Internationalization in Retailing: Explaining the Pattern of Foreign Market Entry

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ABSTRACT

Retailing is becoming more international and retail companies increasingly have operations in many countries. In this paper, the expansion of retailers into foreign markets is being explored. The retailers' choice of foreign markets is investigated using a spatial-interaction model which takes into account factors related to the attractiveness of a given market as well as distance to that market. While gravity and spatial interaction models have a long tradition in retailing research dating back to Reilly (1931), this type of model has to the best of our knowledge not been applied to foreign market entry before. Data on UK retailers' cross-border operations provide good support for the model.

Keywords: international retailing, foreign market entry, spatial interaction models, gravity models, UK retailers

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INTRODUCTION

Retailing is rapidly becoming an international industry. The internationalization of retailing has many aspects, and in principle it may be argued that it includes inward (e.g. international sourcing) as well as outward moves (McGoldrick and Davies, 1995). The main academic interest has, however, focused upon the transfer of some aspect of business operation or behavior in the retail industry across national boundaries. Three broad categories of transfer have been considered particularly relevant: The transfer of retail concepts, the transfer of retail operations, and the transfer of management functions (Burt, 1991). The transfer of retail concepts may take place without the explicit involvement of a foreign company and can be regarded as a special case of the diffusion of new ideas. While the literature dealing with the process of internationalization in retailing has focused on the internationalization of retail operations, this also entails the transfer of management functions in many cases.

In particular, a number of frameworks have been proposed in order to examine motivational and strategic aspects of internationalization. Salmon and Tordjman (1989) suggested a distinction between different international retail strategies (global, multinational and investment) and Treadgold (1988) classified retailers on the basis of their expansion strategies into four groups (the cautious internationalists, the emboldened internationalists, the aggressive internationalists, and the world powers). Much of this work seems to treat retailing as a very special sector. Actually, it has been a recurring discussion to what extent it is possible to draw upon models developed for

other industries when analyzing retailer internationalization. Alexander and Myers (2000) seem for instance to regard Dunning's (1988) eclectic model as highly relevant also for retailing, while Dawson (1994, 2001) is – in general – skeptical when it comes to importing frameworks from other sectors.

The present paper deals with the choice of foreign markets when retail operations are to be internationalized. Which countries are being selected when a retailer goes abroad? Is it possible to explain the pattern of foreign market entries that may be observed? It is argued in this paper that a model originally developed to analyze consumers' choice of shopping centers may be highly relevant for analyzing the impact of various factors on the choice of foreign markets to enter. The probability model proposed summarizes the impact of various factors on the outcome of the location choices and makes it possible to estimate the effect of each factor. To the best of our knowledge the model has not been applied to the choice of foreign markets before.

THE CHOICE OF FOREIGN MARKETS

The classical approach to the analysis of international expansion in retailing has been to discuss "push" and "pull" factors (Kacker, 1985). Typical examples of factors that "push" the retailers abroad are a limited home market and regulatory constraints, which both may contribute to rapid saturation at home. The owner of a particular retail offering may therefore be forced to look abroad if expansion is to be continued. The "pull" factors include all the attributes that make a particular foreign country attractive. The attractiveness of the US market to European retailers during the 1970s has for instance been discussed in terms of its size and spending power, limited interference from government agencies, low growth in wages etc. (Alexander, 1990). Initially, the

internationalization process tended to be interpreted as the result of "push" factors and this is usually referred to as the "reactive school" of thought. By the late 1980s and early 1990s the tendency was to regard retailer internationalization in a more positive light – it was acknowledged that foreign markets could be attractive opportunities – and the "proactive school" of thought emerged (Alexander and Myers, 2000).

Concerning the choice of foreign markets, two general theories developed in international business are particularly relevant. First, the eclectic framework of foreign direct investment put forward by Dunning (1988) may be a starting point for developing a model in retailing (Pellegrini, 1994). In the original eclectic model location advantages are analyzed in terms of the factors that make it profitable to locate a given business activity, say manufacturing, in a particular country, e.g. a low wage level. In manufacturing, the products produced in the factory may then be exported to other countries. In retailing, the attractiveness of a country for starting operations is more closely related to the size of the market, the income level, cultural similarity etc (de Mooij and Hofstede, 2002). A series of market characteristics may be developed that all are likely to have an impact upon the perceived attractiveness of the market.

