Determining the Impression and Risk of SMEs in Developing Financial Constant Accepted Companies in Tehran Money Exchange

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Abstract   The aim of this investigation is determining the impression and risk of SMES in developing financial constant in accepted companies in Tehran money exchange. This is a kind of library and analytic-scientific investigation. In this investigation the financial information of 104 accepted companies in Tehran money exchange during 1387 to 1392 were determined. (624 companies every year) for analyzing the results soft wares such as Minitab 16 – Eviews7 and Spss20 were used. The results of the research showed that there is a meaning full and straight relation between SMES and added value. Also there is a meaning ful and reversed relation between risk of SMES and intrinsic value.

Key words   Size of SMEs, intrinsic value, risk of SMES and data panel

1. Introduction

Today's developing SMEs as a way to pass the passing period for developing & developed countries is recommended. Already there are 350 million commercial-industrial units & more than 2 milliards in the world. More than 90 percent of them are SMEs. Lu and Bimsh (2001) Some of university experts believe that paying attention to small and average industries is generalizing to postmodern in generalizing to postmodern in economic (Lu and Bimsh, 2001). In their opinion by using these characteristics the problems & difficulties can be solved. Developing economic agencies is not the only way of increasing development rate. SMEs are small limited organizations which apply small capital in production process (Roodman, 2009). These industries are industrial miniature of countries. They are formed in small scale to develop occupation & increasing production (Levine, 2005). By stabilizing economic market, these small units increase occupations and productions and show a suitable picture of constancy rate. These countries with their special characteristics are able make positive interaction to decrease weaknesses of system (Fliess & Busqets, 2006). The aim of this investigation is determining the size and risk effects of SMEs in developing financial constant. This search can be a motivation for future investigation.

2. Literature review

Studying economic system shows that developed countries support SMES for developing economy of their countries. Although these companies need less capital, they have more efficiency. Also they can have an important role in increasing exports and inventions. In the last decades it was believed that big companies can be more effective & government supported big companies (Bond *et al.,* 2010).

Michaelas *et al.* (1999) showed that effective tax rate and tax shield has no effect on structure of interest in English companies. Future development opportunities have positive meaning full relations with interest structure (Michaelas *et al.,* 1999). According to Karter and Van Auken (2005) the factors such as, level of investing capital, kind of company, longevity of company, the output of investing capital, development opportunities and tolerating risk can be effective in making decision for investing capital (Karter and Van Auken, 2005).

Modigliani and Miller (1958) state that the size of company doesn't have impression on capital structure (Modigliani and Miller, 1958). But many researchers believe that there is a relation between companies and their financial structures. One of other financial conditions that is important for the companies is old cycle of economic units (Dollinger, 2005).

Small Companies with high development are depended on stocks owner's salary (Berger & Udell, 1998). Constand *et al.* (2002) aren't agreeing with their opinion and they state there is a straight relation between making profit & debt (Constand *et al.,* 2002).

Ang (1992) states that the goals of SMES owners in financing is a combination of factors such as: profit, creating value family affairs & taxation regards and professional independence lack of information about different capital choices, wrong information, being unlade to access capital markets maybe cause that small companies has low output or unfavorable structure (Ang, 1992).

Chittenden *et al.* (1996) believe that this that this theory has more influence on small companies rather than big ones (Chittenden *et al.,* 1996).

Daskalakis & Silaki (2005) determined the fixing factors of capital structure in SMEs in French & Greek. They studied 1252 companies & 2006 French companies during 6 years from 1997 to 2002. The results of investigation showed that assets structure & making profit have negative relation in both countries. But there is a positive relation between the size of company & opportunities to develop the capital structure (Daskalakis & Silaki, 2005).

3. Methodology of research

In this investigation with straight withdrawal needed information from financial statements Rahavard Novin software exchanging organization site all needed data for testing hypothesis are collected. After selecting companies & classifying them in industries level Excel software is used for calculating for classifying companies in different industries classifying is suggested. For analyzing in formation lined Regersion models are used & for analyzing information Eviews softwares are used. So, because of selecting data panel method with constand influences against composed data, F Limer & Hasman will be done.

3.1. Investigation area

Chronological area: chronological period between 2008 to 2013.

