B., Perry, A. C. (1986) 'Service Multinationals: Conceptualization, Measurement and Theory', *Journal of International Business Studies*, Vol. 17 No. 3, pp. 41-57.

Carman, J. M. and Langeard, E. (1980) 'Growth strategies for service firms', *Strategic Management Journal*, Vol. 1 No. 1, pp. 7-22.

Cavusgil, S. T. (1980) 'On the internationalization process of firms', *European Research*, Vol. 8, No. 6, pp. 273-81.

Cicic, M., Patterson, P. G. and Shoham, A. (1999) 'A conceptual model of the internationalization of services firms', *Journal of Global Marketing*, Vol. 12 No. 3, pp. 81-106.

Coviello, N. E. and Martin, K. A. M. (1999) 'Internationalization of Service SMEs: An Integrated Perspective from the Engineering Consulting Sector', *Journal of International Marketing*, Vol. **7** No. 4, pp. 42-66.

Dana, L. P., Hamilton, R. T. and Wick, K. (2009) 'Deciding to export: an exploratory study of Singaporean entrepreneurs', *Journal of International Entrepreneurship*, Vol. 7, No. 2, pp. 79-87.

Davidson, W. H. (1980) 'The Location of Foreign Direct Investment Activity: Country Characteristics and Experience Effects', *Journal of International Business Studies*, Vol. 11 No. 2, pp. 9-22.

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.

Dreher, A., Gaston, N. and Martens P. (2008) *Measuring Globalisation – Gauging its Consequences*. Springer, New York.

Ehrman, C. M. and Hamburg, M. (1986) 'Information Search for Foreign Direct Investment Using Two-Stage Country Selection Procedures: A New Procedure', *Journal of International Business Studies*, Vol. 17 No. 2, pp. 93-116.

Ellis, P. D. (2008) 'Does psychic distance moderate the market size—entry sequence relationship?', *Journal of International Business Studies*, Vol. 39 No. 3, pp. 351-369.

Engwall, L. and Wallenstål M. (1988) 'Tit for tat in small steps: the internationalization of Swedish banks', *Scandinavian Journal of Management*, Vol. 4 No. 3-4, pp. 147-155.

Erramilli, M. K. (1991) 'The experience factor in foreign market entry behavior of service firms', *Journal of International Business Studies*, Vol. 22 No. 3, pp. 479-501.

ETH Zurich Press Release (2014) KOF Index of Globalization 2014: Switzerland, No Longer Among the Top Ten.

Etemad, H., Wright, R. W. and Dana, L. P. (2001) 'Symbiotic international business networks: collaboration between small and large firms', *Thunderbird International Business Review*, Vol. 43 No. 4, pp. 481-499.

Flores, R.G. and Aguilera, R. V. (2007) 'Globalization and location choice: an analysis of US multinational firms in 1980 and 2000', *Journal of International Business Studies*, Vol. 38 No. 7, pp. 1187-1210.

Graves, C. and Thomas, J. (2004) 'Internationalisation of the family business: a longitudinal perspective', *International Journal of Globalisation and Small Business*, *I*(1), 7-27.

Ghemmawat, P. (2001) 'Distance still matters', *Harvard Business Review*, Vol. 79 No. 8, pp. 137-147.

Goodnow, J. D. and Hansz, J. E. (1972) 'Environmental Determinants of Overseas Market Entry Strategies', *Journal of International Business Studies*, Vol. 3 No. 1, pp. 33-50.

Goerzen, A. and Makino, S. (2007) 'Multinational corporation internationalization in the service sector: a study of Japanese trading companies', *Journal of International Business Studies*, Vol. 38 No. 7, pp. 1149-1169.

Grönroos, C. (1999) 'Internationalization strategies for services', *Journal of Services Marketing*, Vol. 13 No 4/5, pp. 290-297.

Hitt, M. A, Bierman, L., Uhlenbruck, K and Shimizu K. (2006) 'The importance of resources in the internationalization of professional service firms: the good, the bad, and the ugly', *Academy Of Management Journal*, Vol. 49 No. 6, pp. 1137-1157.

Hofstede G. (1980) 1st ed. 2001 2nd ed. *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Sage Publications.

