

Factors Affecting Growth and Development of SMEs (Case Study: Ardebil City)

Nahid Lotfi¹, Shahnaz Nayebyzadeh², Hasan Dehgan Dehnavi³

¹Department of Industrial Management, Bafg Branch, Islamic Azad University, Bafg, Iran

^{2,3}Department of Management, Yazd Branch, Islamic Azad University, Yazd, Iran

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ABSTRACT

The aim of the present study is the evaluating of the effective factors on the growth and development of small and medium enterprises. The research model has been formed using the variables of organization structure, business strategy, competitive structure, supply structure, demand structure, and governmental policies as the independent variables, and the growth and development of small and medium industries as the dependent variables. The current research method has been based on practical purpose and descriptive – survey research method and required data have been collected using questionnaires and survey method. Statistical population of this research has been areas 1 and 2 in the industrial city of Ardabil and has been selected through sampling of stratified random method and 200 acceptable samples have been collected. Data analysis has been performed by mean of explanation of structural equation modeling in Lizerl software and research results show that organization structure, business strategy, supply structure, governmental policies have significant relationship on the growth and development of small and medium enterprises and demand structure and competitive structure don't have meaningful relationship on the growth and development of small and medium –sized industries.

KEY WORDS: growth and development of small and medium enterprises, organization structure, business strategy, competitive structure, supply structure, demand structure, and governmental policies

INTRODUCTION

Today, SMEs play important roles in many countries in social, economic, industrial and service-providing aspects. In many countries, SMEs provide new employment and are sources for innovation and transformation. SMEs play important role in economic development of countries with considerable export. It is necessary to study factors which affect SMEs development and growth because SMEs provide people needs, provide new employment and are placed in production transfer stage and help spread economic justice. In the present research, we try to investigate intra-organizational and extra-organizational factors and the main question of the research is “whether growth factors of industry influence on development and growth of SMEs?”.

In general, 93% of companies and institutes in Iranian industry are SMEs which are mainly active separately and are confronted with many problems. Although SMEs produce 30% of industrial products, they own about 56% of employment share (Maroufi, 2005). Since supporting sporadic and small business units is very costly for government, encouragement of them to form industrial clusters and networks can be considered as a successful solution to their problems and many politicians and statesmen have paid attention to this solution (ibid).

Research theoretical background Growth and development of SMEs

A simple concept of growth and development of SMEs can be their ability to provide employment and entrepreneurship. In other words, creation of a considerable amount of occupation and employment in a particular period of time is measured by rapid growth criterion. Such businesses are defined as companies which have at most 50 employees. Their rapid growth is calculated by 3 criteria: absolute growth, relative growth and Birch index. Intensification of global competition, development of transport, transformations in ITC, instability in interest rate, inflation and unemployment and division of markets due to consumers' demand growth are factors which have caused rapid development of firms (Carlson, 2004). Such firms usually have workshop style and need less equipment and human force and instruments in comparison with large industries and they do not need huge investments. In SMEs, some part of works is done with machinery and some of works are done by human resource.

* **Corresponding Author:** Nahid Lotfi, Department of Industrial Management, Bafg Branch, Islamic Azad University, Bafg, Iran. E-mail: N_lotfi2005@yahoo.com Tel: (+98) 351-8211391

Production performance growth

This indicator is resulted from measuring productivity of an individual, machinery, factory, system and ..., and ratio of conversion of input to helpful outputs. Increase in this index is obtained from performance management which is based upon competency and exact work. This indicator investigates and measures employees working performance in specified time intervals and in formal manner.

Market performance growth

Market growth and performance refers to speed with which market value is decreased or increased. Companies, financial institutes and government use this index in order to measure and determine success of failure or internal gross performance. An increase in this rate is a positive transformation and its reduction is followed by negative growth. Market performance can be measured on monthly or annual basis. Financial institutes use this concept to determine future prospect of a business model or specific industry. Market performance growth rate is a greater concept in relation to global economy. Measurement criteria for determination of these factors include: DGP, currency rate and purchasing power parity. These indices are international criteria and their figure is indicators of economic welfare in a country or region.

Financial performance growth

This criterion is used to ensure company success in achieving its final goal i.e. maximization of shareholders' wealth, increase in added value and This helps exploit the most important strategies for company's financial performance evaluation and proper economic decisions. Financial performance evaluation criterion is in the form of balance sheet.

