An exploration study to find important factors in market entrance: A case study of truck industry

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C H R O N I C L E	A B S T R A C T
	This paper presents an empirical investigation to find important factors influencing market penetration in truck industry. The proposed study designs a questionnaire in Likert scale consists of 51 questions, distributes it among 300 people who worked for different truck industry related units and collects 262 filled ones. Cronbach alpha is calculated as 0.89. In addition, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Approx. Chi-Square are 0.845 and 3067.443, respectively. The study has implemented principal component analysis and the results have indicated that there were eight factors influencing entering truck making industry including adaptation strategies, new ideas, cost competitiveness, product capabilities, market characteristics, competition threats from external market environment and export accelerators.

1. Introduction

One of the most important issues on entering market activities is to find appropriate business product to enter (Javalgi et al., 2011). There are literally various research studies associated with market entrance. Shieh and Wu (2012), for instance, concentrated on equity-based entry mode choices adopted by multinational corporations (MNCs) in the Greater Chinese Economic Area (GCEA) for entering Vietnam as a new growing market. They reported that equity-based entry modes were significant when foreign direct investments (FDI) firms entering Vietnam originate from the GCEA, which includes Mainland China, Hong Kong, Taiwan, and Singapore. However, the interaction results indicated that industry did not have a moderating impact on the relationship between location and entry mode, whereas it was not found that industrial cluster was specific to any one location. The generalized model had implications for the theoretical and managerial perspectives of both the host and the home countries.

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Xie et al. (2011) adopted the "strategy tripod" perspective, which integrates resource-, industry-, and institution-based perspective to study foreign firms' strategic positioning (i.e. their choice of generalist or specialist strategy) in the U.S. host market. The findings of their study supported the major hypotheses, recommending that: (1) market concentration and foreign firms' heterogeneous resources influence foreign firms' strategic positioning; (2) institutional distance between host and home countries exerts confounding moderating influences on the relationship between firm resources and strategic positioning in the host market. Otto (2008) provided a system dynamics model as a decision help in assessing and communicating complex market entry strategies.

Slangen and van Tulder (2009) investigated on two factors of culture and political issues on entry market and reported that cultural distance had no impact on entry mode choice and that political risk had the weakest influence of all aspects of governance quality. Czinkota et al. (2009) concentrated on developing, measuring, and empirically examining a framework of essential factors influencing international market entry mode choice of U.S. business schools by applying primary data from faculty and administrators of U.S. Master of Business Administration (MBA) schools.

Chang et al. (2012) hypothesized that governance quality plays a contingent role on market entrance. Chen and Chang (2011) built a panel data set and made a dynamic probit analysis on the mode choice between wholly-owned subsidiaries and joint ventures. They reported that state dependence between current and past modes played an essential role in determining entry mode choice. Zhou (2007) investigated the impacts of entrepreneurial proclivity and foreign market knowledge on early internationalization.

Rodríguez-Pinto et al. (2011) examined the role of market entry order as a moderator of the mediating effects of innovation speed and product quality on the MO–NP performance relationship. They reported that the performance of first-to-market products, early entrants, and late movers was associated with the specific implementation that firms make of its MO, whether it was developing high-quality products or accelerating innovation speed.

Morschett et al. (2010) investigated the external antecedents of the choice of entry mode by meta-analyzing data from 72 independent primary studies. They concentrated on the decision between wholly owned subsidiaries and cooperative entry modes. They found a strong positive relationship between power distance as a cultural trait of the firm's home country and the propensity to establish a wholly owned subsidiary.

Malhotra et al. (2011) performed a comparative analysis of the role of national culture on foreign market acquisitions by US firms and firms from emerging countries. Pehrsson discussed different strategy antecedents of modes of entry into foreign markets. Ellis (2007) investigated whether market distant could be serious problem for market entry or not in terms of penetrating into international market. Quer et al. (2007) provided new empirical evidence that cultural distance could reduce the likelihood of choosing equity entry modes, while firm profitability and internal financial funds availability favour the assumption of greater commitment in the international expansion process.

2. The proposed study

This paper presents an empirical investigation to find important factors influencing entering truck industry. The proposed study designs a questionnaire in Likert scale consists of 51 questions, distributes it among 300 people who worked for different business units and collects 262 filled ones. Cronbach alpha is calculated as 0.89. In addition, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Approx. Chi-Square are 0.845 and 3067.443, respectively. During the study, we have decided to remove six questions in order to make sure there is no strong correlation among questions and determinant is not equal to zero. Table 1 summarizes the results of our survey.