House, R., Javidan, M., Hanges, P. and Dorfman, P. (2002) 'Understanding cultures and implicit leadership theories across the globe: an introduction to project GLOBE', *Journal of World Business*, Vol. 37 No. 1, pp. 3-10.

Javalgi, R. G. and Martin, C. L. (2007) 'Internationalization of services: identifying the building-blocks for future research', *Journal of Services Marketing*, Vol. 21 No. 6, pp. 391-397.

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. (2003) 'Business relationship learning and commitment in the internationalization process', *Journal of International Entrepreneurship*, Vol. 1 No. 1, pp. 83-101.

Johanson, J. and Vahlne, J. E. (2006) 'Commitment and opportunity development in the internationalization process: A note on the Uppsala internationalization process model', *Management International Review*, Vol. 46 No. 2, pp. 165-178.

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.

Johanson, J. and Wiedersheim-Paul, F. (1975) 'The internationalization of the firm: Four Swedish cases', *Journal of Management Studies*, Vol. 12 No. 3, pp. 305-323.

Knight, G. (1999) 'International services marketing: review of research, 1980-1998', *Journal of Services Marketing*, Vol. 13, No. 4/5, pp. 347-360.

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.

Levitt, T. (1983) 'The globalization of markets', *Harvard Business Review*, May/June, pp. 92-102.

Lindstrand, A., Sharma, D. D. and Eriksson, K. (2012) 'The perceived usefulness of SMEs previous customer networks in the internationalisation process of firms', *International Journal of Entrepreneurship and Small Business*, Vol. 15 No. 3, pp. 285-307.

Linnemann, H. (1966) *An econometric study of international trade flows*, North Holland Publishing Co.: Amsterdam.

Marshall, M. G. and Jaggers, K. (2002) Polity IV Project: Political Regime Characteristics and Transitions, 1800-2002. Version p4v2002e [Computer File]. College Park, MD: Center for International Development and Conflict Management, University of Maryland. URL: <a href="http://www.cidcm.umd.edu/inscr/polity/index.htm">http://www.cidcm.umd.edu/inscr/polity/index.htm</a>.

Melin, L. (1992) 'Internationalization as a strategy process', *Strategic Management Journal*, Vol. 13 No. S2, pp. 99–118.

Nordstrom, K. A. and Vahlne, J. E. (1992) 'Is the globe shrinking? psychic-distance and the establishment of Swedish sales subsidiaries' in Landeck, M. (1994), *International Trade: Regional and Global Issues*, St. Martin's Press, Inc., New York, pp. 41-56.

Pio, E. and Dana, L. P. (2014) 'An empirical study of Indian entrepreneurs in Christchurch, New Zealand', *International Journal of Entrepreneurship and Small Business*, Vol. 22, No. 1, pp. 17-35.

Pogrebnyakov, N. and Maitland, C. F. (2011) 'Institutional distance and the internationalization process: The case of mobile operators', *Journal of International Management*, Vol. 17 No. 1, pp. 68-82.

Porter, M. (1986) Competition in global industries, Harvard Business School Press: Boston.

Reid, S. D. (1981) 'The decision-maker and export entry and expansion', *Journal of International Business Studies*, Vol. 12 No. 2, pp. 101-12.

Rugman, A. M. and Verbeke, A. (2008) 'A new perspective on the regional and global strategies of multinational services firms', *Management International Review*, Vol. 48 No. 4, pp. 397-411.

Sethi, S. P. (1971) 'Comparative Cluster Analysis for World Markets', *Journal of Marketing Research*, Vol. 8 No. 3, pp. 348-354.

Stobaugh, R. (1969) 'Where in the world should we put that plant?', *Harvard Business Review*, Vol. 47 No. 1, pp.129.

Sanchez-Peinado, E. (2003) 'Internationalisation process of Spanish banks: strategic orientation after the mergers', *European Business Review*, Vol. 15 No. 4, pp. 245-261.

Vernon, R. (1971) *Sovereignty at bay: the multinational spread of U.S. Enterprises*. Basic Books: New York.

Von Nordenflycht, A. (2010) 'What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms', *Academy Of Management Review*, Vol. 35, No. 1, pp. 155-174.