Formality

Formality refers to degree to which works are standard within a particular organization. If formality is high, employees will have little authority in doing his/her tasks. Formality may be declared clearly or it may be implicit. In other words, it can be both written or it can be in the form of employees' perception of regulations. However, written form of formality is intended by an organization. Routine and simple jobs have a high level of formality. In contrast, jobs which need multiple skills have less formality (Robbins, 1987).

Concentration:

Concentration refers to degree of strictness in decision-making and concentrated evaluation of activities (Fredrickson, 1986) and also refers to degree to which decisions are concentrated at a point (Robbins, 1987). Concentration refers to distribution of authority in organization and specifies who is responsible for decision-making (Fry and Slocum, 1984). Authority is a native right in managerial posts based on which managers are allowed to issue commands and expect the orders to be obeyed (Robbins, 1987).

Specialization

Specialization of an organization means to what level that organization is specified and divided. If works and activities are specialized in an organization to a high level, every worker or employee carries out only a limited collection of activities journal of Plan and Design Deputy, 2011).

Concentration strategy

Concentration strategy emphasizes on a special group of buyers, a special part of production line or geographical market. Concentration may also come in different forms like differentiation. Strategy of concentration states that a company can achieve its strategic and limited goals more effectively and efficiently than competitors. Consequently, the company achieves differentiation through appropriate responding to a particular goal requirements or it may reduce its costs or achieve both of them. In fact, concentration involves facilitation of a kind of balance between profitability and sales volume.

Cost leadership strategy

Cost leadership strategy aims to produce the cheapest product or service in market. Adoption of such a strategy is very fruitful when a firm has appropriate access to material or pioneer production technology or has increasing economy of scale. A firm which adopts this strategy in market can cover all market and even it can enter new and similar markets. Such a firm uses all capacities to produce cheaper products and continuously improves its performance and efficiency and uses new production methods for providing the cheapest product.

Intensity of Competition

The most well-known viewpoint on competition is Porter's five-force model (Grimm, Lee & Smith, 2006). This model has five elements:

1. Threat of new entrants, 2. Buyers' bargaining power, 3. Suppliers' bargaining power, 4. Substitutes threats, 5. Competition and its intensity. These five forces can be investigated in many organizational environments. Therefore, Porter suggests bulk production with low cost, which is called "economy of scale" (hajjariyan, 2008). In this strategy, a firm produces and supplies standard products and each product price is reduced for customers.

Entrance and exit are basic factors for selection of market which result in reconstruction and transformation in industry. Entrance and exit are two unavoidable aspects of market dynamic competitive process which result in development of efficient firms and failure of inefficient firms. Barriers ahead of entering an industry include need to investment, high change costs, access to distribution channels and costs that are independent of scale.

Supplier power

It means product or service supplier should be so reliable that it can provide service or product whenever a firm needs. Market is not always ruled by suppliers but demanders also find strength in markets. Relationship between supply and demand is mutual and producers produce any particular amount of product and there will be buyers for the products.

Technologic confusion

Technology refers to information, equipment, techniques and processes which are necessary for converting inputs into outputs. Studies show that technology influences on personnel, tasks, control systems design, costs and salaries, separation of management from ownership, managers' span of control and organizational structure (Robbins, 1987). Technologic confusion therefore refers to absence of coordination among equipment and processes.

Market growth rate

Growth rate refers to increase in size or sales of a consumer group in a particular period of time. When a manager tries to investigate its product in market, he/she should subtract market growth rate from product sale growth rate. In fact, ratio of subtraction of base month growth from current month to base month growth is considered as market growth rate when presented in percentage form.

Buyer power

Power of buyer is the amount of products or service which can be bought by a unit currency. Currency can be product money (gold or silver) or it can be in the form of floating currency in free market (like dollar). As Adam Smith states, when an individual has money, he/she can order other individuals' service (work). Therefore, a higher purchase power is an individual's advantage and ability over others and not their abilities to exchange (trade) currency or money with their services and products. If monetary income of an individual remains fixed and prices level rise, purchase power of the incomes will fall.

Market confusion

Absence of balance between supply and demand is called market confusion. Absence of balance- whether in supply or in demand- is resulted from many phenomena like government policy-making, changes, and transformations in political relations and other factors.

Financial incentives

They include money interest and investment which is given to consumers, employees, organizations and industrial institutes in order to encourage positive behavior and actions. These incentives can be in cash or in the form of advantages which indirectly result in wide financial supports.

