

The effect of firm characteristics and the propensity to export decision in food industry

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ABSTRACT

This paper presents an empirical investigation to study the effects of firm and management team's characteristics to develop food industry. The proposed study considers four factors associated with firms and 9 factors, which are related to management team's characteristics. There were 50 firms in food industry in province of Tehran, Iran and the study has been accomplished among all 50 existing firms. For each firm, between 2-3 questionnaires were distributed among experts in each firm. Cronbach alpha has been calculated as 0.879, which is well above the minimum acceptable level. The results indicate that management knowledge about export market was number one important factor followed by the level of technology used, competitive advantage, believe in being profitable.

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1. Introduction

Expert has been considered as the axis of economic development especially for development countries (Aaby & Slater, 1989). Suárez-Ortega and Alamo-Vera (2005) investigated the specific organizational and managerial determinants of the various characteristics of a firm's export development process including intention, propensity, and intensity. Their results confirmed that factors impacting export involvement were not the same along the process of export development. Atuahene-Gima (1995) investigated the role of new product factors in the firm's propensity to export and its performance in exporting new products based on a sample of Australian firms. They reported that product advantage, proficiency of predevelopment activities, and international orientation of the development process had substantial positive impact on the firm's propensity to export new products. In addition, the new product's domestic market performance and its effect on the sales and profitability of other products of the firm were substantially associated with its export performance. Finally, they reported that firm factors overwhelm new product factors in explaining export performance of new products. Export marketing has covered a number of theoretical and practical

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issues such as standardization and customization, export development processes, obstacles to exporting, export performance, etc. (Kaynak & Erol, 1989; Javalgi et al., 2000; Balabanis et al., 2005). Cadogan et al. (2001) developed a model of the key determinants of firms' market-oriented activities in their export operations on survey data from New Zealand and Finland. They reported that various factors, which were unique to firms' export operations, could play an essential role in impacting the firms' export market-oriented behavior. The findings also confirmed various variables, which have non-linear relationships with firms' market-oriented behavior in their export markets. Cavusgil and Zou (1994) studied the marketing strategy-performance relationship in the context of export ventures. The study was different from past export marketing investigation since they considered a comprehensive set of potential determinants of export market performance. They proposed a conceptual framework of export marketing strategy and performance and examined using path analysis. They provided some supports on the contention that export marketing strategy, firm's international competence, and managerial commitment were the key components of export performance. In their study, export marketing strategy was affected by internal as well as external factors.

Chi and Sun (2013) in an empirical investigation reported various key antecedents such as export reward and training systems, top management support, and export dependence, which could facilitate the development of firm's export market oriented (EMO) behavior while determining the specific moderating influences of environment and experience, and therein described a large percentage of variance in EMO behavior. Estrin et al. (2008) extended the theory of the multinational enterprise and the institutional perspective of strategy by investigating subsidiary-specific advantages as a driver of subsidiary exports. They also made a distinction between the factors affecting whether or not subsidiaries were exporting and those determining the share of sales, which were exported. In addition, they presented some support for these arguments based on a Heckman two-stage selection model estimation in Hungary, Poland, India and South Africa, Egypt and Vietnam. In their survey, the quality of the host institutional environment did not influence on export propensity, which depends entirely on subsidiary-specific advantages in terms of geographic location, acquired resources and small scale of the parent MNE.

Filatotchev et al. (2009) investigated factors influencing the export orientation and export performance of high-technology small and medium enterprises (Hamilton & Dana, 2003) in an emerging economy Combining international business research with the knowledge-based view. They argued that export orientation and performance depend not only on the development of capabilities through research and development as well as technology transfer, but also on entrepreneurial characteristics, such as the founder's international background and global networks. Fillis (2007) made an assessment on an alternative methodological method to investigate international entrepreneurship, which mirrors the creativity of successful entrepreneurial organizations.

Gumede and Rasmussen (2002) reported that business linkages such as networks, joint ventures and subsidiaries play essential role in increasing the probability to export of small enterprises. Besides, access to information, access to capital and the level of education may also increase the probability of a small enterprise to be an exporter. Therefore, they recommended that a national small business strategy could incorporate an element of networking amongst small enterprises and that small enterprise programs need to encourage intermediaries to help not only with networks but also with international market intelligence.