Weinstein, A. K. (1977) 'Foreign investments by service firms: the case of multinational advertising agencies', *Journal of International Business Studies*, Vol. 8 Spring/Summer, pp. 83-91.

United Nations Conference on Trade and Development. *Bilateral FDI Statitics*. <a href="http://unctad.org/en/Pages/DIAE/FDI%20Statistics/FDI-Statistics-Bilateral.aspx">http://unctad.org/en/Pages/DIAE/FDI%20Statistics/FDI-Statistics-Bilateral.aspx</a> (Accessed

January 2015)

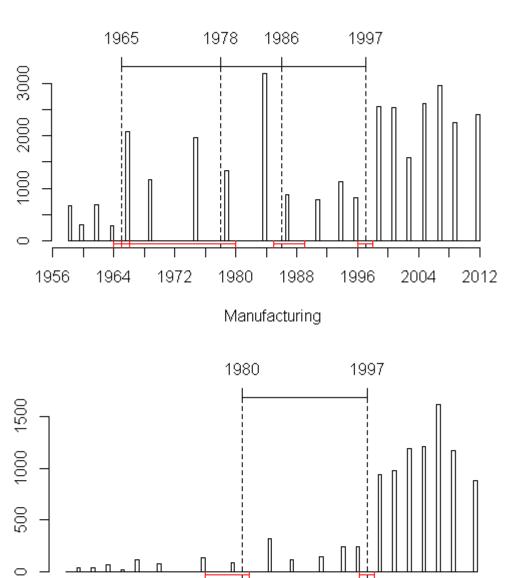
United Nations Conference on Trade and Development (2014). *World Investment Report*. http://unctad.org/en/PublicationsLibrary/wir2014\_en.pdf (Accessed January 2015)

Zain, M. and Ng, S. I. (2006) 'The impacts of network relationships on SMEs' internationalization process', *Thunderbird International Business Review*, Vol. 48 No. 2, pp. 183-205.

Zhao, H. and Levary, R. R. (2002) 'Evaluation of country attractiveness for foreign direct investment in the E-Retail Industry', *Multinational Business Review*, Vol. 10 No. 1, pp. 1-10.

# **Tables and Figures**

Figure 1 International Entries by US firms with structural breakpoints and confidence intervals



Services

Table 2 Summary statistics and correlation matrix for manufacturing (1997-2012)

|                               | Median | Std. Dev. | 1        | 2       | 3        | 4        | 5       | 6       | 7    |
|-------------------------------|--------|-----------|----------|---------|----------|----------|---------|---------|------|
| 1. Distance                   | 5297   | 1881.46   |          |         |          |          |         |         |      |
| 2. Current GDP rank           |        |           |          |         |          |          |         |         |      |
|                               | 72     | 40.74     | -0.13    |         |          |          |         |         |      |
| 3. Current GDP percapita rank |        |           |          |         |          |          |         |         |      |
|                               | 74     | 45.21     | -0.41*** | 0.42*** |          |          |         |         |      |
| 4. Polity                     | 4      | 6.96      | -0.46*** | 0.37*** | 0.54***  |          |         |         |      |
| 5. Culture distance Hofstede  |        |           |          |         |          |          |         |         |      |
|                               | 2.65   | 1.27      | 0.1      | -0.31** | -0.38*** | -0.43*** |         |         |      |
| 6. Culture distance GLOBE     |        |           |          |         |          |          |         |         |      |
|                               | 1.47   | 0.88      | 0.18     | -0.21   | -0.43**  | -0.53*** | 0.51*** |         |      |
| 7. Language                   | 2      | 0.75      | 0.01     | 0.18*   | -0.1     | -0.05    | 0.16    | 0.08    |      |
| 8. Religion                   | 0      | 0.89      | 0.47***  | -0.04   | -0.30*** | -0.52*** | 0.31**  | 0.47*** | 0.05 |

