Do Government financial and tax policy affect SME's growth?

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Abstract: The paper is based on the findings of a research project which aimed to identify the effects of governmental tax and finance policy on small and medium enterprises growth in Iran. To determine the factors that explain SMEs growth in Iran (Case of Ardabil Province), we used factor analysis based on a list of 26 questions about tax, tariffs and governmental policy that asked from 64 SMEs managers. Four dimension identified by factor analysis. Finally, correlation between factors and growth indexes exemined. The findings of the study lend support to this claim that incentives and discounts' propriety with growth were the major determinants of the SMEs growth, and had significant relation with all the growth indexes. Differently, the effect of rates of credits on the number of staff revealed negative relationship.

1. Introduction

Small and medium sized enterprises (SME) have competitive privilege for a state or even a geographical area (Mertins, et al; 2006) and have gained considerable attention in today's world economy.

Their efficient allocation of resources work force, assets/ capital and technology in the form of synergy can perform a major role in economy development

It is generally a matter of debate that empirical surveys are not adequate in taking small and medium enterprises into account (Barnes, 2002; Metts, 2007), though SMEs are exteremely important for economics and its development (Ebrahim et al., 2009; Ghaderi, et al., 2010); Moreover, there are a small number of empirical research studies focused on understanding the impact of managerial background and perception of performance and the degree to which smaller firms are affected by the strategy awareness of entrepreneurs (Karami et al., 2006). Facing incremental competitive pressure due to globalization, as well as increased quality and service requirements from their customers (Underdown and Talluri, 2002), small- and medium-sized manufacturers must increase their productivity and their competitiveness in order to survive and prosper, even if they do not intend to become "world class" enterprises.

Nevertheless, for SMEs it will be difficult to overcome these challenges mainly due to lack of the internal human resources and the traditional culture of poor investment in education and training (Matlay and Hyland, 1999). The SMEs have specific needs, usually more technological and/or organizational based (Mesquita et al., 2000).

This paper shows that governmental strategy allows for conceiving concentrated growth of SMEs.

2- SMEs Growth:

2.1 Meanings of growth

The enterprise growth is used to describe a development process of enterprise from small to big and from weak to strong. The meanings of development exceeds the meanings of growth, and it includes not only the growth process of things, but the generation stage growing out of nothing before growth and the periodic process of the stage, i.e. the cycle process going round and round. However, the enterprise growth is a complex adjustment process which is different to the simple scale extension. It takes the balance adjustments of various relations in the interior and the exterior of the enterprise as the essential character, and it is the process of balanced development from unbalance to balance, and from lower balance to higher balance.

Therefore, the concept of enterprise growth denotes the development process that an enterprise goes through to maintain balanced and stable growth in total performance level (including output, sales volume, profit and asset growth) or to realize the large enhancement of total performance and the stage spanning of development quality and level (Sun, 2004; Mao, 2009).

Li Zhicheng and Diao Zhaofeng (2003) put forward the concept of "enterprise growth force" (Li, 2003, P.86-89). They thought that the enterprise growth force means the enterprise's ability and potential to realize the extension of "quantity" and enhance the "quality" in

future period. They believed it could determine the probability and the degree of enterprise development.
Zhang (1998) analyzed the enterprise growth from three angles including scale, diversification and competitive force.

Tang Wenxian and Li Panfeng (2005) analyzed the development course of relative enterprise growth theories from three aspects including scale, knowledge and system, and effectively classified the relative enterprise growth theory (Tang, 2005, P.17-21).
In this study, organizational growth, the dependent variable of the research, was measured by means of two indicators. The first of these, sales growth, was measured by asking the respondent to assess the average increase of sales income in recent 5 years.
The second indicator for organizational growth was personnel growth, measured by the average increase of the number of staff in last 5 years.

