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Analysis Of Structural Model Results Barriers To Development In The Stone Trade And Industry

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Abstract: Lorestan province with 21.5% of the country's decorative stones endowments has abundant capacities and abilities in the stone industry, but has poor performance in the field of mining, processing and sale, which has led to a decent position in global and even domestic markets. Not have therefore, the present study aimed to investigate the barriers to success in the Lorestan stone industry. The statistical population of the study was the owners and owners of active units of Lorestan rostrum. 160 people were selected using census method to respond. The data gathering tool was a closed-answer questionnaire, which was used to measure the reliability of its variables using Cronbach's alpha. Using a structural equation modeling technique, through investigating the barriers to the success of the stone industry, a reliable model for predicting the barriers to the success of the stone industry was presented. The findings showed that the weakness in packaging ($r = 0.11$), lack of government support ($r = 0.11$), lack of expertise and technical knowledge ($r = 0.07$), along with crude ($r = 0.04$), the direct and significant effects, and the weaknesses in planning ($r = 0.001$) and the traditional management ($r = 0.008$), the indirect effect (through crude) on the obstacles to the success of the stone industry. Therefore, the final model resulting from the above variables has explained 39% of the variance of the barriers to the success of this industry.

Keywords: Stone Industry, Structural Equation Modeling, Lorestan.

INTRODUCTION

Lorestan province, despite the availability of extraction of stone, the rich resources of decorative stones and facades, is considered as a pristine market with potential for private investment in the processing of various stone types. With about 21 percent of the country's decorative stones (3 percent of the world's reserves) and 22 percent of the country's production, the province has high capabilities and capabilities in the stone industry, but unfortunately it has poor performance in the field of stone processing and diversification into its applications. Due to the quality and quantity of reserves, the presence in the foreign market, the

possibility of export, the creation of jobs in deprived areas has a lot of potential and economic advantages. Despite this, there are obstacles to the prosperity of the provincial industry. Therefore, in order to economize as much as possible the stone industry, special attention to mines and mining, and their restructuring, along with the eradication of barriers to their development, is necessary and inevitable. Development and investment in removing barriers to development of mineral activities can be a major factor in increasing productivity and improving the economic situation in mines [1], which unfortunately has so far been limited studies in the mining field, especially in Lorestan province. Therefore, the present study seeks to study the impact of barriers on the development of industrial enterprises and provide a reliable model by using structural equation modelling techniques, an effective step to improve their growth process. Several studies have been carried out to examine the barriers to develop in various businesses and industries, with some of the most important results summarized in Table 1. The approach presented in this study, has not been carried out in the field of stone industry, and from this perspective, present research has Notable Innovation and is very important to use its results in order to improve and boost the stone industry.

Table 1. Summary of the effective factors presented in the studies

The authors	Year	Objectives and findings
Minetti	2011	Credit quotas are an obstacle to exports, especially for companies active in advanced technology industries [2].
Vikinass et al., 2011	2011	Lack of management in business, inconsistency, deviation from the goal, waste of time and energy will cause the organization to fail [3].
Kess et al	2008	Foreign knowledge management is one of the factors affecting business development [4].
Combel et al	2007	Business development factors include: the existence of successful suppliers, loyal customers and partnerships with entrepreneurs [5].
Esmith et al	2005	The geographic location of a business is one of the factors of survival or business orientation [6].
Chen & Behin, 2004	2004	Supportive policies are one of the most important government economic policies [7].

METHODS

The theoretical framework is the basis on which all the pillars of a research are based on and a well-developed and complete logical network between research variables [8]. Therefore, in this research, while reviewing the literature on barriers to the development of industrial enterprises, researchers combine different approaches and identify the appropriate dimensions, a conceptual model as the theoretical framework of research (industry and stone trade) is presented. The model presented in this study includes independent variables:

(1) Weaknesses in packaging (four sub-sets include: the production of appropriate pallets, access to knowledge and packaging information, access to the transportation of stone packets, the ability and the possibility of production Packaging pallets),

(2) lack of government support (includes five sub-categories: supporting domestic production in the mineral sector, providing services and facilities with low interest rates and government subsidies, lack of foreign investors due to instability in Long-term goals of the country, lack of sponsors and sponsors, insignificant reduction of customs duties on imports of machinery),