Significance levels: \* 5%, \*\* 1%, \*\*\* 0.1%; Spearman correlations

Table 3 Summary statistics and correlation matrix for services (1997-2012)

|                               | Median | Std. Dev. | 1        | 2       | 3        | 4        | 5       | 6       | 7    |
|-------------------------------|--------|-----------|----------|---------|----------|----------|---------|---------|------|
| 1. Distance                   | 5392.5 | 1880.81   |          |         |          |          |         |         |      |
| 2. Current GDP rank           |        |           |          |         |          |          |         |         |      |
|                               | 71.5   | 41.10     | -0.14    |         |          |          |         |         |      |
| 3. Current GDP percapita rank |        |           |          |         |          |          |         |         |      |
|                               | 75.25  | 45.48     | -0.41*** | 0.43*** |          |          |         |         |      |
| 4. Polity                     | 4      | 6.91      | -0.46*** | 0.36*** | 0.53***  |          |         |         |      |
| 5. Culture distance Hofstede  |        |           |          |         |          |          |         |         |      |
|                               | 2.65   | 1.27      | 0.1      | -0.31** | -0.38*** | -0.43*** |         |         |      |
| 6. Culture distance GLOBE     |        |           |          |         |          |          |         |         |      |
|                               | 1.47   | 0.88      | 0.18     | -0.21   | -0.43**  | -0.53*** | 0.51*** |         |      |
| 7. Language                   | 2      | 0.74      | -0.01    | 0.20*   | -0.08    | -0.03    | 0.16    | 0.08    |      |
| 8. Religion                   | 0      | 0.89      | 0.47***  | -0.04   | -0.30*** | -0.52*** | 0.31**  | 0.47*** | 0.05 |

Significance levels: \* 5%, \*\* 1%, \*\*\* 0.1%; Spearman correlations

Table 4 Top 40 countries entered by US manufacturing firms

| 1966-1996    |                |              |              | 1997-2012      |              |                        |
|--------------|----------------|--------------|--------------|----------------|--------------|------------------------|
| Overall rank | Country        | Average rank | Overall rank | Country        | Average rank | Change in overall rank |
| 1            | United Kingdom | 33.58        | 1            | United Kingdom | 34.66        | 0                      |
| 2            | Canada         | 38.43        | 2            | Germany        | 47.87        | 1                      |
| 3            | Germany        | 48.51        | 3            | Canada         | 52.04        | -1                     |
| 4            | France         | 52.34        | 4            | China          | 52.33        | 12                     |
| 5            | Mexico         | 59.43        | 5            | France         | 53.29        | -1                     |
| 6            | Australia      | 60.20        | 6            | Japan          | 58.83        | 1                      |
| 7            | Japan          | 61.29        | 7            | Singapore      | 65.30        | 4                      |
| 8            | Netherlands    | 64.20        | 8            | Australia      | 67.77        | -2                     |
| 9            | Italy          | 64.94        | 9            | Netherlands    | 68.47        | -1                     |
| 10           | Brazil         | 68.12        | 10           | Italy          | 68.80        | -1                     |
| 11           | Singapore      | 68.32        | 11           | Mexico         | 69.39        | -6                     |
| 12           | Belgium        | 68.64        | 12           | South Korea    | 72.02        | 9                      |
| 13           | Spain          | 71.42        | 13           | India          | 72.58        | 4                      |
| 14           | Hong Kong      | 71.65        | 14           | Hong Kong      | 72.70        | 0                      |
| 15           | Switzerland    | 72.37        | 15           | Taiwan         | 74.30        | 7                      |
| 16           | China          | 73.81        | 16           | Spain          | 75.44        | -3                     |
| 17           | India          | 77.40        | 17           | Brazil         | 75.94        | -7                     |
| 18           | Sweden         | 78.25        | 18           | Belgium        | 76.28        | -6                     |
| 19           | South Africa   | 80.15        | 19           | Sweden         | 77.97        | -1                     |
| 20           | Argentina      | 80.80        | 20           | Switzerland    | 78.58        | -5                     |
| 21           | South Korea    | 80.87        | 21           | Malaysia       | 81.96        | 4                      |
| 22           | Taiwan         | 81.06        | 22           | Ireland        | 84.06        | 1                      |
| 23           | Ireland        | 81.30        | 23           | Denmark        | 84.37        | 1                      |
| 24           | Denmark        | 81.70        | 24           | Russia         | 84.41        | 11                     |
| 25           | Malaysia       | 82.63        | 25           | Austria        | 84.78        | 1                      |
| 26           | Austria        | 82.69        | 26           | Poland         | 85.09        | 7                      |
| 27           | Venezuela      | 83.28        | 27           | UAE            | 85.80        | 7                      |
| 28           | New Zealand    | 83.68        | 28           | Thailand       | 85.83        | 3                      |
| 29           | Norway         | 85.60        | 29           | Argentina      | 85.84        | -9                     |
| 30           | Philippines    | 85.71        | 30           | Israel         | 86.54        | 2                      |
| 31           | Thailand       | 85.80        | 31           | Finland        | 86.56        | 5                      |
| 32           | Israel         | 86.81        | 32           | South Africa   | 86.93        | -13                    |
| 33           | Poland         | 86.98        | 33           | New Zealand    | 87.79        | -5                     |
| 34           | UAE            | 87.24        | 34           | Turkey         | 88.33        | 4                      |
| 35           | Russia         | 87.38        | 35           | Czech Republic | 88.49        | 7                      |
| 36           | Finland        | 87.40        | 36           | Philippines    | 89.21        | -6                     |
| 37           | Colombia       | 87.60        | 37           | Norway         | 89.45        | -8                     |
| 38           | Turkey         | 87.80        | 38           | Hungary        | 89.59        | 6                      |
| 39           | Chile          | 87.86        | 39           | Portugal       | 90.03        | 1                      |
| 40           | Portugal       | 89.02        | 40           | Indonesia      | 90.11        | 1                      |