2.2 Tax Policy
According to Tomlin (2008), economists argue that the resources smaller companies direct towards tax compliance are resources that could be used for reinvestment, facilitating future growth. Hence, there is a belief that taxes and a complex tax system put disproportionate pressure on smaller businesses. According to Coyne (1995), SMEs are generally more responsive to domestic tax incentives than large ones. Taxes may play a more important role in the cost structure of SMEs because they do not have the financial and human capacity to developed sophisticated tax avoidance strategies.
Taxation is popular instrument used by government to develop SME by:
- Improving tax environment for SME by tax reform and modernization of tax administration
-Adopting taxation incentive policy to resolve bottle-neck problem faced by SME (Yaobin, 2007)
Shahroodi, (2010) believes that in order for a tax system to be efficient, the tax policy needs to be designed as such that the tax rates would be appropriate and rational, the exemptions would become lower in amount, the tax collection organization would be more efficient, the tax burden of the indigent people should be lighter and the fight against corruption and tax evasion should be much more intense. Tax policy can be divided in three dimensions as incentives, rates, and administration on SMEs.
In sum, these findings lead us to hypothesize that
H1: Tax incentives have direct relationship with SMEs growth
H2: Tax rates have a direct relationship with SMEs growth
H3: Facilitating taxation bureaucracy increases SMEs growth

2.3 financial policies
Financial barriers, which affect SMEs, include the high cost of credit, relatively high bank charges and fees, high collateral requirements, and a lack of outside equity and venture capital. Often, domestic banks are orientated to provide loans to insolvent large enterprises. Information asymmetries between lenders and borrowers make it hard for banks to determine the real value of a project, and lead to credit rationing (Barlett & Bukvic).
As Francesca Pissarides (1998) said "credit constraints constitute one of the main obstacles to growth of SMEs". The availability of finance is one of the most controversial issues in the analysis of SME problems. Some authors maintain that insufficient finance is not a fundamental obstacle to SME growth and that firms with good projects will always find sources of finance (Bratkowski, et al. 2000). Banks and financial institutions have had to learn about working with SMEs and find methods for evaluating loan applications from companies with little or no track records. Furthermore, it is a general belief that SMEs have limited access to capital markets, either nationally or internationally, in part because of the perception of higher risk, informational barriers and the involvement in smaller projects, etc. As a result, SMEs have quite often been unable to obtain long-term finance in the form of term debt and equity, and a larger part of their investments have traditionally been self- financed. (Nam and Radulescu, 2007). Hereupon we can put forward the following hypotheses:
H4: interest rate of bank loan has direct relationship with SME growth
H5: facilitating credit and loan borrowing has direct effect on SMEs growth
H6: reducing cost of credit has direct effect on SME growth

3. The Methodology
The study had been undertaken in two phases. First phase was designed to identify the factors affecting growth in Ardabil. Thus, a list of 26 questions about tax, tariffs and governmental policy was screened out in the first stage. These questions were then sent to two identified groups for comments. The two identified groups were: academic researchers and government officers. Members of the two groups were asked to rate each of the 26 questions in terms of relatedness to SME growth, on a 5-point Likert scale ranging from "extremely important" to "extremely unimportant". After a careful screening analysis and advice from academic professionals, 21 of the 26 items were selected. These 21 items were regarded as the influential factors in SMEs growth in Ardabil.

The sample chosen in this study included SMEs CEO. The sample of 64 CEOs was drawn mainly from a list of 211 SMEs CEO from a statistical databank used in the first phase of the study. The firms were selected from Ardabil province, and were located in nine cities.

The final questionnaire for this study included two main sections. The first section of the questionnaire consisted of SMEs characteristics. The second part was obtained/ elicited from the first phase with 21 items about factors affecting growth in Ardabil region.

This phase of the study used a questionnaire mailed to a random sample, designed to obtain a range of information on the growth of the firms, the government aids, the development of relations with national and international markets, the main developmental elements of the firm and its skills, and their impact on growth of interventions made by public authorities. In addition to this basic information, we decided to examine the growth phenomenon in more depth in order to discuss the variables identified and include others related to the personality of the entrepreneur and the environmental factors favorable or unfavorable to growth. To do this, we used the case study method, which ensured, first, that the right person was answering the questions and that we could react to his or her questions by providing additional details, and second, that a certain number of open questions were asked in order to obtain unexpected information in the course of the interview.