Hutchinson et al. (2009) studied the initial obstacles to internationalization experienced and perceived by small retailers based in the UK and the effect of government support in addressing such barriers. They reported that lack of vision, fear of losing control, lack of knowledge; the company: transfer of retail concept overseas, lack of resources, lack of consolidation in domestic market are the most important issues influencing the success of firms. Jones (2001) provided some empirical evidence consisting of quantitative data on their first steps in internationalization and reported that, as expected

from previous empirical evidence, trade-related activities, i.e., importing and exporting, were the modes of activity most frequently reported. Katsikeas et al. (2000) evaluated more than 100 papers of pertinent empirical investigation to evaluate and to critique export performance measurements and provided some insights.

Shaw and Darroch (2004) presented the findings of a comprehensive investigation on the perceptions of the barriers to internationalization by 561 New Zealand Entrepreneurial New Ventures (ENVs). They identified substantial differences in the perception of the barriers based on the level of international activity of New Zealand ENVs. In their survey, exporters and likely exporters considered the main obstacles to internationalization to be finance and cost-associated factors. Insufficient New Zealand government incentives were also observed to be a major barrier for the lack of international experience to be a hindrance.

2. The proposed study

This paper presents an empirical investigation to study the effects of firm as well as management team's characteristics to develop food industry (Morgan, 1997; Morgan et al., 2004; Obben & Magagula, 2003; Stoian et al., 2011). The proposed study considers four factors associated with firms and 9 factors, which are related to management team's characteristics. There were 50 firms in food industry in province of Tehran, Iran and the study has been accomplished among all 50 existing firms. For each firm, between 2-3 questionnaires were distributed among experts in each firm. Cronbach alpha has been calculated as 0.879, which is well above the minimum acceptable level. In our survey, 64.5% of the participants were less than 35 years old and in terms of educational background, 41.9% of them hold Bachelor of Science and 39.1% of them had master's degrees. Finally, in our survey, most participants had at least 6 years of job experiences.

2.1. Firm related hypotheses

The first four hypotheses of the survey are associated with firms' characteristics as follows,

1. Firm size influences on the propensity to export decision in food industry (Verwaal & Donkers, 2002; Vermeulen, 2004; Serra et al., 2012).
2. Competitive advantage influences on the propensity to export decision in food industry (Lages & Lages, 2004).
3. The level of technology oriented influences on the propensity to export decision in food industry (Sentürk & Erdem, 2008).
4. Firm age influences on the propensity to export decision in food industry.

Table 1 demonstrates the results of testing the first four hypotheses associated with firm's characteristics.

Table 1

The summary of some basic statistics and testing firm's characteristics

Hypothesis	Number	Mean	Std. Dev.	Sig.	Mean difference	Confidence		Result
						Lower	Upper	
H ₁	50	3.34	0.59	0.000	0.34	0.168	.505	√
H ₂	50	4.26	0.75	0.000	1.26	1.048	1.472	√
H ₃	50	4.23	0.68	0.000	1.23	1.038	1.423	√
H ₄	50	3.49	1.07	0.002	0.49	0.186	0.795	√

According to the results of Table 1, the mean of four hypotheses are 3.34, 4.26, 4.23 and 3.49, which are all above the average and we can confirm the effects of four factors on the propensity to export decision in food industry.

2.2. The effects of management characteristics

The second part of the survey is associated with the effects of management characteristics. As stated earlier, there are nine hypotheses associated with our survey as follows,

4. Young management teams in food industry are more interested in export.
5. Highly educated management teams in food industry are more interested in export.
6. Management teams with full knowledge on other international languages in food industry are more successful in export.
7. Managers who take more risks in food industry are more interested in export.
8. Managers who believe export cost more than domestic sales in food industry are less interested in export (Solberg, & Nes, 2002).
9. Managers who believe in export's advantage are more interested in export.
10. More commitment managers in food industry are more interested in export.
11. Managers of old firms in food industry are more interested in export.
12. Managers with high level of international rules and regulations (Cateora & Hess, 1975) are more interested in export.
13. Managers with knowledge with rules and regulations of the target market in food industry are more interested in export.