Table 5 Top 40 countries entered by US services firms

| 1966-1996    |                |              |              | 1997-2012      |              |                        |
|--------------|----------------|--------------|--------------|----------------|--------------|------------------------|
| Overall rank | Country        | Average rank | Overall rank | Country        | Average rank | Change in overall rank |
| 1            | United Kingdom | 24.80        | 1            | United Kingdom | 18.12        | 0                      |
| 2            | Canada         | 36.52        | 2            | Germany        | 42.33        | 1                      |
| 3            | Germany        | 38.11        | 3            | Canada         | 46.81        | -1                     |
| 4            | France         | 43.96        | 4            | France         | 47.29        | 0                      |
| 5            | Australia      | 44.13        | 5            | Australia      | 47.64        | 0                      |
| 6            | Netherlands    | 48.63        | 6            | Japan          | 53.45        | 1                      |
| 7            | Japan          | 53.53        | 7            | Singapore      | 58.92        | 5                      |
| 8            | Spain          | 57.01        | 8            | Netherlands    | 59.17        | -2                     |
| 9            | Brazil         | 57.85        | 9            | China          | 64.49        | 8                      |
| 10           | Italy          | 59.34        | 10           | India          | 65.09        | 8                      |
| 11           | Belgium        | 60.26        | 11           | Hong Kong      | 65.86        | 3                      |
| 12           | Singapore      | 61.27        | 12           | Spain          | 67.05        | -4                     |
| 13           | Mexico         | 62.36        | 13           | Italy          | 68.88        | -3                     |
| 14           | Hong Kong      | 64.73        | 14           | Brazil         | 71.29        | -5                     |
| 15           | Switzerland    | 65.34        | 15           | Sweden         | 71.61        | 1                      |
| 16           | Sweden         | 68.11        | 16           | Mexico         | 71.72        | -3                     |
| 17           | China          | 71.32        | 17           | South Korea    | 72.11        | 4                      |
| 18           | India          | 73.36        | 18           | Belgium        | 74.49        | -7                     |
| 19           | Taiwan         | 73.59        | 19           | Switzerland    | 75.70        | -4                     |
| 20           | Denmark        | 74.27        | 20           | Taiwan         | 78.78        | -1                     |
| 21           | South Korea    | 74.32        | 21           | Ireland        | 80.01        | 2                      |
| 22           | Argentina      | 74.54        | 22           | Malaysia       | 80.71        | 7                      |
| 23           | Ireland        | 74.62        | 23           | UAE            | 81.08        | 14                     |
| 24           | New Zealand    | 74.72        | 24           | Denmark        | 81.45        | -4                     |
| 25           | Austria        | 75.75        | 25           | New Zealand    | 82.67        | -1                     |
| 26           | Norway         | 75.87        | 26           | Argentina      | 82.90        | -4                     |
| 27           | Israel         | 75.93        | 27           | Poland         | 83.05        | 5                      |
| 28           | South Africa   | 76.23        | 28           | South Africa   | 83.09        | 0                      |
| 29           | Malaysia       | 76.35        | 29           | Finland        | 84.31        | 10                     |
| 30           | Thailand       | 76.35        | 30           | Russia         | 84.64        | 5                      |
| 31           | Chile          | 77.44        | 31           | Philipines     | 85.12        | 5                      |
| 32           | Poland         | 77.56        | 32           | Norway         | 85.25        | -6                     |
| 33           | Venezuela      | 78.82        | 33           | Israel         | 85.32        | -6                     |
| 34           | Czech Republic | 79.06        | 34           | Thailand       | 85.75        | -4                     |
| 35           | Russia         | 79.83        | 35           | Austria        | 85.90        |                        |
| 36           | Philippines    | 80.36        | 36           | Czech Republic | 86.00        |                        |
| 37           | UAE            | 80.87        | 37           | Chile          | 86.32        |                        |
| 38           | Saudi Arabia   | 81.45        | 38           | Portugal       | 87.67        |                        |
| 39           | Finland        | 81.67        | 39           | Turkey         | 87.81        | -2                     |
| 40           | Portugal       | 82.01        | 40           | Colombia       | 88.04        |                        |

