ISSN 1392–1258. EKONOMIKA 2004 66

An Exploratory Study on the Predictability of Export Behavior using Culture as a Guide

Audra I. Mockaitis

Vilnius University
Department of Marketing
Sauletekio al. 9, II–818
Vilnius, LT-10222, Lithuania
Tel. (+370 5) 236 61 46
Fax: (+370 5) 236 61 50
E-mail: audra.i-mockaitis@ef.vu.lt

This paper discusses the cultural variable of international business through a comparison of the cultural values of three Baltic countries, Lithuania, Estonia and Poland. Scores on Hofstede's cultural dimensions for these and other countries are utilized in measuring the "cultural distance" between the Baltic countries and their main export partners. The intent of the paper is to test the appropriateness of the concept for predicting export behavior. Although the study is exploratory, it is seen that cultural distance plays a slight role in country export behavior.

Introduction

The Baltic region is becoming one of the most attractive markets for foreign investment. Not only is its geographical position favorable, but improvements in infrastructure, lower costs and the highly skilled labor force have been drawing more and more investors to the region, and foreign direct investment (FDI) into this region has been steadily increasing. In Lithuania, for example, during the period 1997–2001, FDI increased from 700 mln. USD to 2.3 bln. USD. The percentage of FDI from the European Union (EU) has been proportionally increasing as well, and comprised 64% of all FDI in Lithuania in 2001, compared to 58% in 1997. Trade statistics show a similar trend. In 2000, Lithuanian trade with the EU comprised 47% of all trade, gradually reducing the dependence of Lithuania on the Commonwealth of Independent States (CIS), with which trade comprised only 25% of all trade in 2000[1]. Similar trends are found in Estonia and Poland as well[2]. It can be expected that with the entry of these countries into the EU, the proportion of trade with the EU will only further increase. And as markets become more

[1] All preceding data were obtained from the Lithuanian Department of Statistics.

[2] For example, up until 1999, Russia was Poland's most important trading partner. However, in 2000 trade with the EU comprised almost 70% of total exports and 61.2% of total imports (Polish Agency for Foreign Investment (PAIZ)).

fluid, the amount of cross-border interactions will increase as well.

However, the Baltic region is often treated as homogeneous by foreign investors, especially large multinationals, which often serve the entire Baltic market from a regional office located in one country. It will be shown in this paper that the cultures of Lithuania, Estonia and Poland are very different from one another. This, coupled with the existence of yet another culture, that of the investing firm, has especially strong implications for international business, not only for international human resources management (Hofstede, 2001), but also for market selection, choice of entry (Kogut and Singh, 1998), international marketing efforts (Usunier, 2000) and a wide spectrum of other aspects.

This paper has three objectives. First, Lithuanian scores on the four cultural dimensions of Hofstede (1980) will be presented, so that comparison may be made to the other Baltic countries of Estonia and Poland. Second, because of the increasing importance of Western Europe for the economies of these countries, the cultures of these countries will be compared to those of the main trading partners of each. This will be done using a method developed by Kogut and Singh (1988) to assess the "cultural distance" between countries. The third objective is to assess whether any relationship exists between cultural distance and foreign trade.

The Cultural Variable in International Business

Culture has been defined by numerous authors in different ways, depending on the goals of the research. In this paper, because the analysis revolves around the measurements of Hofstede, his description of culture as "the collective programming of the mind, which distinguishes the members of one human group from another (1984:21)," will be applied. Human groups here are defined in terms of national boundaries (national cultural groups).