Local area: All accepted companies in Tehran money exchange.

Topical area: The influence of SMEs in constant financial development.

Statistical population of this investigation is all industrial groups of Tehran money exchange that were active in 2008 to 2013.

For determining the studied sample the companies were selected from above statistical *population:*

1. The companies which have been accepted in the exchange in the exchange after 2007.
2. During the investigation the companies must not exit the exchange.
3. Their financial year end in Esfand & they don't have financial year change.
4. They must not be financial agent.
5. During considered period, there would be trade actively.
6. They must present their financial statement during the investigation in 2013.
7. Their information for earning investigation variables must be enough.

And at the end with these limitations, 104 companies were chosen as investigation samples for 6 years (624 companies every year).

3.2. Investigation hypothesis

The important investigation affair: Is there a relation between size & risk of SMEs development Tehran money exchange 2 alternative hypothesis were tested.

Main hypothesis: There is a meaning relation between constant financial development & SMEs.

Alternative hypothesis: There is isn't any meaningful relation between SMEs size & intrinsic added value.

Main hypothesis: There is a meaningful relation between risk of SMEs & constant development.

Alternative hypothesis: There is a meaningful relation between risk of SMEs & intrinsic value.

Investigation variables & their definitions:

Constant financial development: Constant financial development is the influences of financial variables on intrinsic value. Some of the variables are: The relation of saved profit on book value all proper ties, the relation of all short term deposit on book value of all debts. The relation of total value of the cash reserve ratio and the ratio of long-term loans.

Size of Company: It is equal to the book value of total assets on in small and medium-sized companies (Constand, 2002).

Risk of company: Risk is part of the company's expected range of rates of return plus a risk premium safe (Chittenden *et al.,* 1996).

The dependent variable:

Intrinsic value: It is called the intrinsic value investment. In other words, the intrinsic value is the sum of the present value of Cash flows from an asset item (Madrakian, 2011).

Abnormal stock returns: Return of the difference between actual returns and expected rate of return and the calculation is as follows (Ang, 1992).

Financial Cost rations: According to Gallo Vilaseca (1996), Financial expense ratio will be calculated as follows (Gallo Vilaseca, 1996):

$$ SOE_{i,t} = \frac{\text{Financial expenses}}{\text{book value of all properties}} \qquad (1) $$

Quality audit: Dummy variable that financial statements reviewed by the audit ting company examined is equal to 1, otherwise it will be zero (Michaelas *et al.,* 1999).

Foreign Investment: Dummy variable that if the company did not examine foreign investment equal 1 & zero otherwise be (Berger and Udell, 1998).

Table 1. How to measure the research variables

How to Calculate	Variable Name	Symbol	Variable type
EVA=(r-c)*capital The rate of cost of Capital = C , Return on investment =r Capital=Capital Common stock + other Capital items + interest –bearing debt + capital Return on investment achieved from the formula face: r= NOPAT/CAPITAL NOPAT = Accounting profit The following formula is used the rate of the cost of capital $$WACC = \frac{Vd}{Vd+Ve}*Kd + \frac{Ve}{Vd+Ve}*Ke$$ Vd=Book value of debt operation Ve= Book value of equity	Intrinsic value	EV Growth	**Dependent**
It is equal to the logarithm of the book value of the assets of the company (Dollinger, 2005).	Company Size	SSME	**Independent**
Rit: Company return si in t period. Rft: Safe in the rate of return risk. Bi: Beta yield securities. Rmt: The rate of portfolio return in the period. We use the following formula to measure systematic risk. Rit: Company returns of I in chronicle period. Pi: The price per share at the end of the period. DPF: Dividend per share for the period. Sr: priority value of shares granted in the period t Beta's accounting equation is calculated. Rit: Returns company of I in t period. Rmt: The rate of portfolio return in the period.	Corporate Risk	RSME	**Independent**