The first section of questionnaire contained questions to be answered by management alone, concerning factual elements such as the number and type of employees, location, the type of products and services offered, the technologies used, and so on. In all, there were a total of 35 relatively closed and detailed questions, including five ordinals.

Exploratory factor analysis with VARIMAX rotation was used to identify factor dimensions. Only those with eigenvalues higher than 1.0 was considered (Kaiser, 1958, 1974) and factor loadings of .50 were utilized for item inclusion.

4. Results

The aggregate of these four factors represent four dimensions of SME growth contributors in Ardabil. For each construct, the item responses were averaged to create a composite measure (except for the factor on productivity, which portrays internal effect of SMEs, consisting of one item only).

Altogether these four factors represented four dimensions of contributors to SME growth in Ardabil. For each construct, the item responses were averaged to create a composite measure (except for the factor on productivity, which portrays internal effect of SMEs, consisting of one item only).

The first factor was designated as bank loaning, due to the structure of its elements. The factor included items which were related to receiving loan and its proportion to the enterprise size. The second factor was the rate of credits profit. It was directly related to the amount of profit paid for loan, and its proportion to enterprise growth, it could justify over 18% of variance changes. The third factor denoted tax exemptions and discounts, and was called the propriety of tax exemptions and discounts. As a matter of fact, among the items which directly addressed exemptions, only a few ones were placed inside this factor, which had nothing to do with the amount of exemption and discounts, rather they reflected the proportion of these exemptions and discounts to growth. Finally, the fourth factor with four items justified totally 9% of the variance. This factor because of its characteristics was denominated as research and development incentives.

Table 1 Results of the factor analysis (N = 64)

	Factor 1	Factor 2	Factor 3	Factor 4
Reduction of rate of offered facilities along with investment increase	.550			
The conformity of the bank facilities' rules to enterprise growth	.782			
The proportion of length of credit pay off to enterprise growth	.747			
facilitating the process of offering credit facilities by banks	.616			
The rate of credit profit paid to the banks		.694		
Bank discounts on rate of offered facilities in proportion to enterprise growth		.778		
Tax exemptions in the case of increasing the personnel number			.682	

Tax exemptions on imports and supply of articles and necessary primary materials			.565	
Discounts on tax in the case of investment in production			.728	
tax exemptions on products' exports			.866	
The extent of financial help of government for supporting staff training				.583
discounts on tax for supporting investments in research and development				.712
Final price of products compared to similar enterprises' products price				.648
tax exemptions on reconstruction of units				.606
Eigenvalue	4.504	3.711	3.584	2.902
% of Variance explained	21.248	18.810	16.169	9.070
Cronbach's Alpha	.901	.853	.760	.862
The Bartlett's test of sphericity (significance level)			.000	
The Kaiser–Meyer–Olkin measure of sampling adequacy			.544	

Note: 1) "productivity" variable was loaded into Factor 5 alone and thus was not selected as an independent factor with only one single item. (2) Items with a factor loading of higher than .50 are shown. Extraction method: principal component analysis. Rotation method: Varimax with Kaiser Normalization.

The fifth identified factor was profitability. As there was only one item related to it, the factor was excluded from the list of elicited factors and its degree of variance which was 3.405% was subtracted from total variance.

After, identifying the factors affecting enterprise growth from the respondents' perception, growth factors were calculated separately (Table 2). As table 2 displays, mean and standard deviation of growth indicators included number of sale, personnel, variety of products and activity background

Table 2 Characteristics of SME s growth index

	Mean	Sd
amount of sale	127	13.164
number of staff	5	5.018
variety of products	3	1.260
activity background	5	1.422

To examine the effects of these factors on growth, the correlation coefficients of these two variables were calculated. Table 3 indicates the calculated correlation coefficients among the growth indicators and the obtained factors.

Subsequently, correlation analysis was employed to examine the relationship between four independent factors and SME growth. The values of independent variables were calculated by multiplying the perceived importance of each variable (as depicted in Table 3) and the value of the factors obtained by averaging the values of each variable elements. The results of regression analysis are summarized in Table 3.