Hofstede's Cultural Dimensions. Based on survey research conducted from 1968-1972 on IBM subsidiaries in 40 countries (later expanded to 53)[3], Hofstede (1984) was able to distinguish four factors, or dimensions, on which countries more or less differ: power distance, uncertainty avoidance, individualism and masculinity. *Power distance* (PDI) is defined as "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally (Hofstede, 1991: 28)." *Uncertainty* avoidance (UAI) refers to "the extent to which the members of a culture feel threatened by uncertain or unknown situations (Hofstede, 1991: 113)" and their ways of coping with this uncertainty. *Individualism* (IDV) (with collectivism on its opposing pole) refers to the relationships between an individual and society, whether these ties are loose (high IDV) or whether individuals form tight-knit groups early on in their lives (low IDV). *Masculinity* (MAS) distinguishes between those societies in which gender roles are distinct and "masculine" values dominate (high MAS), and those in which gender roles overlap (low MAS).

Although Hofstede's work has been criticized for its use of one multinational corporation in drawing generalized conclusions about societies (Triandis, 1982) and that the corpo-

[3] The inclusion of findings from several extension and replication studies in new countries currently brings the total number of countries (and regions) in the database to 70.

rate culture may have had an affect on the results (Shackleton and Ali, 1990), the patterns of relationships found among countries have been shown to remain over time in replication studies (Hoppe, 1998), adding to their validity. And Hofstede (2001) has provided over 400 external validations of his dimensions. To date this is the largest and most cited study on national cultural values.

Cultural Distance. The influence of these cultural dimensions on management attitudes and organizational forms and practices has been proven by numerous researchers (Suutari, 1996; Offermann and Hellmann, 1997). Less consistent are the results of studies, seeking to measure the influence of the combination of country dimension scores on internationalization.

Kogut and Singh (1988) have developed a measure, based on Hofstede's dimensions, to explain the degree to which two countries differ in culture. This "cultural distance" has mostly been applied in the international business literature to explain the market choice and entry mode decisions of firms. It refers to the extent to which the culture of one country differs from that of another (Kogut and Singh, 1988). This concept has often been confused with "psychic distance," the uncertainty a firm faces (perceives) about another culture when deciding about foreign market entry (O'Grady and Lane, 1996), which has been used to explain the location of exports and FDI. However, as psychic distance includes measurements of various factors, such as level of economic development, level of education, business language differences, culture and channels of trade (O'Grady and Lane, 1996), cultural distance may be viewed as a cultural component of the former.

Various studies have revealed that the chances of foreign enterprise survival in a country are greater when cultural distance between the host country and the foreign entrant is small (Barkema et al., 1996, 1997; Li and Guisinger, 1991). However others (O'Grady and Lane, 1996) have found that firms enter culturally "close" countries, only to discover that unforeseen cultural differences prove more difficult to hurdle and end in the failure of the venture, due to the lack of cultural preparation in entering foreign markets. Thus, cultural "risk" may be viewed as just as important as political risk and other external factors when entering foreign markets.

In the export literature as well, it has been suggested that firms first begin to export to culturally close markets before venturing to more distant ones (Shoham and Albaum, 1995) and that firms will be less likely engage in business activities with very culturally dissimilar countries. Here, using national export data, this argument will be explored, by analyzing the export directions of Lithuania, Estonia and Poland and comparing the percentage of total exports to a given country with the cultural distance between them.

Comparing Cultures

In order to compare the cultural distances of the Baltic countries with their main trading partners, the cultural dimensions of the countries should first be compared. The cultural dimension scores for Poland were obtained by Nasierowski and Mikula (1998) using a matched sample of students from Poland and Canada. Estonian scores have also been obtained (Hofstede et al, 1996) using a matched student sample (for the MAS dimension only). These results have recently been published by Hofstede (2001). However, as Lithuania was not included in the original Hofstede study, a

replication study using the methodology of Hofstede was conducted by the author in 1999 also using a matched student samples strategy (see, e.g., Mockaitis, 2002).

The following tables depict the relative positions on the cultural dimensions of all the countries in Hofstede's database, including Lithuania and recent results for additional countries. Hofstede (2001) has published the results for 15 additional countries, obtained by various researchers in replication studies. These new countries are indicated with an asterisk (*), and the country rankings have been adjusted by the author.