How to Calculate	Variable Name	Symbol	Variable type
REdu=ri –E(ri) REdu : Abnormal stock returns ri The actual rate of return on stock ، E(ri) Downside stock real rate of return is calculated as follows ri = P$_{i,1}$ – P$_{i,0}$ + DIV$_{i,0}$ / p$_{i,0}$ pi,0 The stock price of the beginning of period , pi,1 The stock price at the end of period , {div}_(i,0) = It Is divided period CAPM= Downside using CAPM is Calculated as follow. E(ri) = rf + βi *(rm – rf) / r-m = Market port folit return r-f = Risk – Free return / E(ri) = Expected return	Abnormal Stock returns	REdu	**Control**
The result of the division of financial assets with a book value (Gallo and Villisca 1996) $$SOE_{i,t} = \frac{\text{Financial expenses}}{\text{book value of total assets}}$$	Financial Expenses	SOE	**Control**
Dummy variable is to examine the company's financial statements have been reviewed by access account is equal to 1, otherwise it will be zero (Michaelas *et al.*, 1999).	Quality accounting	CPI	**Control**
Dummy variable that if the company did not examine foreign investment equal to 1 and zero otherwise be (Berger and Jodl, 2003).	Foreign investments	FOI	**Control**

To test the hypothesis & sub-hypothesis first & second respectively, from 1 to 2 models. In this study β_i will be used as follows (coefficients of the independent variables) is significant at a confidence level of 95% to the sub research hypothesis is confirmed by research.

Research models from Research (Ang, 1992).

Model 1:

$$EVGrowth_{i,t} = \alpha_0 + \beta_1 SSMEs_{i,t} + \beta_2 RSMEs_{i,t} + \beta_3 REdu_{i,t} + \beta_4 SOE_{i,t} + \beta_5 CPI_{i,t} + \beta_6 FOI_{i,t} + \varepsilon_{i,t}$$

Model 2:

$$MVGrowth_{i,t} = \alpha_0 + \beta_1 SSMEs_{i,t} + \beta_2 RSMEs_{i,t} + \beta_3 REdu_{i,t} + \beta_4 SOE_{i,t} + \beta_5 CPI_{i,t} + \beta_6 FOI_{i,t} + \varepsilon_{i,t}$$

4. Results of Investigation

Table 2. Descriptive statistics of variables

Elongation	Skewness	Highest amount	Lowest amount	Variance	Average	The number of views	Variable
- 0/770	0/861	0/9986	0/0000	0/3194	0/3365	624	Intrinsic value
0/576	0/731	8/0074	4/7761	0/6116	5/9200	624	Size of Company
0/079	0/439	0/9035	0/6791	0/0437	0/7700	624	Risk of company
1/558	- 0/156	0/8313	0/3908	0/0588	0/6646	624	Abnormal stock returns
1/865	1/321	3/1282	0/0016	0/5512	0/6653	624	Financial expenses
-1/998	0/090	1/0000	0/0000	0/4998	0/4775	624	Quality audit
104/586	8/487	6/8040	0/0000	0/4276	0/1295	624	Foreign investment

Table 3. The results of the normality of the dependent variable research

Level of significance (Sig)	Statistics (K-S)	Number(N)	Variable
0/038	4/442	624	Intrinsic value

Table 4. Matrix Pearson correlation coefficients between variables

	Intrinsic value	Size of company	Risk of company	Abnormal Stock returns	Financed expenses	Accounting Quality	Foreign investment
Intrinsic value $(P-Value)$	1						
Size of company $(P-Value)$	-0/022 (0/579)	1					
Risk of company $(P-Value)$	-0/023 (0/563)	0/998 (0/000)	1				
Abnormal stock returns $(P-Value)$	-0/023 (0/572)	0/809 (0/000)	0/810 (0/000)	1			
Financial expenses $(P-Value)$	-0/003 (0/933)	-0/030 (0/447)	-0/050 (0/214)	-0/098 (0/014)	1		
Accounting Quality $(P-Value)$	-0/016 (0/685)	0/127 (0/001)	0/129 (0/001)	0/081 (0/043)	0/068 (0/092)	1	
Foreign investment $(P-Value)$	-0/019 (0/639)	0/369 (0/000)	0/354 (0/000)	0/244 (0/000)	0/074 (0/065)	0/009 (0/818)	1

Table 5. The results of Chav & Hasman test for model (1)

P-Value	Degree of freedom	The amount of circumstantial evidence	Circumstantial evidence	Number	Test
0/0419	(103-514)	3/2303	F	624	Chav
0/0360	6	7/4775	χ^2	624	Hasman

