Presenting a Model for Assessing the Impact of Resource-Based Approach’s Components on Export Performance Based on cost Leadership Strategy in Non-Metallic Minerals Industry

Kiumars Sharifi, Abdolhossein Karampour, Mahsa Mirbakhsh

Tehran University, Iran
Shahidbeheshti University, Iran

Abstract

The purpose of this study is designing a model to evaluate the effect of resource based approach components on the export operation based on the Cost leadership strategy in non-metallic minerals industry. In this regard the approaches of determinants of export operation including Contingency approach, Business Interaction Networks and resource based approach have been identified. In this study the researcher reviews the relations between resource based approach’ components and competitive strategies and operation which are the major structures of the research. This research following this aim, how resources directly or indirectly (due to competitive strategies) leads to high levels of performance. The conceptual model of this research mergers indeed three main elements of strategic management, indoor (resources, features, organizations’ competitive systems), competitive strategy and operation. 300 Questionnaires have been distributed. 285 of the Questionnaires were analysable. Between this number based on cluster analysis method and mean method 124 Questionnaires were at the level of distinct strategy, 91 at the level of focus strategy and 70 were at the level of minimum cost strategy. In this research the model would be reviewed based on cost leadership strategy. The Questionnaire’s data were analysed by Factor analytic techniques. Structured equation modelling and they have been modified and finally confirmed. Based on the results organizational systems merely have no effect on competitive strategy and competitive capabilities have the most effect on export operation.

Keywords


I. Introduction

Exports are one of the most vital parts of every country’s economy. Exports of goods and services are the most important resource of our country’s foreign exchange income. It has the economy’s pulse of the world. If it has been accepted that export’s of non-oil commodity is the most important way to improve the country’s economic situation we have to imitate countries which has succeeded in this way with a systematic planning. Since the oil resources are limited and According to oil’s ministry acclaims, since 1474 the oil resources will reach to zero, therefore we have no option but to develop and improve exports of non-oil commodities in cooperation with world’s markets. The politicians have to recognize factors which are effective in this case and use them in order to improve the situation.

The perspective of increment of non-oil commodity export has been represented by government in years but according to the statistics we had no success and more planning is needed. Therefore the managers haven’t recognized effective factors in order to improve export operations. Iran is one of the few countries which naturally has valuable mineral resources. One of these resources is stone. Iran has a lot of mineral capabilities in facade and decorative stones. Iran is the first about certain reserves and second about stone’s diversity in the world’s ranking. Also non-metal mineral’s industry due to the huge mineral reserves has significant advantages in production and exporting. According to the high amount of value added in this industry it’s development should be considered seriously in planning and diplomacies. During recent years the industry’s producing advantages such as raw materials, fuel, energy and manpower results in high growth in mineral product group. Therefore the production of most of the subgroups of the industry (ceramic and tile products, stone and cutting and completion, Chinese porcelain and sanitary, crystallization and vitrification, beam blocks, types of brick, cement, lime, grill, writing and producing of different types of writing chalk and pieces of gypsum plaster, concrete and ready Components of Concrete, Stone and stone artefacts, grain size, and micronized powder sand and stone powder) is economically justified. The primary problem in the industry is a lack of exporting and consuming program [2]. On the other hand, according to official statistics published by the Islamic Republic of Iran Customs, the export industry also shows a downward trend. This particular trend is more significant in comparison with 70 decades that the industry had high growth, like other industries [10]. Also, according to the government’s policy of readiness to join the World Trade Organization, the industry’s import tariff rate has also declined. This has caused companies and foreign competitors in the domestic markets become stronger than before [7]. Consequently, due to the circumstances, there’s competition in this industry is very intense and brutal than before. Inabusinessenvironment, someorganizati ons with higherbusinessprofits are better than other competitors in performance. The subject that how in a same environment can be more successful than others, has been studied by Connoisseurs. Some experts in strategistic management consider the effect of the external environment on organizational strategies more important than the internal factors. The difference is in how they adapt to the circumstances and requirements of environment. Thus the environment determines the factors which managers should invest on and be successful in a competitive environment. Thus, according to this view, identifying the environment and its requirements derived from successful companies is essential. On the other hand, given limited resources, identify areas where the organization can make a good investment in the sector, will earn a higher return on capital, is important [3]. As results, the identification of these areas is important for managers because their knowledge in addition to allocating resources, will ensure success in the competitive environment. Thus variants of researches have been done in order to identify the effective factors in exporting of different.
industries. Most of the early researches in the field of exports for exporters were to identify exporters, which means that process of internationalisation of the company were taken into account the most. After that, the researchers examined the external factors influencing export behaviour, such as encouraging programs. In the third step, the researchers studied the behaviour of firms consistent with export issues. Four effective factors on export’s performance or achievements of the companies were studied. For example, Kasykyd and colleagues (2002) provide a model to study the effect of three features, concrete firm understanding of export-related variables (size and export experience, export incentives, export problems, comparative advantage) and commitment to exports (separate part of exports to enter foreign markets and customer selection criteria, steady visiting of the export market, planning and controlling of the export) on the export performance of European countries.

