Transaction Costs in Institutional Environment and Entry Mode Choice

K. D. Mroczek

Abstract—In the study presented institutional context is discussed in terms of companies’ entry mode choice. In contrary to many previous analyses, instead of using one or two aggregated variables, a set of eleven determinants is used to establish equity and non-equity internationalization friendly conditions. Based on secondary data, 140 countries are analyzed and grouped into clusters revealing similar framework. The range of the economies explored is wide as it covers all regions distinguished by The World Bank. The results can prove a useful alternative for operationalization of institutional variables in further research concerning entry modes or strategic management in international markets.

Keywords—Clustering, entry mode choice, institutional environment, transaction costs.

I. INTRODUCTION

INTERNATIONAL business covers a wide range of processes that involve, for instance, a company’s entry mode choices, strategies it adopts within foreign markets and networks it creates by its international transactions. One of the most crucial decisions is the company’s initial entry mode that significantly determines the firm’s international position and strategy. Entry mode choice is often considered in terms of transaction cost theory. This concept, first indicated by Coase [1]-[4], has been later developed by researchers such as Williamson [5]-[7], Arrow [8], North [9] and many others.

Both international business and the transaction cost approach enrich one another and point to new research areas and objectives that have not previously been their subject of interest. There has been some concern if the transaction cost-based perspective can be applied to international aspects. However, empirical research has proved that it is applicable both to production and service industries [10], to small and medium-size companies as well as multinational corporations [11]. This concept evokes asset specificity, frequency and uncertainty which, according to Williamson [12], are the most vital of transaction characteristics. Operationalization of those characteristics enables the researchers to use both quantitative and qualitative methods of analysis.

One of the issues discussed within the transaction cost approach is the entry mode choice. Entering a new market requires a company to consider the revenues, costs and risks associated with each form. Equity and non-equity forms of internationalization require or rather are determined by different conditions. To go deeper and include the internationalization models (e.g. Uppsala model) then switching costs (the costs of changing one form of internationalization to another) should also be considered.

Transaction cost theory has so far proved to be an adequate tool in explaining the decisions and efficiency of companies functioning in the international markets. A question however arises if transaction costs acknowledged as asset specificity, frequency and uncertainty only are enough to determine company’s choices [13], [14]. Operating in an international environment may also point to other, more institutionally embedded costs that are (or at least should be) taken into consideration. The institutional perspective examines the costs in both external and internal environments, giving focus to the social norms, formal framework and even the networks that companies create [9], [15], [16].

II. INSTITUTIONAL CONTEXT IN ENTRY MODE RESEARCH

Significant attention to the institutional framework has been given in studies conducted among others by Brouthers [17]-[19] who included into his model institutional context understood as variables which "extend transaction cost theory by examining the ability of a firm to expand or enhance its competitive advantage in particular markets [17]". As such, he has introduced the level of legal restrictions to measure its influence on a company’s entry mode choice. The question remains whether institutional variables should be perceived as managerial perception of these conditions or the conditions themselves. On one hand, it is the way the government restrictions are seen that determines the manner the international trade is handled. On the other hand, there is a justified doubt whether subjective opinions on institutional environment should be enough to just simply call it "institutional variables".

In his retrospective on the occasion of The Decade Winning Article, Brouthers [20] suggests that if managerial perception is to be substituted by another variable, maybe it is worth turning to the actual costs encountered in international trade. If the definition of transaction costs based on the property rights is evoked [21] then it is clear that transaction costs carry all the costs associated with transferring the owner’s rights form the seller to the buyer. That means that if the transaction is carried out across borders, some additional expenses may occur. The number and significance of such burden may vary, but taking into account the overall increase in international trade and an undeniable increase in the value of transaction costs themselves [22] these costs undeniably

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attract attention.

Institutional theory is said to have been first applied into entry mode research in 1999. The costs of governing companies or their contracts abroad are now perceived not only on the basis of pure transaction cost theory but are also accompanied by anthropological and sociological perspective. This has created the possibility to integrate various concepts and alter the quite homogenous view to a more complex standpoint that, to a certain point, serves better in understanding the phenomena [23].