Tax incentives

Tax discounts or exemption of tax debts in a period of time are tax incentives which are given to economic units. In another definition, tax incentives are articles of Direct Taxes Law which are aimed to motivate industrial investment development (in various areas and especially undeveloped areas), development and reconstruction of the present businesses, development of export, support for design, engineering and assembly firms and industrial de-concentration.

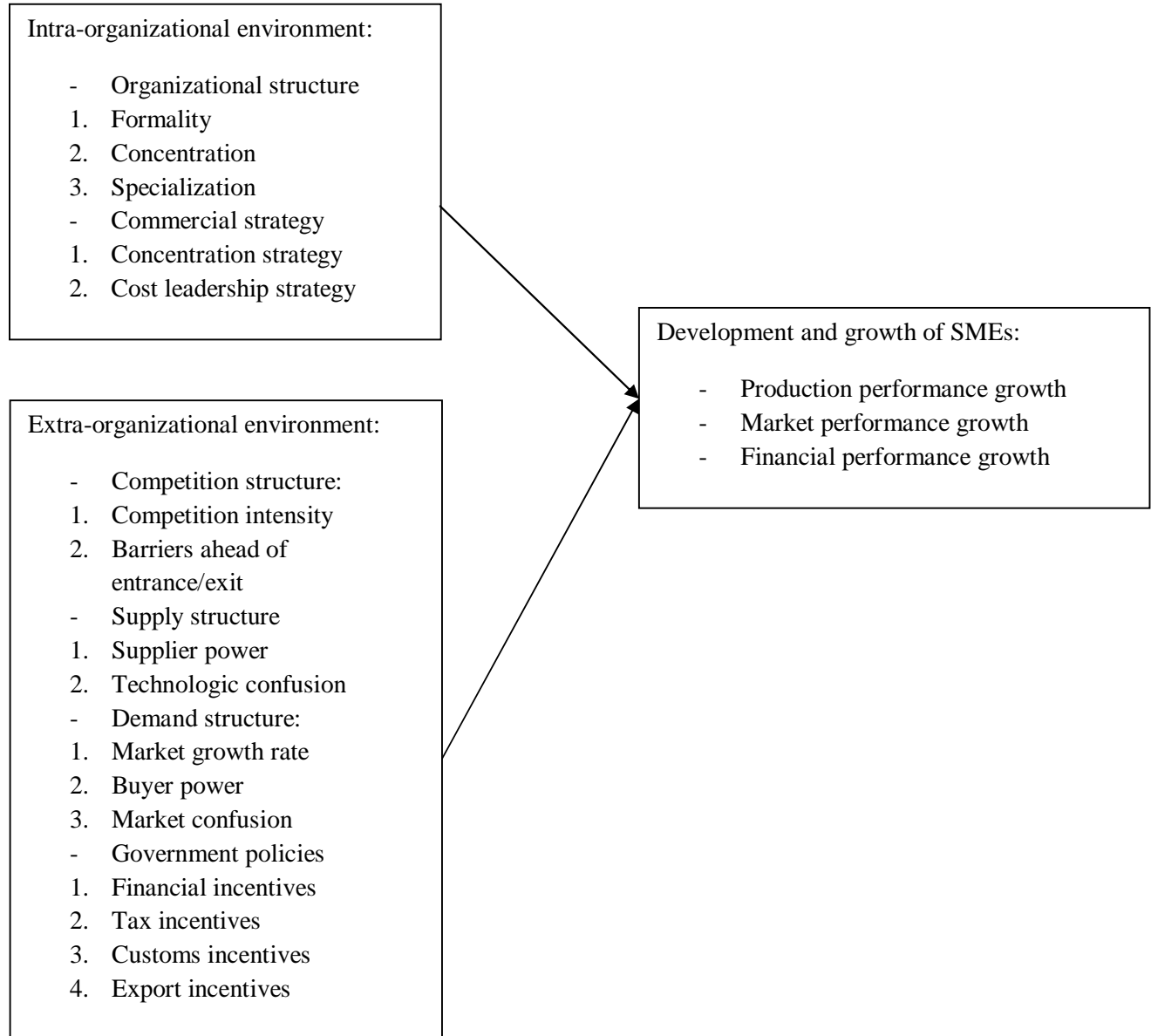
Customs incentives

Customs incentives include articles of Export and Import Regulations Law which are aimed to provide special customs facilities for exporters of industrial products and protect internal industries against import.

Such supports are mainly aimed to impose appropriate tolls or tolls forgiveness and make industrial products export justifiable.