White, Griffith and Ryan (2000) also analyse a number of methods for measuring export performance in the service sector. Wallace and Baker (1998) also gave Australia a model for effective factors on export performance. The study divided variables into two categories, intangible variables (orientation, skill, knowledge) and intangible (distribution, product, customer communication, management, suppliers). Tyrl and Ramezani (2000) investigated the effects of competence (technology, market knowledge and export quality), Marketing major, firm characteristics, strategy and environment on firms’ export performance. In their model, due to company characteristics influence the strategy will affect the export performance. Shuham and Krupp (1998) examined the effects of marketing mix variables on export performance. Zhou and Stan in the same year with a review of previous studies introduced, 2 × 2 framework for classifying different factors affecting export performance. In this context, the factors affecting export performance can be classified in two dimensions, Ability to control versus uncontrollable, internal versus external organization. The combination of this dimension creates four parts to classify the factors affecting export performance. In 2000, Dale, and Paul Myers Tamngvch studied the effect of firm characteristics (size, barriers to entry and business’s employment years), firms’ qualification, (Export’s experience) and export marketing strategies (focus on the market versus diversification, activeness versus passive action) on firm’s export performance. In the same year, Baldayf, Kravns and Wagner (2000) provide a model to study the relationship between environmental characteristics (social, cultural and political) firm’s features (demography, management’s incentives) business strategies (differentiation or minimal cost) and export performance.

In 2002, Kasykyd& Associates proposed a model and introduced three variables export’s attitudes, export barriers, and management support as effective variables on export performance. The first two variables in addition to their direct influence on variable management support, effect export performance indirectly. The same year, Leonydo, Samiiald Katskytz with additional analysis of previous research, presented a model in which effective factors divided into five categories of variables (management characteristics, organizational factors, environmental pressures, targeting exports and export marketing strategy elements). The first three variables effect on export performance directly by influencing the next two variables. But so far the research has been done in businesses environments of Iran companies. Thus this research in Iran and in such an industry with Macroeconomic indicators is essential. The aim of this study was to design and represent a model to evaluate the impact of the components of resource-based approach on export performance in non-metallic minerals industry based on cost leadership strategy.

This model is examined based on ideas of high-level managers and senior managers participated in the study. Introducing these factors and which approach should be looked by in export markets, will help industry’s managers in industry executives in competitive strategy, resource allocation and success in the competitive environment of the target market [7]. Thus the main question of this research is “what are the effective factors on exporting performance?”. Considered the main question of this research to determine dimensions and export performance model parameters with emphasis on competitive strategy, the relation between the components of the research model and the possibility to extend the model to the industry. The research hypotheses are defined as follows:

- There is a significant relationship between organizational resources and capabilities.
- There is a significant relationship between organizational resources and systems.
- There is a significant relationship between organizational capabilities and systems.
- Organizational resources have a significant impact on competitive strategy.
- Organizational capabilities have a significant impact on competitive strategy.
- Organizational systems have a significant impact on the competitive strategy.
- Competitive strategy has significant impact on export performance.
- Organizational resources and significant impact on export performance.
- Organizational capabilities have a significant impact on export performance.
- Organizational systems have a significant impact on export performance.