The review of studies conducted on entry mode choices shows that numerous researchers focus on employing institutional context into studies. As mentioned before, the operationalization may be questioned, however this field undoubtedly needs exploring. Focusing on the most recent studies enabled to distinguish some patterns in viewing and applying the institutional regulations (Fig. 1). If secondary data is used, then aggregate measures indicate the quality of institutional environment whereas primary data points to measures indicated in Likert scale. To go a step further, while verifying the hypothesis most researchers tend to turn to logistic regression, either with multiple explanatory variables (e.g. all range of entry modes) or with dichotomous explanatory variable (e.g. general choice between equity and non-equity modes only).

### III. ECONOMIES’ CLUSTERING

#### A. Research Objectives

Inspired by Brouthers’ suggestions that it is vital to look into costs embedded in the institutional context, the author aims to establish a division between countries that offer companies an equity and/or non-equity internationalization-friendly environment. The objective of the paper is twofold. First, such clustering may constitute an alternative for understanding and operationalization of institutional variables frequently considered in entry mode research. Second, it enables to match the firm’s transactions specifics with the institutional environment granted by individual economies.

#### B. Hypotheses

The entry mode decisions and the effectiveness of the forms chosen is said to be highly influenced by the institutional determinants of the target market [26]-[28]. The research in this particular area has, however, been limited as most of the studies apply very little or even insufficient variables concerning the institutional context. Bearing in mind the division on the equity and non-equity modes of internationalization the following hypotheses have been suggested:

- **Hypothesis 1**: High-income economies create a favorable environment for both equity and non-equity internationalization modes whereas upper-middle-income economies favor non-equity internationalization.

- **Hypothesis 2**: Low-middle-income and low-income economies create neither equity nor non-equity internationalization favorable conditions.

In both hypotheses, the World Bank classification is applied. It is not the only classification available but since the variables refer mainly to the *Doing Business Report*, which is also prepared by the World Bank, the data compatibility will be maintained. The classification is updated once a year and is based on *gross national income per capita*. The high-income threshold in 2011 was adjusted to $12,275.

#### C. Methodology

In order to avoid respondents’ subjectivity, the analysis has been based on secondary data collected by international institutions such as the World Bank. The author is aware of the fact that regardless to the source chosen, some of the indices specified there still remain at least partly biased. However, the sample of companies and transactions studied is far more adequate for such analysis than the one possible to obtain in any other manner. Still, most of the indices chosen are based on *hard* statistical data that refers to tax rates, costs of employment currency rates, tariff barriers, etc.

Based on the World Bank reports ([1] Doing Business and Logistics Performance Index data) a pre-set of 11 non-dependent variables has been selected. These included institutional requirements to undertake both equity and non-equity ventures. Variables determining equity entry mode covered: number of procedures to start a new business, time required to start a new business, extend of protecting the investment, total tax rate and logistics costs for domestic deliveries. Non-equity costs were presented as: currency stability, tariff and non-tariff trade barriers, time of cross-border trading and costs of cross-border trading. Two variables – cost of enforcing contracts and time of enforcing contracts – concerned both discussed entry modes and were also taken into consideration.

The variables considered are presented in Table I.
Basing on the criteria of *coefficient of variation* no grounds for excluding any of the variables were found. The data was transformed in order to apply it to *k*-means clustering.

The dataset included 183 entities in the Doing Business report and 155 in the Logistics Performance Index report. After conducting a cross-reference search, the dataset was reduced to 145 economies which included: 14 East Asia and Pacific countries, 16 Middle East and North Africa countries, 22 Eastern Europe and Central Asia countries, 7 South Asia Pacific countries, 16 Middle East and North Africa countries, 22 Latin America and Caribbean countries, 34 Sub-Saharan countries and 30 countries that were not assigned to any particular region. Due to insufficient data 5 economies (Afghanistan, Brazil, Congo Demo. Rep., Congo Rep. and Chad) had to be excluded. The final analysis was conducted on 140 economies.

### IV. FINDINGS

The analysis enabled grouping the 140 economies into 18 clusters that featured countries providing similar institutional environment (Table II).