Table 1 depicts country rankings on the individualism dimension. We can see that Lithuania ranks about average for this dimension (rank 28th), while Estonia and Poland both rank equally medium-high (rank 19–21). It is interesting that Estonia ranks just below its closest neighbor, Finland and slightly below Germany, while the Czech Republic and Slovakia score in between the Estonia Poland pair and Lithuania. The Baltic countries also score well above Russia (ranked 35–38th).

Table 1. Country scores and rankings on the individualism (IDV) dimension

Rank	*Country*	*Index*
3	Great Britain	89
4/6	Netherlands	80
8	Italy	76
10	Denmark	74
11/12	Sweden	71
11/12	France	71
16	Germany	67
18	Finland	63
19/21	Poland*	60
19/21	Estonia*	60
28	Lithuania*	50
35/38	Russia*	39

Country rankings for power distance are depicted in Table 2. Lithuania has a medium power distance, ranking 51–52 out of 70 countries. Estonia scores just below Lithuania (rank 53–55). Both of these country scores are similar to the USA. Germany is not far behind these two countries as well (59–61). Also on the low end of the dimension we find the Anglo and Scandinavian countries. Poland, on the other hand, scores fairly high (rank 24–26) similar to France. Again Russia scored far from the Baltic countries and ranks 6th.

Table 2. Country scores and rankings on the power distance (PDI) dimension

Rank	*Country or region*	*Index*
6	Russia*	93
24/26	Poland*	68
24/26	France	68
46	Italy	50
51/52	Lithuania	45
53/55	Estonia*	40
57	Netherlands	38
59/61	Germany	35
59/61	Great Britain	35
63	Finland	33
64/65	Sweden	31
67	Denmark	18

Uncertainty avoidance rankings are displayed in Table 3. We see that Lithuania scores medium high on this dimension (rank 38/39), similar to Germany. Again the Anglo and Scandinavian countries score low in this dimension, while the Latin cluster scores the opposite. The German-speaking countries fall in between, as do most of the Central and East European countries.

The last table of rankings presents scores for the masculinity dimension. We find that all of the Scandinavian countries are on the very low end of this dimension, and the Anglo countries are on the higher side, as is Lithuania

Table 3. Country scores and rankings on the uncertainty avoidance (UAI) dimension

Rank	Country or region	Index
6	Russia*	95
9	Poland*	93
15/20	France	86
30	Italy	75
38/39	Lithuania	67
40	Germany	65
42/43	Estonia*	60
44/45	Finland	59
49	Netherlands	53
62/63	Great Britain	35
66/67	Sweden	29
68	Denmark	23

Table 4. Country scores and rankings on the masculinity (MAS) dimension

Rank	Country or region	Index
6/7	Italy	70
11/13	Great Britain	66
11/13	Germany	66
14	Lithuania	65
15/17	Poland*	64
46/47	France	43
59	Russia*	30
62	Estonia*	30
64	Finland	26
67	Denmark	16
68	Netherlands	14
70	Sweden	5

(rank 14). Once again we see that Lithuania scores fairly similarly to Germany (rank 11–13). Poland scores only slightly below Lithuania (rank 15–17), while Estonia (rank 62) is on the low side, together with its closest neighbors (Finland – 64, Russia – 59).

Analysis

A brief look at the country rankings on each of the dimensions reveals that Lithuania shares many similarities with Germany, Poland with France, and Estonia scored very close to Finland on several dimensions. On most of the dimensions, the position of Russia was far from those of the Baltic countries. Cultural distances will be measured to gauge the extent of these similarities and differences on all of the cultural dimensions combined.

Cultural distance is calculated by taking the square root of the sum of the squared distances between two countries on each of the cultural dimensions (Kogut and Singh, 1988; Morosini et al, 1998; Singh et al, 2001):

$$CD_a = \sqrt{\sum_{i=1}^{4}(C_{ia} - C_{ib})^2}$$

where CD_a is the cultural distance from a given country, C_{ia} is the scores for country *a* on Hofstede's four cultural dimensions and C_{ib} is the scores for country *b* on Hofstede's dimensions. The cultural distances between Lithuania, Estonia and Poland and several countries are depicted in Table 5. The main trading partners of each of the three countries are highlighted in boldface.