II. Theoretical Research

Among different studies researchers concluded that three different progresses are effective in determining the effective factors in export performance which performed on different analyse unit. First of all, the Contingency approach which impress that a firm’s good performance isthe result of a good strategic choice that lead to a better firms’ position in the industry. Porter (1980) asserts that the strategic choice will be determined by five competitive forces: (a) the bargaining power of customers, (b) bargaining power of suppliers, (c) the intensity of competition between existing firms in the industry, (d) the threat of substitute products; and (e) the threat of new entrants to the industry. In this approach, Porter explained that the competitive strategy is due to the systems business activity rather than the company’s resources. The second approach, resource approach emphasizes that these heterogeneous resources are a source of competitive advantage and differentiate between the different functional areas of the company. This factor has not been considered in other approaches.
According to this view, resources of a company such as company’s physical assets, financial capital, human resources, organizational systems, technology and know-how, and intangible assets (such as trademarks, patents, copyrights and goodwill) creates competitive advantage. In this regard, Barney (1991) suggests that the sources with the ability of creating competitive advantage that have four characteristics such as: valueability, rarity, non imitation and non replacement. This view focuses on the internal characteristics of the company (organization) specialits strategic resources. Third progress is a relational view (interaction network) which is considereda competitive advantage as a result of the collaboration or social relationships of companies rather than a distinct resource or individual activity of a company. Sooner or Synq (1998) identified four potential sources of competitive advantage of an organization: (a) relationship based asset (b) knowledge sharing strategies, (c) the complementary capabilities and resources, and (d) effective monitoring. In this view, for example, the key features of a company, a firm’s tacit knowledge or specific resources within the company are not included, but the ability and relational resources will be created through social relationships between organizations.

According to this view, a company is not able to create competitive advantage merely and the advantage is formed by dynamic organizanional interactions. In this study, researchers using the resource-based approach, the relationships between the components of the resource-based approach, competitive strategies (differentiation) and the export performance will be investigated. Based on the analysis of competitive resources and the environment, related strategies should be developed in order to perform activities as the matter of fact Competitive Strategies are adaptable with the complex competitive environment. Firms have to achieve excellent performance such as maximum profit to improve shareholder value in a competitive environment. So it can be concluded that the operation is an important index to evaluate the effectiveness of an appropriate competitive strategy. A good competitive strategy in an optimal environment usually leads to satisfactory performance. Otherwise, companies should review their strategic management process and reform issues related to the formulation, implementation and monitoring of strategies. Companies should be aware that the strategy does not always lead to success and the companies should evaluate their strategy and strategic management process to ensure achievement of goals, particularly in dynamic environments. Considering the results of comparing these approaches researcher tests the model base on resource based approach. This model is depicted in fig. 1.

![Fig. 1: Research Conceptual Model](image)

In the conceptual model is defined by the relationships between concepts, dimensions, components and indicators [1] as measuring relationships in forms of simple regression and multiple regression model. In this conceptual model all assumptions due to being measurable have been defined in the form of correlation based on different existing measuring models in structural equations model. In this model competitive resources' measuring structures include physical resources, human resources, relational resources and technological resources. Measuring Structures of organizational systems include organizational knowledge and business processes. Cost strategy measuring structures includes emphasizing of amount on reducing costs in all activities. Continuous change in production processes with the aim of minimizing production costs, investing in major markets to reach economies of scale, emphasizing on prices lesser than competitors and export operation measuring structures include strategic exporting goals, sale exporting ratio, sale exporting growth.