Each of the clusters varies as far as the costs of equity and non-equity internationalization is concerned. Cluster $G_7$ exhibits relatively high non-equity internationalization costs whereas countries from cluster $G_4$ tend to deter equity investments. On the other hand, clusters that create institutional environment boosting both modes of entry can also be found. A mapping of clusters in terms of institutional framework can be presented if the variables used for the cluster analysis are summarized as singular indices determining equity and non-equity costs of internationalization (Fig. 2).

The mapping itself does not give a full picture of the costs of institutional context since it does not consider the number of the economies creating a particular cluster. The geographical distribution of these countries should also be taken into account. The widest diversity can be seen in the African countries. Similarly, relatively high costs, particularly non-equity ones, can be observed in the Asia-Pacific area and the Middle East. Latin America exhibits greater uniformity, although with exceptions such as Venezuela, which tends to be more restricted than other countries. Nevertheless, the most preferable breakdown of costs finds the companies willing to invest or trade across North America and central Europe (Appendix 1–Fig. 3).

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>$G_1$</td>
<td>Bosnia and Herzegovina, Botswana, Fiji, Gabon, Liberia, Moldova, Namibia, Nicaragua, Nigeria, Paraguay, Russia, Tanzania, Vietnam</td>
</tr>
<tr>
<td>$G_2$</td>
<td>Benin, Bolivia, Guinea, Iran, Cameroon, Mali, Niger, Uganda, Ukraine, Zambia</td>
</tr>
<tr>
<td>$G_3$</td>
<td>Ethiopia, Guyana, Jamaica, Madagascar, Maldives, Mauritius, Nepal, Pakistan, Serbia, Syria, Uruguay</td>
</tr>
<tr>
<td>$G_4$</td>
<td>Gambia, Comoros</td>
</tr>
<tr>
<td>$G_5$</td>
<td>Djibouti, Haiti, Togo</td>
</tr>
<tr>
<td>$G_6$</td>
<td>Saudi Arabia, Chile, China, Cyprus, Czech Republic, Dominican Republic, Estonia, Israel, Qatar, South Korea, Lebanon, Lithuania, Latvia, Malaysia, Mexico, Panama, Portugal, South Africa, Slovakia, Thailand, Tunisia, Turkey, Hungary, UAE</td>
</tr>
<tr>
<td>$G_7$</td>
<td>Mozambique, Sierra Leone</td>
</tr>
<tr>
<td>$G_8$</td>
<td>Albania, Armenia, Azerbaijan, Bulgaria, Montenegro, Egypt, Ghana, Georgia, Iceland, Peru, Romania, Slovenia</td>
</tr>
<tr>
<td>$G_9$</td>
<td>Angola, Eritrea, Iraq</td>
</tr>
<tr>
<td>$G_{10}$</td>
<td>Bahrain, India, Kenya, Kuwait, Macedonia, Oman</td>
</tr>
<tr>
<td>$G_{11}$</td>
<td>Bangladesh, Guatemala, Guinea Basque, Colombia, Sri Lanka</td>
</tr>
<tr>
<td>$G_{12}$</td>
<td>Australia, Austria, Belgium, Denmark, Finland, France, Spain, the Netherlands, Hong Kong, Ireland, Japan, Canada, Luxembourg, Germany, Norway, New Zealand, Singapore, Switzerland, Sweden, UK, USA, Italy</td>
</tr>
<tr>
<td>$G_{13}$</td>
<td>Argentina, Croatia, Honduras, the Philippines, Costa Rica, El Salvador, Senegal</td>
</tr>
<tr>
<td>$G_{14}$</td>
<td>Algeria, Bahamas, Ecuador, Greece, Jordan, Yemen, Sudan</td>
</tr>
<tr>
<td>$G_{15}$</td>
<td>Laos, Venezuela</td>
</tr>
<tr>
<td>$G_{16}$</td>
<td>Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan</td>
</tr>
<tr>
<td>$G_{17}$</td>
<td>Indonesia, Cambodia, Papua New Guinea, Solomon Islands</td>
</tr>
<tr>
<td>$G_{18}$</td>
<td>Burkin Faso, Mongolia, Rwanda</td>
</tr>
</tbody>
</table>

![Fig. 2 Mapping clusters according to equity and non-equity costs](image-url)

This is mainly due to the policies applied within regional groupings and associations such as European Union. If the mapping is confronted against the hypotheses outlined previously, then some important implications can be drawn (Table III).