Table 1
The summary of principal component analysis

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.608	19.564	19.564	8.608	19.564	19.564	2.767	6.288	6.288
2	2.512	5.709	25.272	2.512	5.709	25.272	2.633	5.985	12.272
3	1.852	4.209	29.482	1.852	4.209	29.482	2.448	5.563	17.835
4	1.619	3.680	33.161	1.619	3.680	33.161	2.169	4.929	22.764
5	1.474	3.351	36.512	1.474	3.351	36.512	2.000	4.545	27.309
6	1.405	3.192	39.704	1.405	3.192	39.704	1.929	4.384	31.693
7	1.350	3.069	42.773	1.350	3.069	42.773	1.915	4.352	36.045
8	1.308	2.972	45.745	1.308	2.972	45.745	1.827	4.153	40.198
9	1.218	2.768	48.514	1.218	2.768	48.514	1.803	4.099	44.296
10	1.166	2.649	51.163	1.166	2.649	51.163	1.775	4.035	48.331
11	1.154	2.622	53.785	1.154	2.622	53.785	1.716	3.901	52.232
12	1.050	2.387	56.172	1.050	2.387	56.172	1.473	3.347	55.579
13	1.021	2.321	58.493	1.021	2.321	58.493	1.282	2.914	58.493
14	.976	2.218	60.711						
15	.946	2.150	62.861						
16	.928	2.110	64.971						
17	.877	1.994	66.965						
18	.868	1.972	68.936						
19	.842	1.913	70.849						
20	.790	1.795	72.644						
21	.762	1.732	74.376						
22	.730	1.660	76.035						
23	.719	1.634	77.670						
24	.693	1.575	79.245						
25	.660	1.500	80.745						
26	.647	1.470	82.215						
27	.629	1.429	83.644						
28	.578	1.313	84.957						
29	.564	1.282	86.239						
30	.551	1.253	87.492						
31	.523	1.189	88.681						
32	.512	1.164	89.845						
33	.478	1.087	90.932						
34	.452	1.027	91.959						
35	.434	.987	92.946						
36	.420	.954	93.900						
37	.397	.902	94.802						
38	.386	.878	95.681						
39	.370	.840	96.520						
40	.351	.799	97.319						
41	.341	.774	98.093						
42	.310	.705	98.798						
43	.275	.625	99.423						
44	.254	.577	100.000						

Next, we need to extract important components from the study of this paper. Fig. 1 demonstrates the summary of Scree plot. As we can observe from the results of Fig. 1 and Table 1, there are 13 components with relative Eigenvalue of greater than one. We have computed the communalities with all 44 and Table 2 demonstrates the summary of our results. Finally, we have extracted eight factors out of 13 factors and they are explained in next section.
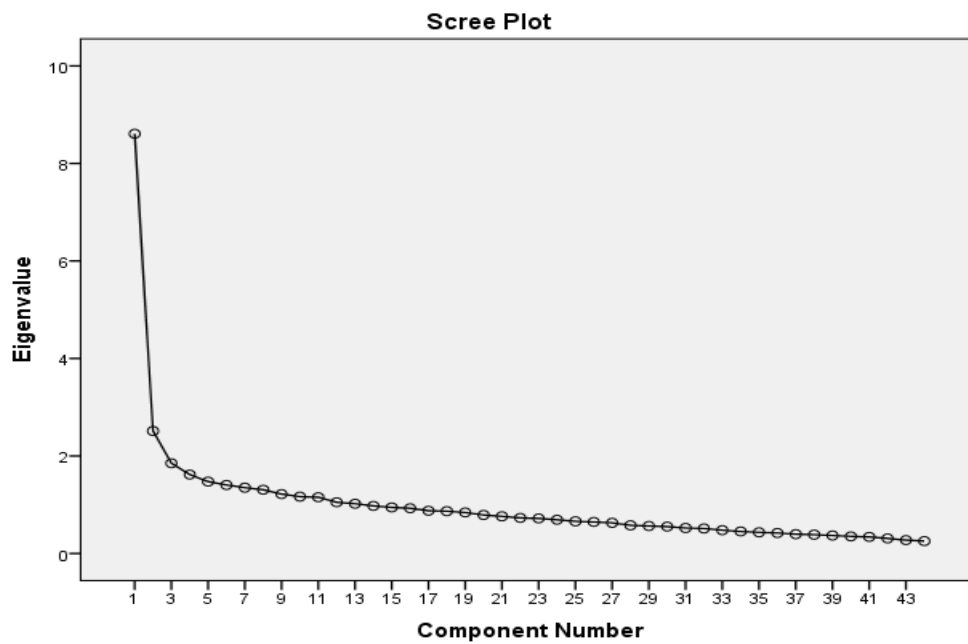
Fig. 1. The summary of Scree plot