### III. Methodology

The present study is a descriptive - applied survey which has been done based on scale method. The study’s statistical population includes all exporting non-metallic mineral industry companies in Tehran limits, which the company’s headquarters has been visited in the research’s period. After providing the primary design of the questionnaire the validity and reliability of the questionnaire have been determined. Gathering data of the questionnaire included 58 questions related to the main variables of the study and 9 demographic variables which its reliability and validity were tested after distribution of preliminary samples. To determine the reliability of the questionnaire, the Cronbach’s alpha coefficient was used. The calculated coefficient of the questionnaire was 0.87 which is satisfactory in the study of human scientific studies. After removal of the questions unrelated to competitive resources and competitive capabilities variables, organizational systems, competitive strategies of cost leadership, differentiation competitive strategy and export performance, the coefficients were 0.755, 0.832, 0.912, 0.965, 0.913, 0.926 and 0.964 by order. For evaluating the validity of the questionnaire, formal validity and factor authentication validity (via the first and second order confirmatory factor analysis) were used. For estimating sample size, preliminary study on a small part of the population which includes 30 companies were performed. Number of exporting companies in this industry significantly involved in export activities was 1142 (Ministry of Industries and Mines) and on the basis sample size based on Morgan and error level of 5% and precision of 0.1, 300 companies was estimated. In this study, a two-stage stratified random sampling quota is used. In the first stage exporting companies listed in eleventh groups of the related industry has been provided. Second, after determining the contribution of each group, the random number of them is chosen and questionnaires were completed by them. In the end, 285 questionnaires were returned and their data base were analyzed. For testing the hypothesis, confirmatory factor analysis one and two degrees was used. Data analysing has been done by LISREL 8.54 and SPSS 17 software.

### IV. Research’s Findings

Demographic description of the sample

Demographic variables of the research were analysed in two parts - individual (5 questions) and corporative (4 questions). In this study 81.8% of the respondents were male and 18.2% female. The majority of Respondents (84.6%) has bachelor degree or higher. Respondents with bachelor degree has the most abundance (52.3%) among respondents.

The results also show that 16.8% of respondents have under five years of work experience, 18.6% have work experience...
between 5 to 10 years, 35.8% have 10 to 15 years and 28.8% have 15 or more of work experience. Organizational’s authority of themajority of respondents in the research was exporting manager (37.9%). Most of the companies participating in the research have more than 15 years of work experience in the field of international marketing and exporting and this indicates that themajority of companies surveyed has appropriate experience in exporting. 33.7% of surveyed companies have considered 10 to 15 target markets. 31.9% of companies have considered 1 to 5 countries for exporting, finally in this research having representative or distributor in abroad has the most applications (26.7%) and exporting management has had the last application (1.4%).

V. The Results of the Analysis of Research
Relationship test between latent variables and observed has been done using software LISREL8.53 taken. The coefficients of the indicators reflective (ratio between variable and factor, such as variability of resources and physical resources), and load factor the coefficients of the formative indicators (variables such as resources and cost’s strategy) is considered a weight. First and second order factor analysis results show that the competitive resources, related resources (90%), physical resources (77%), technological resources (55%) and human resources (33%) accounted for the highest percentage in the resource’s dimension. First and second order factor analysis results show that the competitive capabilities, relational capabilities (75%), strategic capabilities (74%) and marketing research capabilities (73%) accounted for the highest percentage in the capability ‘s dimension. In organizational system’s dimension, organizational knowledge also have the highest representation with 81% of the resources. Research model in fig. 2 is presented in two standard estimates.