Table 3 Correlations of SMEs growth and governmental financial rules

	F1	F2	F3	F4
amount of sale	.163 (.000)**	.071 (.128)	.316 (.000)**	.293 (.000)**
number of staff	-.204 (.000)**	.254 (.000)**	.084 (.000)**	.132 (.004)**
variety of products	.256 (.000)**	.054 (.442)	.285 (.000)**	.347 (.212)
activity background	.111 (.000)**	-.180 (.000)**	.488 (.000)**	.156 (.000)**
$Adj.R^2$	0.36	0.42	0.46	0.49

Note: ** Correlation is significant at the 0.01 level
* Correlation is significant at the 0.05 level

We find that sales and variety of products show a positive and highly significant correlation with the obtained factors. Another words, third and fourth factors are positively correlated with many aspects of SME's growth. These factors are tax exemptions and R&D incentives.

Among the factors, only the fourth factor (R&D) was statistically significant in all the sectors, and had a positive effect on every aspect of growth. It is likely this relationship could confirm the generalizablity of the effect of the relationship existing between R&D on the growth of an enterprise including SME.

In contrast, bank loaning had negative influence on the personnel/staff number. The rate of credits, as the second factor, showed negative influence on SME's age. It can indicate that unfair rates of credits can decrease SME's life and their growth cycle.

It is worth mentioning that the amount of sale had direct relationship with all the four factors, while the number of staff/personnel didn't enjoy direct relationship with the first factor, i.e., bank loaning. It is probable that not only the offering loan doesn't result in real and further employment, but also lead to resorting to unreal occupation for achieving the loan. The variety of products had relationship with each of the four factors, as well. It can reflect the more financial and investigational support was, the higher the amount of sale and the variety of products could be. However, the negative relationship between rate of profit and activity background catches the attention. The relationship discovered might be justified by the role of innovation in SMEs according to the Hoffman et al.'s (1998) study.

5. Conclusion

This study contributes to the literature on SME's growth by complementing empirical evidence on the financial and tax policy factors that affect SME's growth. In contrast to previous research our analysis not only focused on differences between factors and SMEs but also provided evidence on the ways through which financial and tax policies affect SMEs growth indexes. Furthermore, this study, to best of our knowledge was the first study that analyzed double interaction between factors and growth indexes in a government-based economy like Iran.

For the empirical analysis, we used a large sample of SMEs over the period 2011-2012 from Ardabil province located in the northwest of Iran. This sample included over 64 SMEs. In the first step, a questionnaire was sent to CEOs of selected SMEs. Then, in the second step, we analyzed how/which variables were more effective on SMEs growth. Factor analysis showed four factors that explained more than 65% of total variance.

Thereby, we focused on these factors and the growth measures: sales, personnel number, the variety of products and age.

We found that R&D incentives and discounts' propriety with growth were the major determinants of the SMEs growth, and had significant relation with all the growth indexes.

The results obtained from factor analysis manifested the direct relationship between the rate of offered credits to SMEs and their growth. However, the key point was not the lowness of the rates, but it was the proportion of the rates to growth which mattered and had also significant relationships with goal indexes. Differently, the effect of rates of credits on the number of staff revealed negative relationship. These finding needs to be investigated in the future studies.

On the contrary, the proportion of the factors of research and development incentives, as well as tax discounts and exemptions from governments to enterprise growth were identified as the key elements which showed significant relationships with all the

dimensions of the growth. It can be claimed that both factors in the Iran's government-based economy result in sharper distinction between the enterprise and its rivals and its longer lifetime and further growth. On the other hand, both factors lend hand to financial power of enterprises. This investment cycle in research and development, and consequently, taking up a larger market portion increase success and growth of the enterprise. The strong relationship among financial discounts, exemptions, the amount of sale and activity background can support the ….?

The strong relationship between variety of the products and sale and research and development incentives also can be explained with the same reason.

Finally, we showed in the present study that financial support of the government can be helpful in the growth of SMEs, only in the case that there is programming in specific frameworks. In addition establishing the policies, such as further occupation through loaning or discount on bank profit, may not be obtainable in the current Iran's government-based economy.

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