Table 5. Cultural Distances of Select Countries

	Country and Index		
Distance from:	Lithuania	Estonia	Poland
Lithuania	0	37.40	36.14
Estonia	37.40	0	55.04
Poland	**36.14**	55.04	0
Russia	**66.59**	**66.90**	**47.18**
Germany	**19.85**	**37.35**	**43.89**
Denmark	75.11	47.38	99.50
Sweden	75.37	**42.28**	95.22
Finland	43.57	**8.66**	61.92
UK	**51.44**	52.79	72.79
France	**42.60**	41.83	**24.72**
Italy	**28.11**	46.70	**30.66**
Netherlands	61.20	26.63	**73.48**

It may be seen from the table that of the Baltic countries in this study, Lithuania and Poland share the most similarities (CD = 36.14), while Estonia and Poland the most differences (CD = 55.04). Lithuania and Estonia are almost equidistant from Russia. In the case of Estonia, this distance of 66.90 is the largest of all the countries in the table, while in Lithuania it is surpassed only by Denmark and Sweden. The cultural distance between Russia and Poland, on the other hand, ranks fifth out of the eleven countries in the table.

The main trading partners for Lithuania in 2001 and the corresponding share of trade for exports were the United Kingdom (13.8%), Latvia (12.6%), Germany (12.6%), Russia (11%) and Poland (6.3%). The five largest import partners in 2001 were Russia (25.3%), Germany (17.2%), Poland (4.9%), Italy (4.2%) and France (3.8%). Upon a glance at Table 8, it can be seen that all of the aforementioned countries, with the exception of Russia and the UK, are fairly culturally close to Lithuania, compared to the remaining countries in the table.

In 2000, the main export partners with Estonia and their share of total exports were Finland (38%), Sweden (11%), Germany (10%), Russia (8%) and Latvia (4%). Main import partners were Finland (31%), Sweden (20%), Germany (8%), Latvia (7%) and Russia (2%). Of the countries listed in the table, Finland, Estonia's neighbor, is also the least culturally distant country (and the least of all the distances depicted in the table), Germany ranks third, Sweden sixth, and the only culturally distant country is Russia.

Poland's main export partners in 2000 were Germany (34.9%), Italy (6.3%), France (5.2%) and the Netherlands (5.1%). Its main import partners were Germany (23.9%), Russia (9.4%), Italy (8.3%), France (6.4%) and the UK (4.5%). Here too we see that with the exception of the UK and the Netherlands, the remaining countries are among the most culturally "near" of those in the table.

It seems that in most cases both the major share of exports and imports come from culturally close countries. However, it makes sense only to analyze the relationship between cultural distance and export partners, as imports would require calculations based on the exporting country point of view. A small negative correlation ($r = -0.38$) is found between the choice of export partner and cultural distance.

Conclusion

Although most studies have applied the concept in explaining the market entry mode of firms of a given country, this exploratory study has applied the concept of cultural distance toward only one aspect of internationalization, in attempt to find a relationship between it and country export behavior. This has been done on a general level only, by comparing a country's largest export partners to the cultural distance of the country.

The results revealed a small negative correlation between the percentage of export share to a given country and its cultural distance. This may have been due to a number of factors. First, the unit of analysis was national export volume, as opposed to data from individual industries. According to Zukauskas (1999), the major Lithuanian export partner for the textiles and services sectors is Germany, while virtually no exports went to the UK (Lithuania's largest export partner on the national level). It is quite possible that separate analyses by sector would reveal different results. It has also been argued (Barkema et al,

1997; Barkema and Vermeulen, 1998) that the cultural dimension of uncertainty avoidance plays a greater role than the remaining dimensions in foreign market entry. Moreover, data for the cultural dimensions of Latvia, a major export partner of both Lithuania and Estonia are unavailable. It was also seen that Lithuania and Estonia conduct a major share of their export with Russia, even though the cultural distance between Russia and these countries is quite high (66.59 and 66.90, respectively). Here the concept of psychic distance may be more useful than cultural distance in explaining export behavior, with experience, familiarity, learning and language playing a stronger role than cultural values. Nevertheless, some support is given to the role of cultural distance in export behavior.