Table 2 presents the results of testing the next nine hypotheses associated with management characteristics.

Table 2

The summary of some basic statistics and testing management characteristics

Hypothesis	Number	Mean	Std. Dev.	Sig.	Mean difference	Confidence		Result
						Lower	Upper	
H ₅	50	3.51	1.007	0.000	0.34	0.51	.796	√
H ₆	50	3.90	0.827	0.000	0.90	0.665	1.35	√
H ₇	50	3.94	0.884	0.000	0.94	0.689	1.191	√
H ₈	50	3.99	0.678	0.000	0.99	0.869	1.125	√
H ₉	50	4.06	0.913	0.000	1.06	0.800	1.319	√
H ₁₀	50	3.90	0.614	0.000	0.90	0.725	1.075	√
H ₁₁	50	4.19	0.552	0.000	1.19	1.023	1.344	√
H ₁₂	50	3.96	0.608	0.000	0.96	0.785	1.130	√
H ₁₃	50	4.32	0.668	0.000	1.32	1.130	1.510	√

Similar to what we have found in the previous section, all mean values are well above the average level and we can confirm that all management characteristics influence on development of export, significantly.

2.3. Freedman test

One of the primary concerns on testing various hypotheses of the survey is to learn more about the effects of various factors on export development, which has been accomplished by using Freedman test summarized in Table 3 as follows,

Table 3
The summary of freedman test

Factor	Mean Score	Rank
Firm size	3.74	13
Competitive advantage	8.63	3
The level of technology	8.71	2
Firm age	5.17	11
Managers' age	5.14	12
Managers' educational background	6.91	7
Language background	6.89	8
Knowledge about international rules and regulations	7.34	6
Interest in taking risk	7.85	5
Acceptance of the costs associated with export	6.63	10
Believe in export advantage	8.25	4
Managers' level of commitment	6.67	9
Managers' knowledge about target market	9.07	1

Chi-Square = 107.943 Sig. = 0.000

The results indicate that management knowledge about export market is number one important factor followed by the level of technology used, competitive advantage, believe in being profitable.

3. Conclusion

In this paper, we have presented an empirical investigation on the effects of two group factors on export development. The first group of factors has been associated with four factors including firm size, competitive advantage, technology and firm age. The study has confirmed that large and older firms have had better potentials for export development. In addition, firms with better competitive advantage as well as advanced technology are more likely to succeed in export development. The second group of factors was related to managers' personal characteristics such as age, educational background, language capabilities, etc. The study confirmed the effects of all these factors on export development. Finally, the implementation of freedman test has concluded that management knowledge about export market was number one important factor. In addition, the level of technology used, competitive advantage, believe in being profitable were other important factors influencing export development. Finally, in our survey, firm's age and management are the least important factors.

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References

- Aaby, N. E., & Slater, S. F. (1989). Management influences on export performance: a review of the empirical literature 1978-1988. *International marketing review*, 6(4).
- Atuahene-Gima, K. (1995). The influence of new product factors on export propensity and performance: an empirical analysis. *Journal of International Marketing*, 3(2), 11-28.
- Balabanis, G., Theodosiou, M., & Katsikea, E. S. (2004). Guest editorial: Export marketing: developments and a research agenda. *International Marketing Review*, 21(4/5), 353-377.
- Cadogan, J. W., Paul, N. J., Salminen, R. T., Puumalainen, K., & Sundqvist, S. (2001). Key antecedents to "export" market-oriented behaviors: a cross-national empirical examination. *International Journal of Research in Marketing*, 18(3), 261-282.
- Cateora, P. R., & Hess, J. M. (1975). *International marketing*. Tata McGraw-Hill Education.
- Cavusgil, S. T., & Zou, S. (1994). Marketing strategy-performance relationship: An investigation of the empirical link in export market ventures. *Journal of marketing*, 58(1), 1-21.
- Chi, T., & Sun, Y. (2013). Development of firm export market oriented behavior: Evidence from an emerging economy. *International Business Review*, 22(1), 339-350.

