

Comparing Co-Determinants Affection on Stock Return: Focusing Business Strategies

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ABSTRACT

The present study investigates the impact of assets' age and business strategies on the relationship between the growth of assets and the operational performance of the companies. Stock return is considered to be the representatives of the operational performance of the companies. For this purpose, a sample including 86 companies listed at Tehran's stock exchange during the 2006 and 2010 has been studied. By doing hierarchical cluster analysis, the companies were categorized into two clusters of cost leadership and product differentiation. In order to analyze and examine the relationship between the variables in our study, the approaches of balanced panel data and Estimated Generalized Least Square (EGLS) were used. The results show that there's a significant relationship between and the assets' age operational performance of the companies. These findings underline the influence of the variables of the assets' age and business strategies on the relationship between growth of the assets and the performance of the companies. These results indicate that the impact of factors on the growth of assets in the companies with older assets is more intensive. From the other hand, the findings show that the impact of the growth of the assets in the companies following the product differentiation approach is negative.

KEYWORDS: Assets' age, Growth of assets, Cost leadership, Product differentiation, Stock return

INTRODUCTION

One of the most important and widespread financial markets studies is to explain the behavior of stock returns. The results of these studies provide several models that have been subjected to various support and criticism. On the other hand, investors are always looking for tools to be able to predict their investment returns. This need has provided different models to predict stock returns and factors effective on it. Today the hypothesis of stock returns predictability is strong in financial management. Some parts of the influential variables on companies' stock returns in the stock market could be due to the financial information that is provided by the accounting system. The effect of this information is very complex and partly unknown. Assets age indicates time duration for optimal assets exploitation, so the more age of capital assets increases, the more desirable performance is resulted by investment efficiency stability. Evidence suggests that investors seem to show extraordinary response to historical growth rates of company. By confirming the potential effect of growth on performance, researchers have performed many investigations with the aim of explaining this relationship. Research confirms that the assets growth rate is an important predictor of stock returns and its prediction power has been approved even for big companies (Cooper et al, 2008).

Since the main key of success in investments is determination of company's specific competitive advantage and, above all, durability of the advantage, experimental results of these strategic implications can provide useful understanding for professional individuals so that they could also analyze and predict the company's future performance. By satisfying daily and future essential needs, adaptability and consistency for organization sustainability and its different sectors support at the time of maturity it will be possible to avoid wasting resources and concentrate on proceedings by developing a strategy. Strategy of any organization depends on competition and competitiveness definitions and approaches that the organization has taken. So, strategies can help companies to maintain their competitive advantage in today's advanced competitive environment. In addition, reviewing the effect of using applied strategies will provide the area for development of more desirable methods to maintain and improve the competitive situation.

LITERATURE REVIEW

One of the primary functions of the capital market is effective pricing of investments. When companies acquire or dispose of assets, economic efficiency requires that market will change appropriately such transactions to capital

ones. The studies' results show that after occurrence of events related to asset expansion (mergers, equity issuance, and public issuance of debt) there are periods in which returns are abnormally low. While after occurrence of events related to asset contraction (redemption of shares, prepayment of debt and dividend distribution) there are periods in which the returns are abnormally high. Moreover, many studies have been carried out about the negative relationship between different forms of investment in company and cross-sectional returns and imply that there is a negative relationship between capital expenditures, accruals, sales growth rates, as well as increase of investment with future returns. Comparison of asset growth effect with other determinants of cross-sectional returns suggests that asset growth effect is still strong. In fact, in regressions of cross-sectional stock returns that book value to market value ratio, company's market value, short and long horizons of lagged returns and other criteria of growth including sales growth in research of Lakonishok, Shleifer and Vishny (1994), growth in capital expenditure in research of Titman, Wei and Xie (2004), accruals in research of Sloan (1996), the growth rate of corporate assets is the strongest determinant of future returns and in companies with high market value this effect is more severe.