Second, based upon the behavioral theory of the firm the theory of a gradual internationalization process was originally suggested by Johanson and Vahlne (1977). The theory underlines the importance of experiential knowledge and suggests an expansion pattern where the firm is gradually moving into (1) more demanding entry modes, and (2) more distant countries in cultural or psychic terms. Empirical tests in manufacturing have not uniformly supported the gradual move into more distant countries in cultural terms (Benito and Gripsrud, 1992). A possible explanation is that some of the investments made in manufacturing are mainly motivated by low

production costs and not by demand characteristics of the chosen market. The impact of cultural or psychic distance is likely to be stronger in retailing than in manufacturing (de Mooij and Hofstede, 2002). According to Evans, Treadgold and Mavondo (2000) the psychic distance concept has been identified as a key concept in explaining variations in both geographical expansion and organizational performance in retailing.

THE MODEL

Comprehensive reviews of gravity and spatial interaction models may be found in Haynes and Fotheringham (1984) and Sen and Smith (1995). In principle, any movement over space that results from a human process may be analyzed by spatial interaction formulations. Applications include estimates of international trade flows (Oguledo and Macphee, 1994) as well as studies in transportation, migration and so forth. A review of the development of spatial–interaction models in retailing is given by Ghosh and McLafferty (1987). Reilly's original law of retail gravitation (Reilly 1931) may be considered a precursor of these models, but Huff (1964) was the first to propose a spatial-interaction model in probabilistic terms. He suggested that the utility of store number j for a consumer at i depended on the size of the store (S_j) and the distance to the store (D_{ij}). Hence,

(1) $U_{ij} = S_j^{\alpha} D_{ij}^{\beta}$

Huff argued that each store within the relevant geographical area had some chance of being patronized. He followed the choice axiom proposed by Luce (1959) to determine the probability of a consumer visiting a particular outlet. The axiom postulates that

when faced with several choice alternatives, the probability with which an individual chooses a particular alternative is equal to the ratio of the utility of that alternative to the sum of the utilities of all alternatives considered by the individual. That is:

(2)　　$P_{ij} = U_{ij} / \Sigma\, U_{ik}$

where $k \in N_i$ and N_i is the set of competing stores in the area; also referred to as the "choice set" or the "consideration set". Now, substituting equation (1) in equation (2) we obtain Huff's model – apart from the fact that there was no exponent associated with size or attraction in the original formulation:

(3)　　$P_{ij} = S^{\alpha}_{j}\, D^{\beta}_{ij} / \Sigma\, S^{\alpha}_{k}\, D^{\beta}_{ik}$

The basic model was extended by Nakanishi and Cooper (1974) to include multiple measures of store attractiveness (A_i) as well as store accessibility (D_{ij}). The general form of the model is generally called the multiplicative competitive interaction model (MCI), and it can be estimated by OLS regression using a logarithmic transformation.

(4)　　$\ln(P_{ij} / P_{i\circ}) = \Sigma_{l=1}\, \alpha_l \ln(A_{lj} / A_{l\circ}) + \beta_l \ln(D_{lj} / D_{l\circ})$

where, $P_{l\circ} = (\Pi_{j \in N_i}\, P_{ij})^{1/n_i}$

$\qquad A_{l\circ} = (\Pi_{j \in N_i}\, A_{ij})^{1/n_i}$

$\qquad D_{l\circ} = (\Pi_{j \in N_i}\, D_{ij})^{1/n_i}$

$\qquad n_i = $ number of alternatives considered by companies at i

The application of such a model in analyzing the choice of which foreign markets to enter, implies that the management of a retail chain considers a number of alternative countries when the decision to internationalize has been made. It is assumed that the attractiveness of each country is measured by a number of attributes, while the "accessibility" of each country also is measured in one or many ways. Due to the large number of factors that may influence the outcome, it makes sense to develop the model in probabilistic terms. The dependent variable is therefore the relative probability of entering one particular country within the consideration set.