Table 6 Determinants of the average rank of foreign countries entered by US manufacturing firms

|  | 1966-1996 |            |      |          | 1997-2012  |      |            |            |         |            |               |
|--|-----------|------------|------|----------|------------|------|------------|------------|---------|------------|---------------|
|  | Model 1   |            |      | N        | Model 2    |      |            | odel 1     | Model 2 |            |               |
|  | estimate  | std. error | sig. | estimate | std. error | sig. | estimate s | std. error | sig.    | estimate s | td. error sig |
| Intercept                                  | 26.96     | 5.51       | ***  | 26.98    | 8.40       | **   | 30.42      | 5.92       | ***     | 34.06      | 8.89 ***      |
| In(Distance)                               | 4.24      | 1.49       | **   | 3.67     | 2.21       |      | 2.04       | 1.60       |         | 1.62       | 2.34          |
| In(Nominal GDP rank)                       | 11.89     | 0.82       | ***  | 12.13    | 1.11       | ***  | 12.16      | 0.89       | ***     | 12.51      | 1.18 ***      |
| In(Nominal GDP percapita rank)             | 0.54      | 0.92       |      | 0.63     | 1.33       |      | 0.18       | 0.99       |         | -0.29      | 1.41          |
| In(Culture distance Hofstede)              | 3.07      | 1.02       | **   |          |            |      | 0.42       | 1.10       |         |            |               |
| In(Culture distance GLOBE)                 |           |            |      | 5.90     | 1.94       | **   |            |            |         | 5.19       | 2.05 *        |
| Polity                                     | 0.07      | 0.13       |      | 0.11     | 0.22       |      | -0.02      | 0.14       |         | 0.17       | 0.24          |
| Language dummy (English major)             | 3.09      | 3.65       |      | 3.43     | 5.15       |      | 7.77       | 3.91       | ٨       | 4.17       | 5.46          |
| Language dummy (English one of major)      | 5.79      | 3.64       |      | 5.01     | 5.47       |      | 10.5       | 3.91       | **      | 5.45       | 5.79          |
| Language dummy (English not major)         | 6.38      | 3.95       |      | 7.50     | 5.32       |      | 8.42       | 4.24       | ٨       | 3.62       | 5.63          |
| Religion dummy (Christianity one of major) | -1.27     | 1.80       |      | 1.46     | 3.43       |      | -2.43      | 1.93       |         | 0.04       | 3.63          |
| Religion dummy (Christianity not major)    | 1.57      | 2.02       |      | -1.34    | 3.43       |      | 0.12       | 2.16       |         | -3.09      | 3.63          |
| R-sq                                       |           | 0.84       |      |          | 0.86       |      |            | 0.80       |         |            | 0.83          |
| Adj R-sq                                   |           | 0.83       |      |          | 0.82       |      |            | 0.78       |         |            | 0.79          |
| F-statistics                               |           | 44.96      | ***  |          | 25.10      | ***  |            | 33.21      | ***     |            | 20.14 ***     |
| N  |           | 94         |      |          | 53         |      |            | 94         |         |            | 53            |