Future research may include further exploration into the concept of cultural distance, relating it to the internationalization of Baltic firms and their market entry mode choice. However, with regard to entry into Central and Eastern European countries, it may be more useful to treat measures of cultural distance as a component of the broader concept of psychic distance and include economic indicators and socio-cultural factors.

REFERENCES

1. Barkema, H.G., Bell, J.H. and Pennings, J.M (1996). Foreign Entry, Cultural Barriers and Learning. *Strategic Management Journal,* Vol. 17: 151–66.

2. Barkema, H.G., Shenkar, O., Vermeulen, F., and Bell, J.H. (1997). Working Abroad, Working with Others: How Firms Learn to Operate International Joint Ventures. *Academy of Management Journal,* 40: 426–42.

3. Barkema, H.G. and Vermeulen, F. (1997). What Differences in the Cultural Backgrounds of Partners are Detrimental for International Joint Ventures? *Journal of International Business Studies,* fourth quarter: 845–864.

4. Barkema, H.G., and Vermeulen, F (1998). International Expansion through Start-Up or Acquisition: A Learning Perspective. *Academy of Management Journal,* Vol. 41, No. 1: 7-26.

5. Hofstede, G. (1984). Culture's Consequences: International Differences in Work-Related Values. Beverly Hills, Sage.

6. Hofstede, G. (1991). Cultures and Organizations: Software of the Mind. London, McGraw-Hill International.

7. Hofstede, G. (1994). Values Survey Module 1994 Manual. Maastricht, IRIC, University of Limburg.

8. Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations. Thousand Oaks, Sage.

9. Hofstede, G., Kolman, L., Nicolescu, O. and Pajumaa, I. (1996). Characteristics of the Ideal Job among Students in Eight Countries. In: H.Grad, A.Blanco and J.Georgas, (eds). *Key Issues in Cross-Cultural Psychology,* Netherlands, Swets & Zeitlinger: 199–216.

10. Hoppe, M. (1998). Validating the Masculinity/ Femininity Dimension on Elites from 19 Countries. In; G.Hofstede et al (eds). *Masculinity and Femininity: the Taboo Dimension of National Cultures.* Thousand Oaks, Sage.

11. http://www.lda.lt

12. http://paiz.gov.pl

13. 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: 411–423.

14. Li, J. and Guisinger, S. (1991). Comparative Business Failures of Foreign-Controlled Firms in the United States. *Journal of International Business Studies,* Vol. 22, No. 2: 209–224.

15. Mockaitis, A.I. (2002). The National Cultural Dimensions of Lithuania. *Ekonomika,* Nr. 59: 67–77.

16. Morosini, P., Shane, S., and Singh, H. (1998). National Cultural Distance and Cross-Border Acquisition Performance. *Journal of International Business Studies,* Vol. 29, No. 1: 137–158.

17. Nasierowski, W. and Mikula, B. (1998). Culture Dimensions of Polish Managers: Hofstede's Indices. *Organization Studies,* Vol. 19, Nr. 3: 495–509.

18. O'Grady, S. and Lane, H.W. (1996). The Psychic Distance Paradox. *Journal of International Business Studies,* second quarter: 309–333.

19. Shackleton, V.J. and Ali, A.H. (1990). Work-Related Values of Managers: A Test of the Hofstede Model. *Journal of Cross-Cultural Psychology,* Vol. 21, Nr. 1: 109–118.