To better assess the asset growth effect, the total growth of assets was divided to main components on the right side of the balance sheet (i.e., investment) and the left side of it (financing). The results indicate that the asset growth effect is common for many subsets that develop asset growth and financing growth simultaneously. However, on the right side of the balance sheet there is a strong relationship for changes in operating assets (non-cash current assets plus tangible fixed assets) and on the side of financing of the balance sheet the strongest effect relates to the debt growth and equity financing. Due to the size of companies, the growth in debt financing has the strongest effect on small and medium enterprises, but in big companies financing through equity issuance has the strongest effect. Similarly, on the right side of the balance sheet of small companies change in current assets is the most important component of growth, but for big companies change in tangible fixed assets is considered the most important component. The results of analysis confirm that why asset growth serves well in prediction of cross-sectional returns. Because the asset growth is the total subgroups of growth from the left and right sides of the balance sheet, it benefits from predictability of all sub components of growth simultaneously and allows asset growth to predict cross-sectional returns better than any other single component of growth. The evidence indicates that investors seem to extraordinary response to historical growth rates of company. By examining stock returns around earnings announcement days it has been found that earnings announcement is positively related to abnormal returns for companies with lower growth profits and is negatively related to abnormal returns for institutions with high growth (Cooper et al, 2008).

Results of some studies suggest that asset age will affect the comparability of rate of return on assets. The company's asset age will be noticed to identify the cross-sectional changes of difference between the historical cost and the current replacement cost of company long-term assets. When the price or value of assets is increasing the book value of old assets is less than their current replacement cost (Edward and Bell, 1961). The bias in reported value of assets increases the book rate of return and it will make the mentioned rate to exceed the current economic performance (Fama and French, 2000; Penman and Zhang, 2002; Penman, 2003; Rajan et al, 2007). When companies with similar performance have different asset age, the measure of historical cost without necessary adjustments can reduce the comparability of accounting rate of return. The results indicate that there is a significant positive relationship between the asset age and future return on operating asset after control of competitive strategies and performance and they found some evidence about less comparability of the rate of return on assets due to cross-sectional change in company asset age. They showed that there was less positive correlation between companies' net return on operating asset and older assets with contemporary efficiency. Therefore, it suggests that investors reduce net return on operating asset. Also, they found that there is a negative correlation between return on operating asset and average assets age with future efficiency and it shows that investors reduce return on operating asset of companies with older assets (Asher and Melissa, 2010).

Porter (1985) presented a conceptual framework on how companies choose a business strategy in order to compete effectively. Porter's generic strategies in competition area stated that between two conditions a company should choose one: the first condition is a company as producer with low cost in its industry – cost leadership strategy – and the second condition is competition through producing outstanding products and unique from the aspect of quality, objective characteristics of the product and related services to it – differentiation strategy. Porter (1996) emphasized that the nature of a company's business strategy implies its capability to choose the right and systematic set of activities that offers a unique combination of value and utility to customers. The results suggest that there is a relationship between Porter's generic strategies and rate of return on assets. Applying the mentioned strategies can affect companies' performance and will lead to improve their performance. Also, it became clear that applying cost leadership strategy will not lead to sustainable long-term economic performance because it can be easily imitated by competitors. But, applying differentiation strategy can lead to a sustainable economic performance because it needs more time to be imitated by competitors. The results of Barton and Gordon (1987) and

O'Brien (2003) studies also showed that there was a significant interaction between business strategy and financial leverage to influence company's performance. Studies confirm adopting a business strategy by a company can affect the relationship between its financial leverage and performance. Jordan et al (1998) state that the goal of cost leader companies from using financial leverage is to enhance the managerial efficiency and this is the same goal that capital suppliers of company are always searching for it by providing monitoring and control mechanisms. In fact, for those companies that want to promote efficiency and effectiveness (cost leader companies) the task of control and preventing the rise of debt is more important. Porter (1985) stated that cost leader companies need strongly to control their costs so they avoid the enormous costs of innovation, marketing and advertising and in sales stage they decrease the price of their products to increase sales and benefit from index of economies of scale. In contrast, Miller (1987) states that discriminant companies strongly tend to research and development activities so that through which they improve their innovation capacity and capability and always keep themselves ready to face new competitors' products and thereby achieve the goal of maintaining and enhancing their market share.

RESEARCH METHODOLOGY

1. Research Hypotheses

First hypothesis: The effect of assets age of a company on the current rate of return of company stock is significant.

Second hypothesis: Due to increase of assets age, the assets growth effect on current rate of return of company stock will be different.