Export incentives

Incentives which are provided by governments in order to help increase export are called export incentives. Many governments continue export incentives for a long time. These incentives can be in the form of direct payments or reduction in taxes (government reduces tax on export). Such incentives are intended to increase competitiveness and cost-effectiveness of internal products in international markets. In some cases, incentives depend on countries disagreements on products and domination of target country market.



Research hypotheses

- 1: intra-organizational environment impacts on development and growth of SMEs.
 - 1.1. Organizational structure impacts on development and growth of SMEs.
 - 1.2. Commercial strategy impacts on development and growth of SMEs.
2. Extra-organizational environment impacts on development and growth of SMEs.
 - 2.1. Structure of competition impacts on development and growth of SMEs.

- 2.2. Structure of supply impacts on development and growth of SMEs.
- 2.3. Structure of demand impacts on development and growth of SMEs.
- 2.4. Public policies impacts on development and growth of SMEs.

RESEARCH METHODOLOGY

The present research is an applied study in terms of its goal. Its methodology is descriptive-survey. Data were collected in spring 2013. Statistical population of the research included all active firms in Ardebil Province, Iran, which were 394 in number.

Morgan table was used to estimate sample size. Therefore, sample size was obtained 195. 250 questionnaires were distributed and 200 analyzable questionnaires were returned.

The questionnaire contains 76 questions. Questions of the questionnaire were based on Likert 3-point and 5-point scale. In 5-point scale, number 5 goes to “completely agree” and number 1 goes to “completely disagree” (other choices received values 2, 3 and 4).

Cronbach's alpha was used to investigate reliability of the questionnaire. Therefore, 30 questionnaires were distributed to conduct a pretest. Cronbach's alpha was above 0.7 for all of them and it can be said that the questionnaire has necessary reliability to be distributed among respondents. Demographic information of the respondents has been summarized in table 1.

Table 1: respondents' information

| variable | group | frequency | percentage |
|--------------------|-------------------------|-----------|------------|
| gender | male | 131 | 81.9 |
| | female | 29 | 18.1 |
| age | Below 30 | 33 | 20.6 |
| | 31-40 | 49 | 30.6 |
| | 41-50 | 49 | 30.6 |
| | Above 51 | 29 | 18.1 |
| education | High school and below | 26 | 16.2 |
| | Associate's degree | 39 | 24.4 |
| | Bachelor degree | 63 | 39.4 |
| | Master degree and above | 32 | 20 |
| Working experience | Below 5 years | 43 | 26.9 |
| | 5-10 years | 61 | 38.1 |
| | 10-15 years | 24 | 15 |
| | 15-20 years | 15 | 9.4 |
| | Above 20 years | 17 | 10.6 |

Data analysis and research hypotheses test

In the present research, structural equations modeling method was used to test the hypotheses which is statistical modeling technique. This method includes other statistical techniques like multi-variate regression, factor analysis and path analysis and its main concentration is on latent variables which are defined by measurable indices and tacit variables. In structural modeling, we try to specify whether the present relationships among latent variables which have been extracted based upon theory are verified or not? Lisrel software was used to conduct calculations of structural equations modeling.

It is necessary to investigate research model fitness when using structural equations modeling. This can be observed through final output of LISREL. Table to shows fit indices for research model.

Table 2: model fitness indices

| indices | Allowable value | calculated figures |
|----------------------------|-------------------|--------------------|
| Ratio of kai-squared to df | $\chi^2 / df < 3$ | 1.59 |
| P value | P value < 0.05 | 0.0000 |
| RMSEA | RMSEA < 0.08 | 0.061 |
| Fit index | Above 0.9 | 0.88 |
| Comparative fit index | Above 0.9 | 0.93 |
| Normalized fit index | Above 0.9 | 0.97 |

As it can be seen in table 2, except for fitness index which is equal to 0.88 and has a fairly appropriate status, other fitness indices like ratio of kai-squared to df (1.59), p value (0.00), root mean square error approximation (RMSEA=0.016) and comparative index (0.97) and normalized fitness index (0.97) are in allowable range and therefore, we can conclude that research model is appropriate and good. In order to investigate research hypotheses, LISREL calculations were used in two cases: research model in standard mode (fig. 2) and research model in significance mode (fig. 3).