DATA AND MEASUREMENT

The data used in the study are taken from a report published in 1996 by Corporate Intelligence on Retailing entitled "UK Retailers' Cross-Border Activities". The report provides a comprehensive record of British retail companies that had retailing operations outside the UK in 1996. The original sample comprised 93 companies, but excluding cases with missing values on focal variables, our final sample consists of 86 UK retailers. In 1996, that set of retailers operated a total of 470 ventures in 39 different countries. The ventures – or cross-border activities – include five different methods of entry: franchising, acquisition, joint venture, organic expansion and concessions. This means that the data include high-risk entry modes like acquisition and organic (greenfield) growth as well as operations with more limited risk like concessions, but the available data does not provide information that make us able to distinguish between the various modes for individual cross-border activities.

As shown in Table 1, a majority (61.1%) of UK retailers' foreign operations were located in other European countries, but the number of ventures in Asian and American countries is also quite substantial. The average number of ventures per countries varies somewhat across the regions. Europe had the highest number of ventures per country, 15.9 being the country average (287 ventures in 18 different countries), closely followed by the Americas with a country average of 12.8 (64 ventures in 5 different countries). The top three host countries in the data set were Ireland, France, and the US with 48, 42, and 38 ventures respectively.

As mentioned, we focus on the probability of entering a particular country within the consideration set. We treat the consideration set as the countries that companies in our sample have actually entered. The dependent variable, *COUNTRY*, in the study is hence the ratio between the number of UK retailers' ventures in a given country *j* to the geometric mean of the count of ventures in the various countries.

Table 1. Geographic distribution of UK retailers' foreign ventures in 1996.

Regions	Number of ventures	In percent of total	Average number of ventures per country
• Africa	3	0.6	3.0
• Americas	64	13.6	12.8
• Asia	72	15.3	7.2
• Australia and NZ	16	3.4	8.0
• Europe	287	61.1	15.9
• Middle East	28	6.0	9.3
Total	470	100.0	12.1

In agreement with traditional reasoning in studies of retailer internationalization (Alexander and Myers, 2000), we focus on two "attractiveness" factors: the purchasing power of potential customers in the various countries, and the extent to which potential customers are concentrated or dispersed. Specifically, we use GNP per capita as a measure of purchasing power and the number of inhabitants in a country that live in urban areas as a measure of customer concentration. For both variables, data for 1996 were taken from the World Bank's *World Development Indicators Database*.

As in some previous studies of the location of foreign direct investments (Veugelers, 1991; Benito and Gripsrud, 1995), we distinguish between cultural and physical dimensions of distance. As in many other studies cultural distance was measured by the Kogut-Singh index (Kogut and Singh, 1988), which is based on Geert Hofstede's well-known work on national cultures (Hofstede, 1980). Geographical distance was measured using the following ordinal scale: (1) Europe, (2) Middle-East, (3) North-America, (4) Africa, (5) Asia, (6) South-America, and (7) Australia-New Zealand.

Following the specification of the model in (4), all variables used in the actual estimation were further transformed by taking the logarithm of the ratio between the values for given variable and the geometric mean of that variable. We expect that the coefficients of the "attractiveness" variables, *GNPCAP* and *URBANPOP*, to be positive, while the coefficients for the distance variables, *CULDIST* and *GEODIST*, should be negative. Bearing in mind that all variables in the model are ratios, our empirical model is,

(5) $\ln(COUNTRY_j) = \alpha_1\ln(GNPCAP_j) + \alpha_2\ln(URBANPOP_j) + \beta_1\ln(CULDIST_j) + \beta_2\ln(GEODIST_j) + \varepsilon$

RESULTS

The correlation matrix for the independent variables revealed low correlations (see appendix), with the exception of the moderately high correlation between *GNPCAP* and *URBANPOP* ($r = 0.55$). As a test of potential multicollinearity in the data, the variance inflation factors were inspected. They were all in the range 1.19-1.69, which does not suggest any harmful collinearity.

As suggested by the specification of (5) the relevant level of analysis is at the country level, of which there are 39 in our database. The estimation results of equation (5) using OLS are reported in Table 2. The adjusted R^2 of 0.33 indicates that the overall performance of the model in terms of its fit to the data is reasonably good.

Table 2. Estimation results, OLS regression (*n*=39).