Third hypothesis: The assets growth effect on current rate of return of company stock with differentiation strategy of product is different from cost leadership strategy.

2. Statistical Community and The Sample

Statistical community of this study includes the listed companies in Tehran Stock Exchange with all of the following conditions:

1. They are listed in Tehran Stock Exchange since the beginning of 2003 or earlier.
2. Their financial information to extract the research variables is available.
3. They have operating profit during the study period.
4. Their fiscal year ended 19 Mars and did not change during the study period.
5. Their maximum trading halt is five months.

Considering the above cases and in order to test the hypotheses, 86 companies active in Tehran Stock Exchange were selected during the period 2006-2010.

3. Research Variables and their Operational Definition

In order to separate companies business strategies, by using hierarchical cluster analysis we categorized companies into two groups of discriminant companies and cost leader companies. For clustering two indexes of "ability to get profit margin" and "accounts and notes receivable turnover ratio" were used. The first index is measured through the ratio of gross profit to total sales, and the second index is measured through the ratio of total sales to average accounts and notes receivable. By measuring these two variables the type of company business strategy which is a dummy variable is explained. In fact, companies which choose cost leadership strategy try to reduce the cost of their products as low as possible through minimizing costs of production, distribution and sales, and their product cost to competitors and acquire larger share of the market by increase of turnover sales and benefit from the advantage of economies of scale. The result of successful implementation of this strategy will be reduction of overhead costs and waste, careful budgeting, effective monitoring, applying participative management with the maximum employee contribution in order to reduce costs and ultimately improve company efficiency. Continuation of this strategy requires skill and competence in engineering of manufacturing process and investment in productive assets. Therefore, the successful managers by achieving above goals compared to other group member companies have less gross profit compared to sales and conversely they try to get their profits from increase of the number of sales. Therefore they will have a higher asset turnover. On the other hand, companies that choose differentiation strategy seek to provide differentiated products compared to products of other companies in the industry and superior in terms of quality. Since customers of target market in this business strategy have the least sensitivity to prices, these companies while creating commitment and loyalty in customers try to achieve the advantage of price premium and desired profit levels through production of a unique product considering indexes such as set of concrete and tangible characteristics of the product, advertising and marketing, extensiveness of distribution network, post sale services and other aspects related to product and this will enable them to gain a high profit margin. By this reasoning the method of separation of companies from the business strategy aspect is interpreted in this way that cost leader companies have higher accounts and notes receivable turnover ratio and at the same time

lower profit margins, while discriminant companies have greater profit margin and simultaneously less accounts and notes receivable turnover ratio.

Table 1: Research Variables

Types of Variable	Independent		Abbreviation	Calculation Method
		Net Operating Assets		
	Return on asset	RNOA _{it}	Operating Profit Ratio before Depreciation to Net Operating Assets	
	Stock returns	RET _{it}	Stock Price Changes+ Dividends Payable)/Stock Market Price at the beginning of the year	
Dependent	Asset Age	AssAg _{it}	The Ratio of Accumulated Depreciation to Cost of Depreciable Assets	
	Assets Growth	AG _{it}	The Total of Accruals Growth and Long-Term Operating Assets Growth	
	Long-Term Operating Asset Growth	LTNOAG _{it}	Long-Term Net Operating Assets Ratio to Average Total Assets	
	Accruals Growth	AccG _{it}	(Change of Operating Current Assets - Operating Current Liability - Depreciation) / Average Total Assets	
	Investment Current Growth	Inv _{it}	Total Capital Expenditures and Advertising Cost in Year t = Total Capital Expenditures and Advertising Cost in Year t-1 / Total Capital Expenditures and Advertising Cost in Year	
	Lag Investment Growth	PInvG _{it}	Investment Mean in Past Three Years winsorized	
Adjuster	Differentiation strategy	STRA1 _{it}	An index equal to 1 for Companies with Differentiation Strategy and equal to 0 for Companies with Other Business strategies	
	Cost Leadership Strategy	STRA2 _{it}	An index equal to 1 for Companies with Cost leadership strategy and equal to 0 for Companies with Other Business strategies	
Control	Profit Margin	PM _{it}	Operating Profit Ratio before Depreciation to Sales	
	Book Value to Market Value Ratio	B/P _{it}	book value to stock market value ratio	
	Size	Size _{it}	Logarithm of company's market value	

HYPOTHESES TEST RESULTS

After entering data in Eviews 6 Software the regression estimation was performed. At first stage regression should be run with fixed effects assumption so that F statistic could be performed. In table 2, the results of this test are shown. Regarding F statistic and significance level, at 95% confidence level it becomes clear that panel data technique should be used to estimate the models. About the models that joint effects test was not confirmed, Hausman test was performed to determine fixed and random effects. According to chi square statistic and probability level of Hausman statistic, the null hypothesis was rejected based on the use of random effects method and model estimate is done by fixed effects method.