Figure 2. research model in standard state

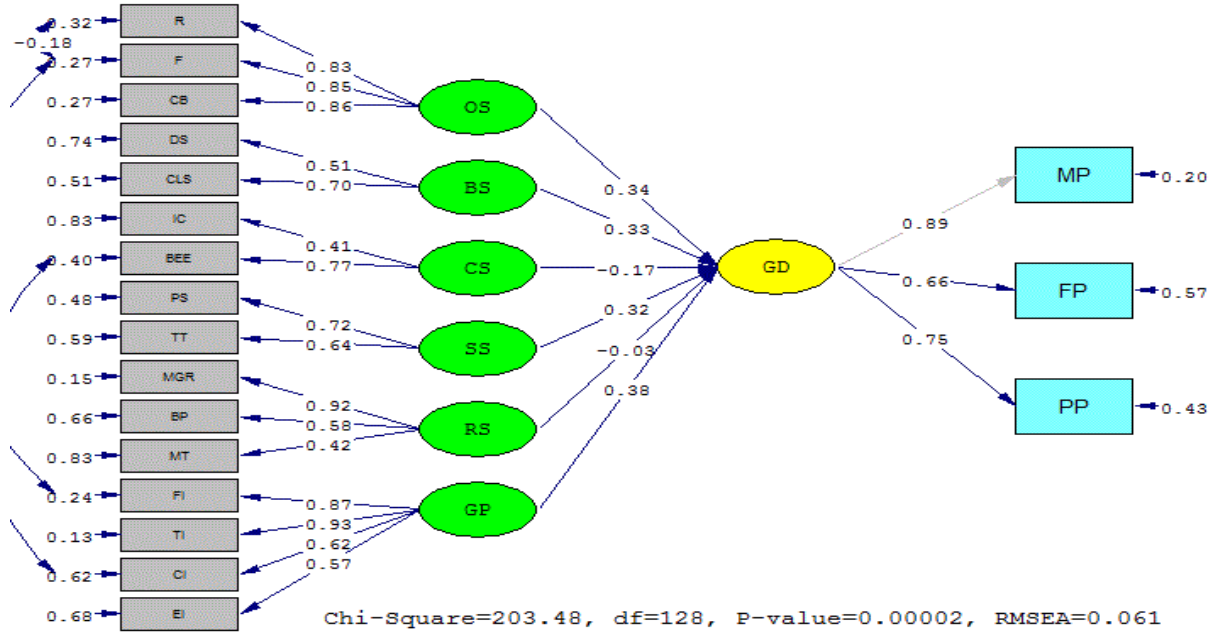
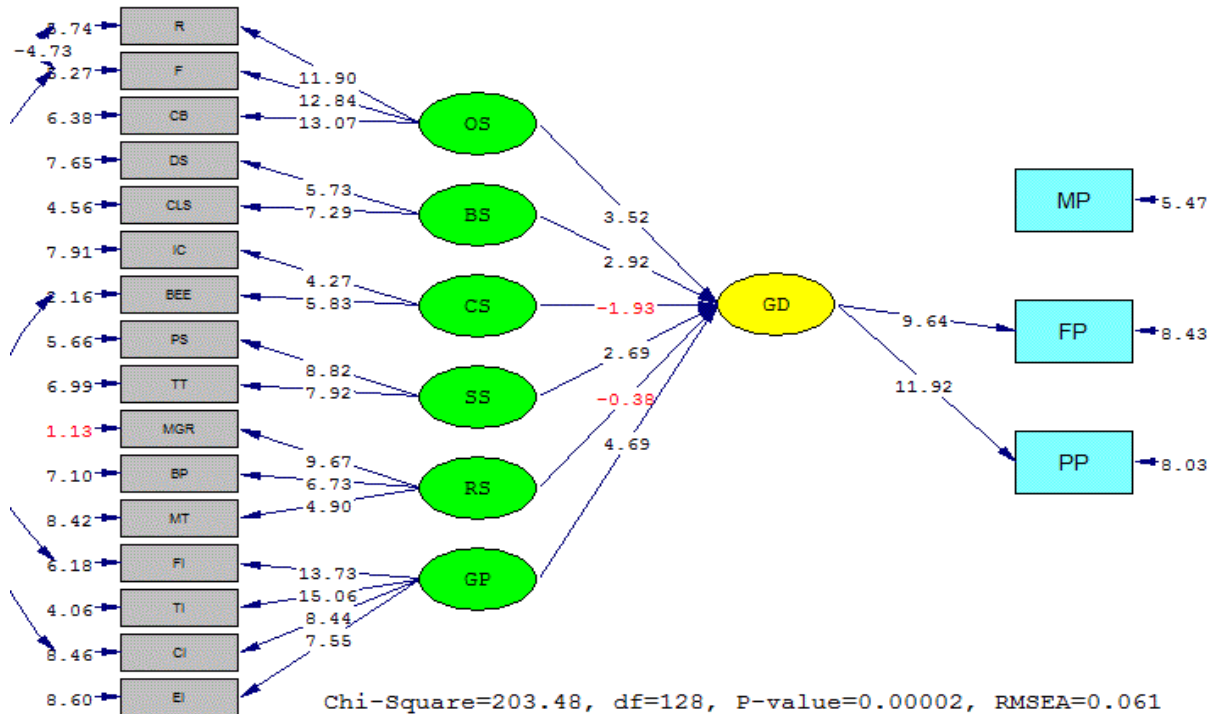