(3) lack of expertise Technical knowledge (has three sub-categories: scientific consultant, lack of familiarity with various stone applications, use of new production methods),

(4) weakness in planning (has three sub-sets including: lack of planning advice, lack of schedules and long service Duration, weakness in the planning system (rules, goals, wages),

(5) traditional management (with four sub-categories: traditional recurrence methods, lack of familiarity with management day knowledge, reliance on old-time experiences, non-diversification In the management of extractives); and

(6) the crude intermediary variable (with four sub-categories: export and unprocessed raw materials, lack

of access to manufacturing technology Export data, low quality of extraction products, lack of knowledge of the appropriate target market) that was refined and modified by the coefficient of change.

The statistical population of the survey is the owners and experts of small and medium businesses (based on the global standard, including manufacturing jobs with the number of employees ranging from 1 to 49 people) active in the field of stones industry in Lorestan province, a sample of 160 of them Selected by census method. First, businesses were identified in each city, and then the owners and experts were interviewed.

The main instrument for collecting data was a structured questionnaire, which was designed according to the objectives of the study and the variables of the study by reversing the similar questionnaires. In order to determine the validity of the questionnaire, first, based on a review of the records, studies, previous texts as well as the points of view and suggestions of the researchers, also to help assess the variables of the study, the questions and questions of Latin articles were also used to obtain narrative content Questions have been adapted to the conditions of the statistical community. Since the construct validity of this questionnaire has been repeatedly confirmed by various researchers, the committee of researchers and experts in mining and engineering has been asked to comment on the validity of the questionnaire, so after summarizing their point of view, the final questionnaire was modified and finalized and the final format of the questionnaire was distributed. Also, for measuring the diagnostic validity, the mean value of variance (AVE) was used in AMOS22 software. This indicator shows how much of the variance of the structure studied was affected by its markers. Different researchers have identified a value of 0.5 for the suitability of this indicator. Also, for determining the reliability, 30 questionnaires were filled out by the researchers outside the sample, and the Cronbach's alpha coefficient for the aforementioned sections was calculated. The obtained results indicate that the research tool has an acceptable and reliable capability for data collection. Also, the Cronbach's alpha coefficient was 0.85.

FINDINGS AND ARGUMENT

Considering that one of the main goals in using structural equation modeling is recognition of the degree of consistency between experimental data and the conceptual and theoretical models, indicators and goodness of fit criteria are used. Therefore, according to the reported values of fitness indicators, it can be seen that the Xi-two squares are based on the degree of freedom for the tested model of 1.37, which is less than 3, and also the CFI index stands for the Comparative Fit Index index. The fittivity is comparative and indicates the accuracy of the model in the repetition of the covariance matrix observed, the GFI index stands for the Goodness of Fit Index, which is also called the Bentler Comparison Matching Index, and is one of the most useful and suitable interpretive indices for confirming fit fitness Or weak is the experimental model, the AGFI index stands for Adjusted Goodness of Fit Index, and the index is equivalent to the application of the mean squares instead of the sum GFI is as squares in the numerator and denominator of which is higher than 90/0. The RMR index stands for Root Mean Square Residual, meaning the root mean of the remaining squares, an indicator for the remaining variance in fitting each parameter to sample data, or to measure the average residues, and can only be modified in relation to variances and covariance. The closer this criterion to zero, the better the fitness of the model is. In addition, the RMSEA index stands for Root Mean Square Error of Approximation in most of the validation factor analysis and structural equation models. If the value of this index is less than 0.08, the fitness of the model is good, therefore the obtained value is equal to 0.05 showing the fit and proper fit of the research.

In Table (2), the test for the main research hypotheses is included using these indicators. As can be seen, all research hypotheses were confirmed at a significant level of 0.05. The results indicate that the highest impact factor is due to the lack of government support and the weakness in packaging.