Significance levels: ^ 10%, \* 5%, \*\* 1%, \*\*\* 0.1%

Table 7 Determinants of the average rank of foreign countries entered by US service firms

|  | 1966-1996 |            |      |          |            | 1997-2012 |              |         |      |          |                |  |
|--|-----------|------------|------|----------|------------|-----------|--------------|---------|------|----------|----------------|--|
|  | Model 1   |            |      | Model 2  |            |           | Model 1      |         |      | Model 2  |                |  |
|  | estimate  | std. error | sig. | estimate | std. error | sig.      | estimate std | . error | sig. | estimate | std. error sig |  |
| Intercept                                  | 12.33     | 6.01       | *    | 16.16    | 9.24       | ٨         | 21.17        | 6.68    | **   | 24.95    | 10.09 *        |  |
| In(Distance)                               | 2.05      | 1.63       |      | 1.06     | 2.43       |           | 0.79         | 1.81    |      | 0.17     | 2.65           |  |
| In(Nominal GDP rank)                       | 13.49     | 0.90       | ***  | 13.25    | 1.23       | ***       | 12.13        | 1.00    | ***  | 12.43    | 1.34 ***       |  |
| In(Nominal GDP percapita rank)             | 2.00      | 1.00       | *    | 1.73     | 1.47       |           | 0.79         | 1.11    |      | 0.4      | 1.6            |  |
| In(Culture distance Hofstede)              | 2.77      | 1.12       | *    |          |            |           | 1.68         | 1.24    |      |          |                |  |
| In(Culture distance GLOBE)                 |           |            |      | 5.32     | 2.13       | *         |              |         |      | 6.41     | 2.33 **        |  |
| Polity                                     | -0.08     | 0.14       |      | -0.18    | 0.25       |           | -0.05        | 0.16    |      | -0.05    | 0.27           |  |
| Language dummy (English major)             | 5.72      | 3.97       |      | 6.69     | 5.67       |           | 13.09        | 4.42    | **   | 11.1     | 6.19 ^         |  |
| Language dummy (English one of major)      | 8.23      | 3.97       | *    | 8.01     | 6.02       |           | 15.62        | 4.42    | ***  | 12.54    | 6.57 ^         |  |
| Language dummy (English not major)         | 8.78      | 4.31       | *    | 11.72    | 5.85       | ٨         | 15.28        | 4.79    | **   | 14.04    | 6.39 *         |  |
| Religion dummy (Christianity one of major) | -0.63     | 1.96       |      | 0.20     | 3.78       |           | -2.89        | 2.18    |      | -1.95    | 4.12           |  |
| Religion dummy (Christianity not major)    | 2.09      | 2.20       |      | -1.94    | 3.77       |           | -0.41        | 2.44    |      | -5.2     | 4.12           |  |
| R-sq                                       |           | 0.87       |      |          | 0.86       |           |              | 0.79    |      |          | 0.82           |  |
| Adj R-sq                                   |           | 0.85       |      |          | 0.83       |           |              | 0.77    |      |          | 0.78           |  |
| F-statistics                               |           | 53.66      | ***  |          | 26.72      | ***       |              | 31.30   | ***  |          | 19.70 ***      |  |
| N  |           | 94         |      |          | 53         |           |              | 94      |      |          | 53             |  |