Variables	Standardized regression coefficients (*t*-values)	
GNPCAP	.311	(1.785)*
URBANPOP	.256	(1.733)*
CULDIST	-.260	-(1.772)*
GEODIST	-.358	-(2.217)**
Model statistics:		
F-statistic	5.630	***
Adjusted R^2	.334	

Note: *, **, and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Turning to the coefficients of *GNPCAP* and *URBANPOP* both are positive as expected, but the results are only weakly statistically significant. In contrast, the coefficients of both distance variables are negative, which is again as expected. The partial effect of *GEODIST* is particularly strong, suggesting that geographic distance is more influential than cultural distance with regards to retailers' choice of foreign markets. However, because geographical distance is measured on an ordinal scale the result for that variable should be considered as tentative.

The estimation results presented in Table 2 do not take into account learning effects as the attraction and distance factors are assumed to be the same regardless of previous experience. The cultural distance factor should, however, become less important the more experience the retailer has acquired from previous ventures abroad. This is in line with the gradual process of internationalization envisaged by Johanson and Vahlne (1977). Recent studies of international plant locations have also found that the uncertainty faced by entering a new market may be more reduced the greater the number of prior plant locations undertaken by other firms in the industry (Henisz and Delios, 2001).

A related issue is the size of the consideration set, which may expand as the retailers become more experienced. Initially, only a limited number of foreign markets may be considered by the management of a retail company. While the exact content of the consideration set for each retailer requires the collection of primary data from the retailers in question, our data base makes it possible to explore the number of countries actually entered at the different steps of internationalization. Table 3 reports the number of countries chosen at the various investment numbers as well as the cumulative number of foreign markets entered at each step. The latter is equal to the size of the

consideration set as it has been defined here. It turns out that seventeen different countries were chosen as the first foreign market to enter, and the consideration set increases to 20 and 23 for investment numbers two and three, respectively.

Table 3. Investment number, country selection, and number of investors.

Investment number i	Number of countries chosen at i	Cumulative number of countries entered at i	Number of retailers making investment number i
1	17		86
2	16	20	62
3	19	23	47
4	17	25	40
5	21	26	34
6	17	29	27
7	16	31	20
8	15	34	18
9	11	34	13
10	9	34	10
>10	36	39	10

To explore the effect of increasing experience on the ability of the model to predict the choice of foreign market, the database was split into three subsets according to the number of investment undertaken by the individual retailers. The first subset consists of ventures up to and including the first three cross-border activities of the retailers. The second subset being analyzed encompasses all ventures made by retailers from investment number four up to and including investment number ten. The last

subset of the database consists of all cross-border activities that exceed investment number ten. Table 4 reports the results of the three regression runs. As can be seen from the table the model works very well for the initial foreign entries. In this case, the adjusted R^2 reaches .566 and all the four predictors are significant at the five percent level. In both the other two subsets of the data base the model performs much weaker, indicating that location choices for higher order entries are motivated by other factors.

Table 4. Estimation results for sub-sets of early, in-between, and late entries.

	Standardized regression coefficients (*t*-values)		
Variables	Sub-set A: investment numbers < 4	Sub-set B: investment numbers 4 to 9	Sub-set C: investment numbers ≥ 10
GNPCAP	.433 (2.580)**	.339 (1.610)	.123 (.643)
URBANPOP	.375 (2.499)**	.321 (1.729)*	.241 (1.422)
CULDIST	-.387 -(2.431)**	-.157 -(.845)	.020 (.118)
GEODIST	-.399 -(2.307)**	-.121 -(.583)	-.413 (2.348)**
Model statistics:			
F-statistic	7.509 ***	2.268 *	2.109 *
Adjusted R^2	.566	.149	.107
Number of cases	23	32	38

Note: *, **, and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

DISCUSSION

This paper applies a spatial-interaction approach to model retailers' choice of foreign markets. To the best of our knowledge this is a novel approach to modeling that particular, and important, dimension of retailer internationalization.

In order to test the model we use data on British retailers' foreign operations in 1996. Overall, we find good empirical support for the model. The selection of which foreign markets to enter is influenced both by factors that make a particular market attractive and the distance to that market. In the present study we investigate both cultural and physical dimensions of distance. Even though geographical distance appears to be more important than cultural distance in determining foreign market choice, our findings suggest that cultural distance has an independent effect. This is worth noting because the estimates are based upon the total number of foreign moves made by the companies. A more refined model could take into account the sequence of moves made by each retailer, since cultural distance should have the highest impact in the first couple of foreign ventures (Johanson and Vahlne, 1977; Vida, 2000). A possible extension is also to acknowledge that the "consideration set" may change as the companies become more experienced in international operations.