- Estrin, S., Meyer, K. E., Wright, M., & Foliano, F. (2008). Export propensity and intensity of subsidiaries in emerging economies. *International Business Review*, 17(5), 574-586.
- Filatotchev, I., Liu, X., Buck, T., & Wright, M. (2009). The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies*, 40(6), 1005-1021.
- Fillis, I. (2007). A methodology for researching international entrepreneurship in SMEs: a challenge to the status quo. *Journal of Small Business and Enterprise Development*, 14(1), 118-135.
- Gumede, V., & Rasmussen, V. (2002). Small manufacturing enterprises and exporting in South Africa: a preliminary assessment of key export success factors. *Journal of Small Business and Enterprise Development*, 9(2), 162-171.
- Hamilton, R. T., & Dana, L. P. (2003). An increasing role for small business in New Zealand. *Journal of Small Business Management*, 41(4), 402-408.
- Hutchinson, K., Fleck, E., & Lloyd-Reason, L. (2009). An investigation into the initial barriers to internationalization: Evidence from small UK retailers. *Journal of Small Business and Enterprise Development*, 16(4), 544-568.
- Javalgi, R. G., White, D. S., & Lee, O. (2000). Firm characteristics influencing export propensity: an empirical investigation by industry type. *Journal of Business Research*, 47(3), 217-228.
- Jones, M. V. (2001). First steps in internationalisation: Concepts and evidence from a sample of small high-technology firms. *Journal of International Management*, 7(3), 191-210.
- Katsikeas, C. S., Leonidou, L. C., & Morgan, N. A. (2000). Firm-level export performance assessment: review, evaluation, and development. *Journal of the Academy of Marketing Science*, 28(4), 493-511.
- Kaynak, E., & Erol, C. (1989). The export propensity of Turkish manufacturing and trading house firms. *Journal of Marketing Management*, 5(2), 211-229.
- Lages, L. F., & Lages, C. R. (2004). The STEP scale: a measure of short-term export performance improvement. *Journal of International Marketing*, 12(1), 36-56.
- Morgan, R. E. (1997). Export stimuli and export barriers: evidence from empirical research studies. *European Business Review*, 97(2), 68-79.
- Morgan, N. A., Kaleka, A., & Katsikeas, C. S. (2004). Antecedents of export venture performance: a theoretical model and empirical assessment. *Journal of Marketing*, 68(1), 90-108.
- Obben, J., & Magagula, P. (2003). Firm and managerial determinants of the export propensity of small and medium-sized enterprises in Swaziland. *International Small Business Journal*, 21(1), 73-91.
- Sentürk, I., & Erdem, C. (2008). Determinants of export propensity and intensity of SMEs in developing countries: An empirical analysis of Turkish firms. *The Empirical Economics Letters*, 7(2), 171-179.
- Serra, F., Pointon, J., & Abdou, H. (2012). Factors influencing the propensity to export: A study of UK and Portuguese textile firms. *International Business Review*, 21(2), 210-224.
- Shaw, V., & Darroch, J. (2004). Barriers to internationalisation: a study of entrepreneurial new ventures in New Zealand. *Journal of International Entrepreneurship*, 2(4), 327-343.
- Solberg, C. A., & Nes, E. B. (2002). Exporter trust, commitment and marketing control in integrated and independent export channels. *International Business Review*, 11(4), 385-405.
- Stoian, M. C., Rialp, A., & Rialp, J. (2011). Export performance under the microscope: A glance through Spanish lenses. *International Business Review*, 20(2), 117-135.
- Suárez-Ortega, S. M., & Alamo-Vera, F. R. (2005). SMES' internationalization: firms and managerial factors. *International Journal of Entrepreneurial Behaviour & Research*, 11(4), 258-279.
- Vermeulen, P. (2004). Factor content, size, and export propensity at the firm level. *Economics Letters*, 82(2), 249-252.
- Verwaal, E., & Donkers, B. (2002). Firm size and export intensity: Solving an empirical puzzle. *Journal of International Business Studies*, 33(3), 603-613.