Figure 3. Research model in significance state



Considering the certainty level (0.95) which was considered for hypotheses test, all hypotheses which have significance numbers out of the range of (+1.96, -1.96) are verified. In the following sentences, we deal with investigation of the hypotheses based on research model in significance and standard states.

Hypothesis 1: organizational structure impacts on development and growth of SMEs.

Results of analysis showed that organizational structure (which has a factor loading equal to 0.34 and $t=3.52$) impacts on development and growth of SMEs. This shows that the first hypothesis is verified. In other words, an appropriate organizational structure has positive impact on development and growth of SMEs.

Hypothesis 2: effective commercial strategy has direct impact on development and growth of SMEs.

Results of analysis showed that commercial strategy (which has a factor loading equal to 0.33 and $t=2.92$) impacts on development and growth of SMEs. This shows that the second hypothesis is verified. In other words, an appropriate commercial strategy has positive impact on development and growth of SMEs.

Hypothesis 3: competition strategy has direct impact on development and growth of SMEs.

Results of analysis showed that relationship between competition structure and development of SMEs has a standard factor loading equal to -0.17 but this is not significant considering significance number ($t=-1.93$). In other words, the impact of competition structure on development and growth of SMEs is not significant.

Hypothesis 4: supply structure has direct impact on development and growth of SMEs.

Results of analysis showed that supply structure (which has a factor loading equal to 0.32 and $t=2.96$) impacts on development and growth of SMEs. This shows that the fourth hypothesis is verified. In other words, an appropriate supply structure has positive impact on development and growth of SMEs.

Hypothesis 5: demand structure has direct impact on development and growth of SMEs.

Results of analysis showed that relationship between demand structure and development of SMEs has a factor loading equal to -0.03 but this relationship is not significant ($t=-0.38$). In other words, the impact of demand structure on SMEs development and growth is not significant.

Hypothesis 6: government policies have direct impact on development and growth of SMEs.

Results of analysis showed that government policies (which have a factor loading equal to 0.38 and $t=4.69$) impacts on development and growth of SMEs. This shows that the sixth hypothesis is verified. In other words, appropriate government policies have positive impact on development and growth of SMEs.

CONCLUSION AND DISCUSSION

The main goal of the present research was to investigate factors which impact on development and growth of SMEs in Iran. In this research, intra-organizational factors (organizational structure and commercial strategy) were measured simultaneously with extra-organizational variables (competition strategy, demand structure, supply structure and government policies). Results of the hypotheses analyses showed that both internal factors have positive impacts on development and growth of SMEs (organizational structure with a standard coefficient equal to 0.34 and commercial strategy with a standard coefficient equal to 0.33). However, supply structure, as an external factor, had a standard coefficient equal to 0.32 and government policies had standard coefficient equal to 0.38 and have direct impact on development and growth of SMEs while two other dimensions of external factors i.e. competition structure and demand structure did not show any significant impact on development and growth of SMEs. Investigation of relationships among variables and standard coefficients values showed that the impacts of significant variables on development and growth of SMEs are close to each other. "Government policies" variable had the greatest impact on development and growth of SMEs with a standard coefficient equal to 0.38. Managers of SMEs are advised to adopt appropriate structures for their organizations mainly based on adhocracy and consider environmental conditions and industrial status and also their internal abilities. Further, they are advised to adopt the best strategy considering commercial and competitive conditions using strategic management instruments like SWOT analysis. Considering the impact of supply structure on development and growth of SMEs, SMEs are advised to optimize their performance through establishment of long-term contracts with suppliers, cooperation with reliable suppliers and making use of several suppliers and Government policies are very important in development and growth of SMEs. Government commercial incentives like customs incentives, tax incentives and export incentives are recommended. Managers of organizations also should identify opportunities and incentives which are offered by government in order to make much of these incentives and develop their business.

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