REFERENCES

Alexander, N. (1990). "Retailers and International Markets: Motives for Expansion."
International Marketing Review, 7: 75-85.

Alexander, A. and Myers, H. (2000). "The Retail Internationalization Process."
International Marketing Review, 17: 334-353.

Benito, G.R.G. and Gripsrud, G. (1992). "The Expansion of Foreign Direct Investments:
Discrete Rational Location Choices or a Cultural Learning Process?" *Journal of
International Business Studies*, 23: 461-476.

Benito, G.R.G. and Gripsrud, G. (1995). "The Internationalization Process Approach to
the Location of Foreign Direct Investments: An Empirical Analysis." Pp 43-58
in *The location of foreign direct investment: Geographic and business
Approaches*. R.B. McNaughton and M.B. Green (eds.). Avebury, Aldershot.

Burt, S. (1991). "Trends in the Internationalization of Grocery Retailing: The European
Experience." *The International Review of Retail, Distribution and Consumer
Research*, 1: 487-515.

Dawson, J.A. (1994). "The Internationalization of Retailing Operations". *Journal of
Marketing Management*, 10: 267-282.

Dawson, J.A. (2001). "Strategy and Opportunism in European Retail
Internationalization." *British Journal of Management*, 12: 253-266.

Dunning, J.H. (1988). "The Eclectic Paradigm of International Production: A re-
statement and some Possible Extensions." *Journal of International Business
Studies*, 19: 1-31.

Evans, J., Treadgold, A. and Mavondo, F.T. (2000). "Psychic Distance and the
Performance of International Retailers: A Suggested Theoretical Framework."

International Marketing Review, 17: 373-391.

Ghosh, A. and McLafferty, S.L. (1987). *Location Strategies for Retail and Service Firms*. D.C. Heath and Company, Lexington, MA.

Huff, D.L. (1964). "Defining and Estimating a Trade Area." *Journal of Marketing*, 28: 34-38.

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Sage, Beverly Hills.

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*, 8: 22-32.

Kacker, M. (1985). *Transatlantic Trends in Retailing*. Quorum Books, Westport, Conn.

Kogut, B. and Singh, H. (1988). "The Effect of National Culture on the Choice of Entry Mode." *Journal of International Business Studies*, 19: 411-432.

Luce, R. (1959). *Individual Choice Behavior*. John Wiley & Sons, New York.

McGoldrick, P.J. and Davies, G. (1995). *International Retailing – Trends and Strategies*. Pitman, London.

Mooij, M. de and Hofstede, G. (2002). "Convergence and Divergence in Consumer Behavior: Implications for International Retailing." *Journal of Retailing*, 78: 61-69.

Nakanishi, M. and Cooper, L.G. (1974). "Parameter Estimates for Multiplicative Competitive Interaction Models – Least Squares Approach." *Journal of Marketing Research*, 19: 303-311.

Pellegrini, L. (1994). "Alternatives for Growth and Internationalization in Retailing." *The International Review of Retail, Distribution and Consumer Research*, 4:

121-148.

Reilly, W.J. (1931). *The Law of Retail Gravitation*. Knickerbocker, New York.

Salmon, W.J. and Tordjman, A. (1989). "The Internationalisation of Retailing."

    International Journal of Retailing, 4: 3-16.

Treadgold, A. (1988). "Retailing without Frontiers." *Retail and Distribution*

    Management, 16: 8-12.

Veugelers, R. (1991). "Locational Determinants and Rankings of Host Countries: An

    Empirical Assessment." *KYKLOS*, 44: 363-382.

Vida, I. (2000). "An empirical Inquiry into International Expansion of US Retailers."

    International Marketing Review,17: 454-475.

Appendix. Correlation matrix and descriptive statistics (*n*=39).

Variables	Mean	Standard deviation	Correlation between variables			
			1.	2.	3.	4.
1. GNPCAP	18,118.88	12,531.70	-			
2. URBANPOP	71.21	18.95	.55	-		
3. CULDIST	2.16	1.31	-.42	-.19	-	
4. GEODIST	2.85	2.01	-.45	-.05	.10	-