Out of 45 high-income economies, 35 countries were classified as exhibiting low equity and non-equity costs. In the same time 2 more economies, Croatia and Russia, proved to
have low non-equity and average equity costs.

<table>
<thead>
<tr>
<th>Classification</th>
<th>High-income</th>
<th>Upper-middle-income</th>
<th>Lower-middle-income</th>
<th>Low-income</th>
<th>Upper middle income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low, Low</td>
<td>35</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Low, Medium</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Low, High</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Medium, Law</td>
<td>2</td>
<td>7</td>
<td>9</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Medium, Medium</td>
<td>1</td>
<td>5</td>
<td>9</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Medium, High</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>High, Low</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High, Medium</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>High, High</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V. FURTHER RESEARCH DIRECTIONS

The efficiency of an institutional system is vital when capital involvement of a company is perceived. These are the institutional regulations that create a bond between an entering company and the market itself. The level of uncertainty [31] and information asymmetries [32] is shaped by the existence or absence of the market-supporting institutions. In fact, some of the authors [33] seek to extend the research determining the impact of formal and informal institutions on entry modes. This has drawn a certain limitation to the paper presented – informal constrains or encouragement does not complement the study.

Once we bring up the issue of informal institutions and behavior we come across a similar obstacle as with the formal ones –measurement. One way to look at these factors is to consider them as the elements of the social environment expressed in the cultural traits. If we call for the cultural aspects, immediately one of the solutions for variables’ operationalization opens up with Hofstede’s, Schwartz’s or GLOBE’s datasets [34]-[39]. Another way is to follow a more negative standpoint and take into account divergent indices that undermine the entrants’ decisions, e.g. corruption level, bureaucracy, etc.

The institutional definition may also be expanded. In light of globalization, the unit of analysis shifts from nation a-level only to a point where national and international institutions set the rules jointly [40]. Facing the increase in the international integration of policies, creation of the monetary unions and regional cooperation, new dimensions should also be considered in calculating institutional distance.

The entry mode research has been a complex field that invokes numerous theories (e.g. Transaction Cost Theory, Institutional Theory, Internalization Theory, Eclectic Paradigm, Resource Based View, etc.) In his commentary to the Brouther’s JIBS (Journal of International Business) Decade Award Shaver [41] stated a controversial question on whether we still need more entry mode studies. Basing on the recent efforts to combine the different approaches in revealing the company’s decisions, the answer to that question can only be affirmative.

VI. CONCLUSION

While there is a growing interest in expanding the transaction cost-based models in the field of entry mode research, room still remains to discuss how the institutional framework should be embedded in this theory. Few studies so far go beyond assessing more than one variable that aims to summarize the institutional context. Furthermore, it is worth to mention that more often than not, it bases on managerial perception of the rapidly changing conditions than on the conditions themselves. The author fears that oversimplifying this matter may result in insufficient conclusions that, in a long term, could even appear misleading.

Shaver [41] brought out a significant yet disturbing question about the future of the entry mode research. Although Shaver concludes that too much consideration is actually given to the measurement of the factors, he also admits that it may eventually lead “to different insights” [41]. Rediscovering the institutional context does not mean that the researchers should reject the previous concepts. It means that searching for incremental advancement requires casting doubt on the methodology adopted and, only if reasonable doubt is proven, applying changes.

In reference to the above, a new, distinct approach is
introduced. Based on the clustering analysis 140 economies are divided into groups that offer similar institutional conditions to companies willing to expand their market operations. The study enables researchers to incorporate the results on the institutional environment into their own models regarding not only entry mode choices, but international business as a whole.

It is crucial to realize that the approach adopted has its limitations. The institutional environment is unstable and undergoes changes and alterations as adjustments to economic and social turmoils are needed. This proves that the study conducted constitutes a snapshot of the current conditions rather than fixed indices that can be applied in the long term. Nevertheless, the tools used are replicable and may be once again adopted to the most recent data.

**APPENDIX**

![Map of countries according to equity and non-equity costs](image)

**Fig. 3** Mapping countries according to equity and non-equity costs

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**REFERENCES**