Table 2: The results from implementation of F test and Hausman test

Study's Models	sample	F statistic	P_value	Hausman statistic	P_value
Model (1-1)	Total firm	1.0014	0.4831	-	-
Model (1-2)	Total firm	0.9592	0.5818	-	-
Model (2-1)	Total firm	0.9620	0.5754	-	-
	High asset age	1.5756	0.0147	38.9286	0.0000
	Low asset age	0.9971	0.4929	-	-
Model (2-2)	Total firm	0.9076	0.6998	-	-
	High asset age	1.3869	0.0596	-	-
	Low asset age	0.9862	0.5135	-	-
Model (3-1)	Total firm	1.0489	0.3770	-	-
Model (3-2)	Total firm	1.0350	0.4072	-	-

Introduced models are analyzed by balanced panel data approach and estimated generalized least squares (EGLS) pooled method. In separated samples in terms of assets age unbalanced panel data approach and estimated generalized least squares (EGLS) pooled method as well as pooled ordinary least squares method are used. Durbin-Watson value in all models is about 1.5 and 2.5 which indicates there is no problem of autocorrelation. In all models F statistic value denotes that the null hypothesis, based on which all the coefficients are zero, is rejected at 5% statistical level and the models are significant.

First Hypotheses : models development to test the first hypothesis are as follows:

$$(1-1): RET_{it} = \alpha_0 + \beta_1 RNOA_{it-1} + \beta_2 AssAg_{it} + \beta_3 PM_{it} + \beta_4 BP_{it} + \beta_5 Size_{it} + \epsilon_{it}$$

$$(1-2): RET_{it} = \alpha_0 + \beta_1 RNOA_{it-1} + \beta_2 RNOA_{it} \times AssAg_{it} + \beta_3 AssAg_{it} + \beta_4 PM_{it} + \beta_5 BP_{it} + \beta_6 Size_{it} + \epsilon_{it}$$

As it can be seen in table 3 the results from testing the relationship between asset age and companies stock returns in both models indicate that there is a direct and significant relationship between assets age and stock returns and increase of the aforementioned variable which leads to increase of company stock returns is studied. Also, the results show that AssAg variable that already has had the most influence on stock returns of companies without considering the effect of AssAg*RNOA_t, its explanatory power has greatly reduced after entering AssAg*RNOA_t variable. On the other hand, the adjusted coefficient of determination statistic of both models shows that the model could reflect well the empirical facts about the effect of the explanatory variables on the dependent variable.

Table 3: The results of the first hypothesis

Explanation	Dependent Variable RET					
	Model (1-1)			Model (1-2)		
	Coefficient	t statistic	P_value	Coefficient	t statistic	P_value
C	-10.5994	-5.3078	0.0000	-9.8590	-5.1909	0.0000
RNOAt	0.3606	0.6266	0.5317	-0.4611	-0.7103	0.4785
Ass Ag	5.5741	5.8258	0.0000	4.0416	4.2602	0.0000
PM	-3.3677	-3.2028	0.0016	-5.9018	-4.4505	0.0000
BP	-1.2197	-5.5477	0.0000	-1.1623	-4.2083	0.0000
Size	1.0855	7.3253	0.0000	1.0782	7.6304	0.0000
Ass Ag*RNOA _t	-	-	-	6.5924	3.2685	0.0013
AR(3)	0.2047	8.2229	0.0000	0.1873	7.5317	0.0000
adjusted coefficient of determination	0.4846			0.5143		
DW	1.8181			1.7996		
F statistic (P_value)	27.8068(0.0000)			26.8716(0.0000)		