Fig 2: Structural Model (Path Analysis), Research in Standard’s Estimate state

Result of path Analysis in fig. 2 shows that by using minimum cost strategy, competitive capability dimension has more weight in comparison with competitive resources and organizational systems dimension. Thus the impact amount of competitive capabilities on minimum cost strategy is 50%, this impact on competitive resources 39% and of organizational systems is 1%. In terms of effect of resource based approach components on exporting operation and based on minimum cost strategy, impact’s amount of competitive capability of exporting operation is 34% this impact on competitive resources and organizational systems are respectively 25% and 24%. Managerial result from the discussion shows that by using minimum cost strategy, competitive capabilities have the most effect on formation of company strategy and exporting operation.

VI. Conclusion’s Recommendations
The aim of this study was to evaluate the impact of model components based approach to resource-based on export performance of non-metallic mineral industry based on cost leadership strategy. The results indicate the importance of competitive ability in comparison with other parts of the resource-based approach (resource competition and enterprise systems), in the export performance of the selected companies. Furthermore, the potential relationship is weightier than the other dimensions (strategic capabilities and organizational capabilities, marketing research) in shaping the competitive capabilities. The results indicate the importance of competitive ability in comparison with other parts of the resource-based approach (resource competition and enterprise systems) in the least-cost competitive strategy and export performance of the selected companies. The results are consistent with the results of other studies. Studies have shown that a significant positive relationship exists between organizational resources and capabilities [5]. The other findings concluded that significant resources and competitive capabilities are related to each other. Parahald and Hml (1990), Grant (1996) and Hangr and violin (2009) also found a significant positive relationship between resources and organizational capabilities have been modelled. Studies have shown that there is a significant relationship between organizational resources and systems. Experimental results of another study stated that organizational resources are significantly different and could explain variance in organizational systems. Other researchers have also proposed the concept of systems theory and organizational resources, especially in order to improve performance, there is a significant relationship. This research strategy is not mentioned in the application form. The studies concluded that there is a significant relationship between an organization’s systems and capabilities. Other studies also confirm a significant relationship between systems and organizational capabilities. Organizational capability using organizational systems for optimal efficiency will improve. Taking the ten studies (1383), Bani Hani and Allhavy (2009) and Kadyvan (2003) found a significant relationship between minimum cost strategy and performance [6]. On the other hand, researches of Kim MAN, AzizivaFasa, Kalka et al (2002), Kim I (2010), Danaraj and Bymysh (2003) and Bani Hani and Allhavy (2009) also found a positive relationship between the components of the resource-based approach (resources and competitive capabilities) and the minimum cost strategy that is consistent with the present results. Kavsgyl and Zhu (1994), and coronary Baldayf (2000), and chat and Hamilton (1993) also found the resource-based approach’s components (strategic resources and capabilities) have a significant effect on the performance of companies in a particular industry. By comparing these results with previous research’s result, we can conclude that these results are consistent with most previous studies. Finally, according to the study results, the following practical recommendations are necessary for policy makers and practitioners in the industry:

1. Using technology and appropriate technical knowledge to increase productivity and prioritization of high value-added products (such as floor and wall tiles, porcelain and granite with large size).
2. Selecting the type of product and production technologies with a focus on export markets, particularly European markets.
3. Modify rules and regulations to encourage and support the export of products, including:
   • Appropriate Increase of export encourages fees and facilitate timely payment
• Providing subsidy for transportation of raw materials and export of finished goods.
• Providing duty exemptions for raw materials, spare parts and machinery required for export production.
4. Close collaboration with renowned European producers and distributors in order to increase the quality and quantity of products and ensure export markets;
5. Non-issuance of new licenses and the removal of government-sponsored exchange facilities and card account and ban the use of foreign exchange reserves. Revocation of licenses allocated to foreign opening which have not and don’t have appropriate physical progress.
6. Put the products of the industry in the export product portfolio and give proper credit for the purchase by the government of the country.
7. Benefit from the tax exemption of domestic sales by the amount of exports were done.
8. Maintain domestic prices.
9. Management of production and review of crises points and production problems in terms of reform production’s barriers.
10. Create cooperative marketing in order to introduce brand issuance of work permission base on priority and needs of region and country.

References