Significance levels: ^ 10%, \* 5%, \*\* 1%, \*\*\* 0.1%

Table 8 Tests of equality of coefficients using segmented regression

|                            | Manufa      | cturing   | Serv        | Services  |      |      | Manufacturing vs. Servi |       |  |  |
|----------------------------|-------------|-----------|-------------|-----------|------|------|-------------------------|-------|--|--|
|                            | 1966-96 vs. | 1997-2012 | 1966-96 vs. | 1997-2012 | 196  | 6-96 | 1997-                   | -2012 |  |  |
|                            |             |           | p-          | value     |      |      |                         |       |  |  |
| Distance                   | 0.32        | 0.53      | 0.61        | 0.81      | 0.32 | 0.43 | 0.61                    | 0.68  |  |  |
| Nominal GDP rank           | 0.83        | 0.81      | 0.31        | 0.65      | 0.19 | 0.50 | 0.99                    | 0.97  |  |  |
| Nominal GDP percapita rank | 0.79        | 0.64      | 0.42        | 0.54      | 0.28 | 0.58 | 0.68                    | 0.75  |  |  |
| Culture distance Hofstede  | 0.08^       |           | 0.51        |           | 0.84 |      | 0.45                    |       |  |  |
| Culture distance Globe     |             | 0.80      |             | 0.73      |      | 0.84 |                         | 0.70  |  |  |
| Polity                     | 0.67        | 0.85      | 0.89        | 0.72      | 0.45 | 0.38 | 0.87                    | 0.54  |  |  |
| Language                   | 0.60        | 0.68      | 0.64        | 0.92      | 0.97 | 0.96 | 0.76                    | 0.62  |  |  |
| Religion                   | 0.86        | 0.93      | 0.66        | 0.84      | 0.97 | 0.97 | 0.98                    | 0.91  |  |  |

Significance levels: ^ 10%, \* 5%, \*\* 1%, \*\*\* 0.1%

Table 9 Top destination countries by average foreign direct investment outward stock (2001-2012)

| Source               | Destination  |
|----------------------|--|
| US                   | UK, Netherlands, Canada, Bermuda, Luxembourg, British Virgin Islands, Ireland, Switzerland, Germany, Japan, Australia, Singapore, Mexico, France   |
| UK                   | US, Netherlands, Luxembourg, France, Ireland, Spain, Canada, Germany, Sweden, Belgium, Switzerland, Italy, Denmark, Russia, Brazil, Norway, Poland |
| France               | US, Belgium, UK, Netherlands, Germany, Italy, Switzerland, Luxembourg, Spain, Ireland, Japan, Canada, Brazil, Poland, China, Morocco, Australia    |
| Germany              | US, UK, Netherlands, France, Luxembourg, Belgium, Italy, Switzerland, Austria, Spain, Czech Republic, China, Poland, Sweden, Malta, Hungary        |
| Hong Kong<br>(China) | British Virgin Islands, China, Bermuda, UK, Australia, Cayman Islands, US, Canada, Luxembourg, Singapore   |
| Netherlands          | UK, US, Belgium, Germany, Switzerland, Luxembourg, France, Spain, Canada, Italy, Ireland, Singapore, Brazil, Australia, Poland, Russia, Sweden     |
| Switzerland          | US, UK, Luxembourg, Germany, Netherlands, France, Canada, Italy, Singapore, Brazil, Australia, Spain, Ireland, Belgium, Japan, Austria, China      |
| Belgium              | Netherlands, Luxembourg, France, US, Germany, UK, Ireland, Spain, Sweden, Italy, Switzerland, Norway, Japan, Australia, Canada, Brazil, Hong Kong  |
| Japan                | US, Netherlands, China, Cayman Islands, UK, Australia, Singapore, Thailand, Brazil, France, South Korea, Belgium, Germany, Hong Kong, Indonesia    |
| Canada               | US, UK, Barbados, Ireland, Cayman Islands, Bermuda, Australia, France, Netherlands, Hungary, Chile, Germany, Brazil, Luxembourg, Bahamas           |
| China                | Hong Kong (China), Cayman Islands, British Virgin Islands, Australia, US, Singapore, Luxembourg, South Africa, Russia, UK, Canada, Kazakhstan      |
| Russia               | Cyprus, Netherlands, British Virgin Islands, Luxembourg, Switzerland, UK, US, Germany, Gibraltar, Austria, Bermuda, Bahamas, Belarus, Ukraine      |
| Sweden               | US, Finland, Netherlands, UK, Denmark, Norway, Germany, Belgium, Luxembourg, France, Switzerland, Spain, Italy, Estonia, Poland, China, Brazil     |

Source: UNCTAD (World Investment Report and Bilateral FDI Statistics)