Table 2

The summary of communities

Variable	Com.	Variable	Com.
Dynamic of industry	.471	Financial resources	.530
Competitive circumstances	.523	Organizational learning	.613
Marketing expenditures	.434	Rate of entrance	.639
Distribution network	.636	Size of investment	.625
Demand fluctuation	.608	Government rules	.622
Sales growth	.583	Risk	.574
Advertisement density	.638	Political danger	.687
Competitors	.608	International experience	.632
Human resources	.600	Kind of product	.609
Commitment to market	.610	Product distinction	.631
Danger in competition	.524	Performance of new products	.562
Knowledge on foreign market	.637	New product development	.657
Quality of services	.542	New innovations	.580
Quality of products	.591	Order from foreign market	.463
Product price	.587	Motivation for competition	.582
Capability to build connection with market	.684	Market structure	.564
Technical capabilities	.604	Market size	.596
Marketing skills	.566	Market growth rate	.592
Management skills	.623	Market potential	.587
Firm reputation	.516	Deregulation policies	.644
Research & Development	.571	distance from market	.462
Export	.531	Board of director	.600

3. The results

In this section, we present details of our findings eight detected factors, which are summarized in Table 3 as follow,

Table 3
The summary of factor analysis

Factor	Measurable variable	Weight	Eigenvalue	Variance	Accumulated
Firm activities	Advertisement density	0.712	8.608	6.288	6.288
	Firm reputation	0.574			
	Sales growth	0.572			
	Research & development density	0.422			
	Risk	0.408			
Adaptability	Commitment to market	0.690	2.512	5.985	12.272
	Product quality	0.633			
	Market deregulation	0.527			
	Export	0.340			
New ideas	New product development	0.772	1.852	5.563	17.835
	Innovation speed	0.629			
	Orders from outside country	0.434			
	Dynamic of industry	0.331			
Competitive price	Price of product	0.674	1.619	4.929	22.764
	Marketing expenditure	0.505			
	Market growth	0.451			
	Market potential	0.349			
Product capabilities	Exclusive product	0.629	1.619	4.929	27.309
	Performance of new product	0.608			
	Type of product	0.449			
	Technical capability of firm	0.379			
Competitive market	Competition opportunities	0.572	1.308	4.153	40.198
	Financial resources	0.564			
	Competitors	0.440			
	Competition motivation	0.402			
	Market size	0.363			
Threats from foreign firms	Government rules & regulations	0.675	1.218	4.099	44.296
	Political dangers	0.641			
	Distance to market	0.358			
	Market structure	0.348			
Market accelerators	Rate of entrance	0.731	1.166	4.035	48.331
	Size of investment	0.516			
	Organizational learning	0.512			
	Demand fluctuation	0.335			

As we can observe from the results of Table 3, there are eight factors associated with the proposed study including firm activities, adaptability, new ideas, competitive price, product capabilities, competitive market, threats from foreign firms and market accelerators.

4. Discussion and conclusion

In this survey, we have performed an investigation on measuring the impact of various factors on market entrance in truck industry in Iran. The study has implemented principal component analysis and the results have indicated that there were eight factors influencing market entrance including, firm activities, adaptability, new ideas, competitive price, product capabilities, competitive market, threats from foreign firms and market accelerators.

In terms of firm activity, there are six sub-components including advertisement density, firm reputation, sales growth, research & development density and risk advertisement density is the most important sub-factor followed by firm reputation. The second factor, adaptability, consists of four factors including commitment to market, product quality, market deregulation and export. In this group commitment to market is the most influential factor. The third factor, new ideas, consists of five factors where new product development is the most important item. The fourth factor is

associated with competitive price with four sub-components where price of product is the most important item. Product capabilities is the next item with four items and exclusive product is the most influential one. The other factors are playing essential role and must be considered for market entrance.

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