## ANALYSIS AND RATING OF DIMENSIONS AND TECHNIQUES OF FINANCING IN DEVELOPING BUSINESS AND ENTREPRENEURIAL BUSINESSESBY USING ANALYTIC HIERARCHY PROCESS TECHNIQUE (AHP)

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Abstract: Development of small and medium enterprises is the key to the economic development in next decade. The aim of this study is to analyze and rate the kinds of financing the small and medium entrepreneurial businesses in Kerman, Iran. Type of research is based on practical purpose and weighting has been done using the technique of analytic hierarchy process (AHP). Field data were collected through face to face questionnairesandthe theoretical part of the research was collected by library studies. Statistical population is small and medium-size business owners and financial entrepreneurial managers in metropolitan of Kerman that are 30 persons. The results showed between 19 methods of financing for small businesses, personal savings method with weight of 0/274 is best method and public offering of stock is worst method. And between 19 methods of financing for medium-size businesses, Medium-term and short-term loans with weight of 0/235 was best method and family and friends method was worst method.

**Key words:** Entrepreneurship, Financing, Small and Medium businesses, Analytic hierarchy analysis.

#### INTRODUCTION

Development of small and medium enterprises is the key to future economic development. Small and medium enterprises influence the global economy in four entrepreneurial channels, Innovation and technological change industry dynamics and finally, creation of job opportunities and increase of income (Qafari Ashtiani and Pir Mohammadi, 2008). The importance of small and medium businesses in growth and stability of long-term economic is depended to their size and structure that under certain conditions allow them to be flexible and able to deal with adverse

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economic conditions. To create new jobs, small and medium-size businesses compared to large industries need less investment (Tommaso & Sabrina, 2000). Nowadays the role and impact of Entrepreneurial on economic and social development of developing countries and job creation is fully revealed. Some experts named this era Entrepreneurial age. Entrepreneurs are leading a revolution that leads to the transformation and modernization of the global economy (Bygrave, 1994). Given the importance and necessity of entrepreneurship and also remarkable entrepreneurs' failure around the world, only 20 percent of businesses have continued more than 3 years (Ginsberg, 2003). Entrepreneurship as an engine of economic and social development has a major role in the development of societies and also given the crucial role of entrepreneurs in various sectors of economic development at the national and international levelcreating the right climate for logical support such as material, spiritual, cultural and research has already attracted the attention of governments, entrepreneurship is process of job creation and profit from the combination of valuable resources The term Entrepreneurship refers to someone who is committed to the risk of an economic activity to organize and manage (Ahmad pour, Mahmoud 2004). Entering the world of business requires capital but one of the biggest challenges for entrepreneurs and perhaps the most important obstacle to setting up their business is Shortage of funds to meet the capital needs (Kuratko, D. & Hodgetts, R. (2001)). The process of funding needed by entrepreneurs to set up business can take months and this will discourage entrepreneurs from the field of their business management and on the other hand, without providing adequate financial resources, the new business will not achieve success.Lack of financial resources and investment can be contributing factor in the failure of many businesses and entrepreneurs. Enterprises and business entrepreneurs will need investment in a two-stage, first stage at the beginning of investment the second stage in the production and operation. At the level of investment entrepreneurs will need long-term investment but at the level of operation financial needs of enterprises are related to regulation of the flow of short-term liquidity required for payments, such as payment of wages, purchase of components and raw materials, Repair and maintenance of equipment (Bigdel Lu, Mahdi 2004). In our country employees of government and public system who are determined to convert their government jobs to private jobs and also improvement of the implementation of Article 44after transferring and cutting state aid faced liquidity problems, the problem of financing and capital needs is One of the biggest challenges for entrepreneurs to start-up, expand and grow the business has (Mohammad taghi ziyaayi bigdeli et al. 2013). In this study we have attempted to identify, assess and rank the various methods of financing in order to take step toward supporting the development and promotion of entrepreneurial business, On the other hand with the development trend of financial management and increase of innovation and development of financial instruments, many resources and other financial instruments are emerging, this

gives entrepreneurs more diverse options and give them more ways to fulfill their financial needs.

#### RESEARCH LITERATURE

#### Small and medium entrepreneurial businesses

In recent years we saw variety of measures and programs to assist and support the creation and expansion of Enterprises and the growth of small businesses at national and international level. But the result of these stepswill not be measurable until we have common definition of the firms at level of research, and management since each of the executive devices according to their needs give a different definition from others this causes confusion and lack of data users to identify and define the firm's competitive position. The definition of small and medium entrepreneurial businesses in different countries is similar. However we cannot give single definition for it and each country has given a definition of these enterprises according to its own condition. These definitions are based on quantitative measures such as number of employees and level of turnover; however these small criteria make division of enterprises easier, but in some countries depending on the type of technology used by enterprises that are more qualitative criteria, division is different. (Dehghan Dehnavi, Mohammad Ali 2006). For example according to definition that EU gave too its members about small and medium enterprises in 2003 and it replaced the old definition in 2005, three categories: numbers of Employees, The amount of the annual turnover, annual balance sheet are used for these firms and firms that the number of their employees is less than 250 and their minimum annual turnover be less than 50 million euros or the balance sheet does not exceed the maximum amount of 43 million euros are consider as small and medium enterprises. In addition, enterprises should be independent; it means less than 25 percent of it should belong to others. Every firm that is outside of these definitions won't be in micro small and medium enterprises. But this definition can be different for steel plant Company with a total staff of 500 (In steel industry is considered as medium-sized company) and a financial consulting firm with about 200 employees (that in their field is a large company). One of the biggest problems we have today in developed and developing economies is the lack of clear definition of the firms at the national level. Providing data and research on the firms is based on the different perceptions that each person and organization takes place therefore first and most important priority is providing a single definition of small and medium enterprises throughout all the research executives of country.