Second Hypotheses: Model (1-2) development to test the second hypothesis is as follows:

$$RET_{it} = \alpha_0 + \beta_1 RNOA_{it-1} + \beta_2 AG_{it} + \beta_3 AG_{it} \times AssAg_{it} + \beta_4 PM_{it} + \beta_5 BP_{it} + \beta_6 Size_{it} + \epsilon_{it}$$

Table 4: The results of testing the second hypothesis – first model

Explanation	Dependent Variable RET					
	Total firm		High asset age		Low asset age	
	Coefficient	P_value	Coefficient	P_value	Coefficient	P_value
C	-7.7895	0.0000	-10.629	0.4779	-10.8125	0.0000
RNOAit-1	-0.1583	0.7617	5.3800	0.0435	-2.3743	0.0001
AG	-5.1503	0.0000	-7.5751	0.0004	-3.8115	0.0000
ASSAGAG	15.441	0.0000	9.5859	0.0000	13.765	0.0000
PM	-3.5653	0.0014	-9.0422	0.1877	2.8690	0.0000
BP	-0.9196	0.0000	-2.7193	0.0738	-4.0578	0.0000
SIZE	1.0367	0.0000	2.0429	0.0821	1.2907	0.0000
AR(1)	-	-	-0.0779	0.6675	0.1751	0.0000
AR(2)	-	-	-	-	0.0415	0.0000
AR(3)	0.1878	-	-	-	0.0367	0.0237
adjusted coefficient of determination	0.5015		0.2632		0.9001	
DW	1.7525		2.4604		2.2006	
F statistic (P_value)	25.5821(0.0000)		1.8037 (0.0122)		57.099(0.0000)	

The results suggest that there is a significant inverse relationship between asset growth and stock returns, i.e. in the studied companies the increase of asset growth will lead to return reduction. By separating companies according to asset age, the results of regression analysis suggest that there is a significant difference between asset growth variable and current stock returns. Although, AG factor in the separated samples is negative and significant, these

coefficients in terms of value (which indicates the degree of relevance) are different so that the difference of mentioned coefficient in companies with new and old assets is -3.81 and -7.57, respectively. Although the results show that there is a significant negative relationship between assets growth and current stock returns for all companies, they imply that there is a stronger negative relationship between assets growth and stock returns for companies with older assets.

Model (2-2) development to test the second hypothesis is as follows:

$$RET_{it} = \alpha_0 + \beta_1 RNOA_{it-1} + \beta_2 AccG_{it} + \beta_3 LTNOAG_{it} + \beta_4 AccG_{it} \times AssAg_{it} + \beta_5 LTNOAG_{it} \times AssAg_{it} + \beta_6 PM_{it} + \beta_7 BP_{it} + \beta_8 Size_{it} + \beta_9 PInvGr_{it} + \epsilon_{it}$$

In table 5, the results from model fitting (2-2) suggest that the effect of accruals current growth (ACCG) and long-term net operating assets growth (LTNOAG) on stock returns is negative so that the more those variables increase, the more current stock returns reduces. But given the significance level it can be found that this effect is significant only in long-term net operating assets growth (LTNOAG) variable. By separating companies according to asset age, the results of regression analysis indicate that there is a significant difference between accruals current growth (ACCG) and long-term net operating assets growth (LTNOAG) at different levels of asset age. Although, accruals current growth (ACCG) coefficient is significant only in companies with older assets, it is different in terms of value (which indicates the degree of relevance) so that the results show the direct effect of accruals current growth (ACCG) on stock returns in companies with new assets, but this effect in companies with old assets is negative. Also, accruals current growth (ACCG) coefficient in companies with new and old assets is 1.89 and -33.71, respectively; that it shows accruals current growth (ACCG) in companies with old assets has increased compared to companies with new assets. In addition, long-term net operating assets growth (LTNOAG) coefficient is significantly negative at different levels of asset age. But these coefficients are different according to value so that long-term net operating assets growth (LTNOAG) coefficient in companies with new and old assets is -6.09 and -11.93, respectively and it implies the increase of asset growth effect in companies with old assets.