20. Singh, G., Ghorpade, J., and Lackritz, J. (2001). Preferences for Involving Employees in the Management of Organizations: the US Versus Mexico. Ciber Working Paper Series, No. 114, San Diego State University.

21. Triandis, H.C. (1982). Review of Culture's Consequences: International Differences in Work-Related Values. *Human Organization,* Vol. 41: 86–90.

22. Usunier, J.C. (2000). Marketing Across Cultures. London, Pearson Education.

23. Žukauskas, P. (1999). Užsienio rinkų atrankos proceso ypatumai, internacionalizuojant Lietuvos įmonių veiklą. *Organizacijų vadyba: sisteminiai tyrimai,* No. 9: 151–169.

APIE EKSPORTO KRYPTIES NUSPĖJAMUMĄ REMIANTIS KIEKYBINIAIS KULTŪROS RODIKLIAIS

Audra I. Mockaitis

Santrauka

Baltijos regionas tebėra vienas iš patraukliausių regionų užsienio investicijoms ne tik dėl geografinės padėties, bet ir dėl žemesnių darbo jėgos ir kitų išteklių kaštų. Tačiau dažnai užsienio investuotojai šį regioną traktuoja kaip vientisą rinką, nepaisant to, kad Baltijos regiono šalys labai skiriasi ne tik savo institucine aplinka, bet ir kultūra, ir vertybėmis. Ne tik šių šalių skirtumai, bet ir jų ir investuojančios įmonės šalies gali stipriai paveikti tarptautinio verslo sėkmę, apsunkinti ne tik tarptautinių žmogiškųjų išteklių įmonėse valdymą, bet ir rinkos, ėjimo į rinką būdo pasirinkimą ir daugelį kitų aspektų. Šio straipsnio tikslas yra trejopas. Pirma, palyginamos trijų Baltijos regiono šalių – Lietuvos, Estijos ir Lenkijos – kultūros. Antra, šių šalių kultūros lyginamos su kiekvienos šalies pagrindinių prekybos partnerių nacionalinėmis kultūromis. Trečia, vertinama, ar egzistuoja kultūrinio atstumo ir tarptautinės prekybos ryšys.

Tad šiame straipsnyje į tarptautinę prekybą žvelgiama kultūros kontekstu. Siekiama atskleisti, ar yra šalies, į kurią eksportuojama, pasirinkimo ir kultūrinio atstumo ryšys. Šiam atstumui įvertinti remiamasi Hofstede'o kultūros dimensijomis, kurios leidžia kiekybiškai įvertinti nacionalinę kultūrą, lyginant šalių santykines pozicijas. Šios dimensijos buvo panaudotos Kogut ir Singh (1988), siekiant kiekybiškai įvertinti šalių atstumą pagal bendrą dviejų šalių skirtumą remiantis kiekviena Hofstede'o dimensija. Tačiau staipsnyje remiantis žvalgomojo tyrimo rezultatais teigiama, kad šis rodiklis turi trūkumų ir galbūt nėra tinkamiausias kultūrinio atstumo vertinimo metodas, kadangi neatsižvelgiama į kitus svarbius aspektus, pavyzdžiui, institucinę aplinką – kalbos, teisinės, ekonominės, politinės aplinkos skirtumus. Nustatytas nestiprus kultūrinio atstumo ir pagrindinių prekybos partnerių, t. y. šalies, pasirinkimo ryšys. Tačiau tai pirmas žingsnis, siekiant įvertinti prekybos patrauklumą ir investicijų atsiradimo priežastis ne tik ekonominiu aspektu, bet ir pagal abstraktesnius kriterijus. Būtų įdomu giliau pažvelgti į kultūrinio atstumo sąvoką: ne lyginant ją vien su makrolygio duomenimis, bet ir Baltijos šalių regiono įmonių santykių bei ėjimo į užsienio rinkas būdo pasirinkimo aspektais.

Įteikta 2004 m. birželio mėn.