#### BACKGROUND AND THEORETICAL FRAMEWORK OF RESEARCH

Du & Girma (2012) in their study they analyzed the surface enterprise in China, the relationship between size of enterprise, financial resources and growth,

Table 1
Europe Union proposal to Members for definition of small and medium enterprises (2005) (Source: Edraki, Mohammad Reza 2007 page 27)

Size of enterprises	Number of Employees	Annual turnover (Million euros)	Annual balance sheet (Million euros)
medium	250>	50>	43>
small	50>	10>	10>
minor	10>	2>	2>

development and promotion of business by using a collection of comprehensive data in surface of enterprise in china between 1998-2005. According to their findings by controlling inside creation of sources of financing, the size of enterprises has an important role in the growth process through the financial system, bank loans are more effective for larger firms, while inside firm financing is better for the growth of small business (Du, Jun & Girma, Sourafel 2012).

Franklin & et al. (2012) in their study they analyzed the legal and commercial environment variables, financing channels and growth patterns and different types of firms in India by using cross-country and sample of Indian firms data collection. The results indicate that financing alternatives, Such as non-bank financial institutions, non-market sources and illegal mechanismshave created a very important form of external financing and Bank loans are considered the second important source of external financing, according to these results banks and financial markets in economies with high growth rates, such as India are not superior to alternative methods (Franklin, Allen & et al. 2012).

Didier & Schmukler (2013) they study this matter that what firms in China and India use capital markets for funding, promotion and development of their business, results showed that firms that have published new stocks and debentures (They used external financing) Have different performance than other firms, these firms are generally larger and grow faster. The results showed positive effects on the growth of the firm's external financing (Didier & Schmukler, Tatiana 2013).

In these researches different divisions from methods of financing are provided for the development and promotion of enterprise. But most analysts, economic and financial management experts, divided sources of financing for start-up, development and promotion of entrepreneurial businesses into four main categories that our theoretical framework is based and it can be seen in Figure 1. Each of these methods has sub-branches that in third chapter is noted in the analytical model.

#### METHODS OF FINANCING ENTREPRENEURIAL BUSINESSES

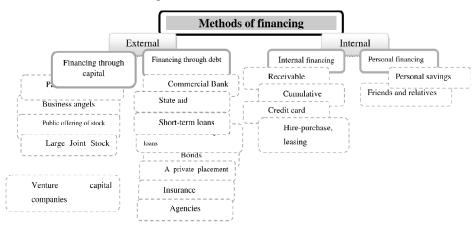


Figure 1: Theoretical framework

### **RESEARCH QUESTIONS**

The main questions are as follows:

- 1. What are Common ways of financing for development of start-up, entrepreneurial businesses?
- 2. How is order and prioritization of financing practices from the perspective of small and medium business owners to develop entrepreneurial business promotion?

#### RESEARCH METHODOLOGY

The nature and purpose of the present study is an applied descriptive study. The statistical population of this study is small and medium entrepreneurial businesses in metropolitan of Kerman, Iran.In this study, expert opinions is used to identify and determine the importance of the model used, several interviewshave been done. Also for collecting information from managers of businesses questionnaire has been used that its validity was confirmed by professors and experts and its and its reliability using Cronbach's alpha was more than 0.7.In this study, we designed a questionnaire based on research objectives and it's free of ambiguity as far as possible.In order to rank the dimensions and indicators and methods of entrepreneurial businesses financing we use AHP standard questioner.

#### **RESEARCH FINDINGS**

In this section, with use of financial managers of small entrepreneurial businesses, we review and prioritize the financing of small entrepreneurial businesses. So paired comparison questionnaire was distributed among 14 financial managers and later the results of group decision-making become clearby using Expert choice software and based on Analytical Hierarchy Process.

#### RATING OF METHODS OF FINANCING FOR SMALL BUSINESSES

In this section 19 methods of financing from the perspective of financial managers of small businesses has been ranked. Figure 2 shows the results of Analytical Hierarchy. Given that the value of incompatibility ratio is 0/03 and this is lower than critical value of 1/0, the results of Rating of methods are reliable.