Table 6. The results of the statistical assumptions of the model (1)

Ramsey circumstantial evidence		Durbin Watson circumstantial evidence	Breusch Pagan circumstantial evidence		Jarque-Bera circumstantial evidence	
$P-Value$	F	D	$P-Value$	F	$P-Value$	χ^2
0/6873	5/2520	2/38	0/0244	4/0940	0/2596	1/2625

Table 7. The research hypothesis using fixed effects

Number of views : 624					
					The dependent variable: The intrinsic value-added companies
Relation	P-Value	circumstantial evidence	t	Factor	Variable
Positive	0/0084	2/6460		4/1767	Fixed component
Positive	0/0387	1/5966		0/8140	Size of Company
Negative	0/0104	-1/5729		-11/5171	Risk of Company
Meaningless	0/1498	1/4422		0/3439	Abnormal stock returns
Negative	0/0345	-1/3919		-0/0226	Of financial costs
Negative	0/0240	-1/3399		-0/0049	Accounting quality
Meaningless	0/2136	-1/2452		-0/0090	Foreign investment
0/6984	Determining model Factor				
3/2361 (0/0000)	circumstantial evidence F $P-Value$				

Table 8. The result of chav & Hasman test for model (2)

P-Value	Degree of freedom	The amount of circumstantial evidence	circumstantial evidence	test
0/0164	(103-514)	3/4347	F	Chav
0/0295	6	4/3571	χ^2	Hasman

Table 9. The results of the statistical assumptions of the model (2)

Ramsey circumstantial evidence		Durbin-Watson circumstantial evidence	Breusch-Pagan circumstantial evidence		Jarque-Bera circumstantial evidence	
$P-Value$	F	D	$P-Value$	F	$P-Value$	χ^2
0/6985	7/8746	2/26	0/0160	4/3212	0/4829	1/4975

According to Chav & also classic Regrisson assumption test. Model 2 of search is calculated by data panel:

Table 10. The hypothesis test results using fixed effects

Number of views: 624				Dependent variable: Market value
Relation	P-Value	circumstantial evidence t	Factor	Variable
Negative	0/0360	-2/1024	-3/0236	Fixed component
Positive	0/0239	1/2657	0/6673	Size of Company
Negative	0/0147	-1/4474	-10/0929	Risk of Company
Meaning less	0/5332	-0/6235	-0/1317	Abnormal stock returns
Positive	0/0498	0/3882	0/0494	of financial costs
Meaning less	0/6891	-5/4513	-0/0798	Accounting quality
Positive	0/0327	1/1603	0/0035	Foreign investment
0/5218	Determining model Factor			
1/7248 (0/0000)	circumstantial evidence F ($P-Value$)			

5. Results and Discussion

Conclusion the results of the first main hypothesis of a link between small&medium sized companies the added value inherent in the company's 95% approved of variable coefficient (0/8140). It showed a direct relationship between SMES sized companies and value companies is essential so that the increase in the intrinsic value of a small unit & medium size companies to rate (0/8140) This finding is in line with the results Daskalakis and Sillaki, they show that the positive relationship between firm size & growth opportunities and capital structure are hypothetical results of testing the main hypothesis It showed a significant association between the risk of small & medium companies & 95 percent of the company's intrinsic value is confirmed negative coefficient of this variable showed a negative coefficient of this variable showed a negative coefficient of this variable show a negative relationship between small firms and the negative coefficient of this valuable implies the existence of an inverse relation between the risk of all small & medium-size companies and value companies is essential so that the rate in increments of one small company risk, value the rate of 11/5171 unit decreases. The results are in line with carter and Van Auken who believe that the risk tolerance of investment priorities. Financing resources that can influences investment decisions. According to the research results managers and financial analysts operating in the capital market, investment advisers in exchange bonds with Conventional analysis techniques. On the intrinsic value of the company & the risk factors affecting the company according to the standard accounting practice for research.

Studying the effect on the relationship between the sizes of the industry the company & the risks inherent in the company's value & the market value of companies the use of other variables evaluated.

Control, such as the volatility of stock returns and Rating credit companies in Bruce relationship between size & risk assess the effects on growth & development of small and medium companies, financial companies listed on the stock exchange of companies.

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