Table 2. Test main hypotheses using structural model

Hypothesis	Description of the hypothesis	Standard path coefficient	Sig	Result
1	The Effect of Traditional Management on Retail Sales	0.20	0.003	Confirmation
2	The effect of weakness in planning on selling raw materials	0.09	0.002	Confirmation
3	The effect of packaging weakness on the barriers to the development of industrial enterprises	0.11	0.000	Confirmation
4	The effect of the lack of state support on barriers to the development of industrial enterprises	0.11	0.003	Confirmation
5	The effect of lack of expertise on barriers to the development of industrial enterprises	0.07	0.006	Confirmation
6	The crude effect on barriers to the development of industrial enterprises	0.04	0.004	Confirmation

CONCLUSIONS

The present study aimed to investigate barriers to develop industrial enterprises in Lorestan, which resulted in the following achievements:

- there is a positive and significant relationship between traditional management variables, weakness in planning, weakness in packaging, lack of government support, lack of expertise and technical knowledge, raw materials and barriers to the development of mining business, so that the coefficient of explaining barriers to business development is equal to 39%, which is directly and indirectly affected by the mentioned variables.

- As in the first layer, the traditional management variables and the weakness in planning through the effect on the first dependent variable, the crude oil, have an indirect effect on the barriers to business development. It seems that by changing the management system of mines and equipping it with modern knowledge, in the short term, the economic situation of many mines can be corrected.

- In order to exploit the mines and thus achieve a favorable economic situation, the state's special attention to mining and mining and its restructuring is necessary.

- Because modern management and long-term planning in the pursuit of short and medium term goals can be a barrier to raw materials and ultimately to business development. These results are consistent with the previous studies [9], and also the crude variables are factors influencing the lack of business development, which is affected by traditional management and planning weaknesses.

- In the second layer, non-government variables and weakness in packaging were equal to the highest impact on the main dependent variable. It is likely that the weakness of the provincial industry producers and owners in accessing the appropriate packaging and routing equipment along with the lack of government support in providing government facilities and subsidies to producers and investors is another obstacle to the development of owners Capital in this field. Therefore, it is expected from government officials and practitioners to reduce the barriers in this area by providing appropriate facilities to increase the rate and rate of investment.

- The lack of expertise and expertise of mining staff leads to increased work hardening, reduced productivity and development, as noted earlier, with the complexity of businesses and the advancement of technology, the importance of employee expertise and expertise has been added. The donor is an important skill, expertise and technical knowledge. Therefore, it can be said that the lack of use of knowledge of the day and the equipping of employees with skills such as job engineering are among the other factors affecting the non-development of mining business. The results of this study are also consistent with the study [10].

REFERENCES

- [1] Janshir Ghiw, M., and Ariafer, A. (2012). "Investigating the Role of Mines and Affiliated Industries in the Economy of the

- Countries and the Need for Increasing Productivity in Coal Mines*". Fourth Conference of the Iranian Geological Society, Birjand, Birjand University.
- [2] Minetti, R., and Chun Zhu, S. (2011). "Credit constraints and firm export: Microeconomic evidence from Italy". Journal of International Economics, 83: 109–125.
- [3] Christina, B., Neelufer, A., and AlAmri, S. (2014). "Challenges and barriers encountered by the SMEs owners in Muscat". Journal of Small Business and Entrepreneurship Research, 12(3): 1-13.
- [4] Kess, P., Phusavat, K., and Takala, J. (2008). "Managing external knowledge: Framework for organisational life cycles". International Journal of Innovation and Learning, 5: 255–265.
- [5] Hair, J. F., Anderson, R. E., Tatham, R. L., and Black, W. C. (2010). "Multivariate Data Analysis". 7th ed. New Jersey: Prentice Hall International, Inc.
- [6] Smith, M., and Shafer, S. (2005). "The power of business models". Horizons Business Journal, 48(3): 199–207.
- [7] Cheng, F., and Behin, J. C. (2004). "Food Self-Sufficiency, Comparative Advantage, and Agricultural Trade: A Policy Analysis Matrix for Chinese Agriculture". Working Paper, 99-WP 223.
- [8] Khaki, Gh. (1999). "Research method with a dissertation approach". Tehran: Ministry of Culture and Higher Education, Research Center of Iran, Cultural Center Publishing House, First Edition.
- [9] Akhlagi, C. (2016). "Strategic Management and Planning, Analysis of Weaknesses, Strengths, Opportunities and Threats (SWOT)". International Conference on New Management at 1404 horizons.
- [10] Kian Pour, Gh. (2010). "Human Resource Training for Industry". Compilation by Willia Mayhem, Tehran, Second Edition, Banking Publications.