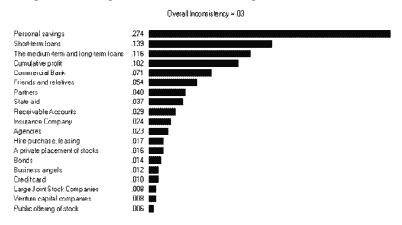


Figure 2: Rating of methods of financing for small businesses

According to Figure 2, from the perspective of small businesses experts, Among the 19 evaluated methods, personal savings method with weight of 0/274 is the best method and Public offering of stocks is the most inappropriate method. Also short-term loan methods with weight of 0/139, Medium-term and long-term loans with weight of 0/116, Cumulative profit with 0/102 are located in Second to fourth places of best methods of financing for small businesses.

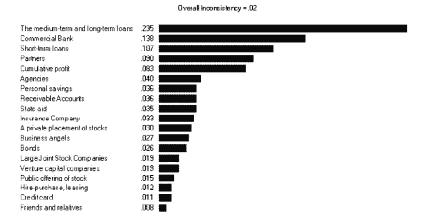


Figure 3: Rating of methods of financing for medium businesses

RATING OF METHODS OF FINANCING FOR MEDIUM-SIZED BUSINESSES

According to figure 3, from the perspective of medium businesses experts, among the 19 evaluated methods, medium-term and short-term loanswith weight of 0/235 is the best method andmethods friends and relatives is the most inappropriate method. Alsomethods of Commercial Bank with weight of 0/138, short term loan 0/107, and partners with 0/090 are located in Second to fourth places of best methods of financing for medium businesses.

#### RATING OF METHODS OF FINANCING FOR SMALL-MEDIUM BUSINESSES

Overall Inconsistency = .02 .200 The medium-term and long-term loans Short-term toans 141 Commercial Bank .123 .101 Personal savings Cumulative profit .101 Partners .044 State aid 044 Agencies .038 Receivable Accounts .035 Insurance Company .035 A private placement of stocks .027 .023 Friends and relatives 022 Hire-purchase, leasing .015 Business angels .013 Creditoard 012 Large Joint Stock Companies 009 Venture capital companies .009 Public offering of stock

Figure 4: Rating of methods of financing for small-medium businesses

According to figure 4, from the perspective of small-medium businesses experts, among the 19 evaluated methods, medium-term and short-term loans with weight of 0/200 is the best method and method of Public offering of stocks is the most inappropriate method. Also methods of short term loan with weight of 0/141, Commercial Bank 0/123, and personal saving with 0/101 are located in Second to fourth places of best methods of financing for medium businesses.

#### **CONCLUSION**

# What are Common ways of financing to start promote and develop entrepreneurial businesses?

According to the study in research literature there are 19 methods of financingfor start-up, development and promotion of entrepreneurial businesses. These methods can be divided into two dimensions internal and external. Also internal methods parts of subsets are personal financing and domestic financing. External methods

are indicator offinancing through debt (Borrowing) and indicator of financing through investment. These 19 methods of financing are:

Table 2
The most common methods of financing entrepreneurial businesses

_	The medium-term and long-term loans	_	Personal savings
_	Bonds	_	Friends and relatives
_	A private placement of stocks	_	Receivable Accounts
_	Insurance Company	_	Cumulative profit
_	Agencies	_	Credit card Credit card
_	Partners	_	Hire-purchase, leasing
_	Business angels	_	Commercial Bank
_	Public offering of stock	_	State aid
_	Large Joint Stock Companies	_	Short-term loans
_	Venture capital companies		

How is order and prioritization of methods of financingfrom the perspective of small and medium-size business owners for the development and promotion of entrepreneurial businesses by using analytic hierarchy process (AHP)?

As was observed in the data analysis, there are 19 methods of financing that were rated in terms of importance from perspectives of experts and financial managers of entrepreneurial businesses.

According to the opinions of small businesses experts, in this type of business the main and is most important method of financing is personal savings. Short-term loans, medium-term and long-term loans, and Cumulative profit are located in 2<sup>nd</sup> to 4<sup>th</sup> places. Also least important methods of financing for small entrepreneurial businesses are venture capital firms and Public offering of stocks.

According to the opinions of medium entrepreneurial businesses experts, among 19 methods of financing for medium-sized businesses medium-term and long-term loans at the highest priority and importance and methods of commercial banks, short-term loans and partners are located in 2nd to 4th places. Also methods credit card, friends and relatives are least important methods of financing for medium entrepreneurial businesses.

According to the opinions of small-medium entrepreneurial businesses experts medium-term and long-term loans, short-term loans, commercial Bank and personal savings are located in  $1^{\rm st}$  to  $4^{\rm th}$  places of most important methods of financing. And methods of venture capital companies and Public offering of stocksare least important methods of financing for small-medium entrepreneurial businesses.

According to the results of this research and comparing it with earlier researches that were done by researchers such as Randy and Goal in 2003. The best way to of financing for small businesses has been a source of personal of financing and most useless method was financing through stocks. Based on the results of this study most efficient way of financing for small businesses in Iran was internal finance and in medium businesses financing through medium-term and long-term loans is as one of the external financing method, while these do not match with findings of Didier and schmulker (2013) that analyzed methods of Financing In small and medium enterprises in India and China. Also results of this study match with study conducted by Saied (2009) in Brazil because the results of both studies emphasis on internal Financing as one of the most important Methods of financing in the development of small and medium businesses.

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