Table 5: The results of testing the second hypothesis – second model

Explanation	Dependent Variable RET					
	Total firm		High asset age		Low asset age	
	Coefficient	P_value	Coefficient	P_value	Coefficient	P_value
C	-8.4973	0.0003	4.5002	0.3943	-0.2012	0.9244
RNOAt-1	0.2808	0.5876	2.9045	0.0000	-3.7208	0.0000
ACCG	-1.7980	0.6249	-33.712	0.0000	1.8999	0.7546
LTNOAG	-4.4760	0.0000	-11.931	0.0024	-6.0981	0.0000
ACCGASSAG	16.565	0.0407	68.889	0.0000	21.254	0.2581
LTNOAGASSAG	12.994	0.0000	25.413	0.0003	23.858	0.0000
PM	-3.4905	0.0000	-6.7269	0.0000	-3.7103	0.0035
BP	-0.7569	0.0000	-2.5494	0.0001	-2.6050	0.0000
SIZE	1.0551	0.0000	0.2646	0.4469	0.4916	0.0083
PINVGIT	0.0040	0.9098	-0.2973	0.0000	0.1046	0.0011
AR(3)	0.1952	0.0000	0.3829	0.0000	-	-
adjusted coefficient of determination	0.4465		0.6777		0.5280	
DW	1.7837		1.6971		1.9172	
F statistic(P_value)	14.798(0.0000)		11.937(0.0000)		28.6038(0.0000)	

Third Hypotheses :Model (3) development to test the third hypothesis are as follows:

$$RET_{it} = \alpha_0 + \beta_1 RNOA_{it-1} + \beta_2 AG_{it} + \beta_3 AG_{it} \times Stra1_{it} + \beta_4 AG_{it} \times Stra2_{it} + \beta_5 BP_{it} + \beta_6 Size_{it} + \beta_7 PInvGr_{it} + \epsilon_{it}$$

$$RET_{it} = \alpha_0 + \beta_1 RNOA_{it-1} + \beta_2 AccG_{it} + \beta_3 LTNOAG_{it} + \beta_4 AccG_{it} \times Stra1_{it} + \beta_5 AccG_{it} \times Stra2_{it} + \beta_6 LTNOAG_{it} \times Stra1_{it} + \beta_7 LTNOAG_{it} \times Stra2_{it} + \beta_8 BP_{it} + \beta_9 Size_{it} + \beta_{10} PInvGr_{it} + \epsilon_{it}$$

Table 6 shows the results of third hypothesis test in two different models. As it can be seen asset growth coefficient is significant. In other words, there is a significant linear relationship between asset growth and stock returns. The negative coefficient indicates that this relationship is negative. According to definition of differentiation strategy dummy variable (STRA1) movement from 0 to 1 means change of other business strategies toward differentiation strategy. Coefficient of the variable AGSTRA1 indicates a negative effect of differentiation strategy on relationship between return and asset growth. This effect is significant at %99 confidence level. On the other hand, dummy variable STRA2 is movement from 0 to 1 that it means change of other business strategies toward cost leadership strategy. The positive coefficient AGSTRA2 confirms that the asset growth effect in companies with cost leadership strategy is positive. This effect is verifiable at 99% confidence level. In the second model, asset growth (AG) is divided into accruals current growth (ACCG) and long-term net operating assets growth (LTNOAG).

Table 6: The results of third hypothesis test

Explanation	Dependent Variable RET					
	Model (3-1)			Model (3-2)		
	Coefficient	t statistic	P_value	Coefficient	t statistic	P_value
C	-5.1283	-16.7431	0.0000	-7.3505	-4.3875	0.0000
RNOA-1	0.9376	11.7262	0.0000	0.2120	0.2685	0.7886
AG	-0.5742	-2.2464	0.0260	-	-	-
AGSTRA1	-0.7742	-11.772	0.0000	-	-	-
AGSTRA 2	4.1936	5.6791	0.0000	-	-	-
ACCG	-	-	-	4.9257	4.8313	0.0000
LTNOAG	-	-	-	-1.7676	-3.4580	0.0007
ACCGSTRA1	-	-	-	1.9408	2.1817	0.0306
ACCGSTRA2	-	-	-	35.202	2.0279	0.0442
LTNOAGSTRA1	-	-	-	-0.7869	-3.2474	0.0014
LTNOAGSTRA2	-	-	-	1.4516	0.7277	0.4679
BP	-0.4886	-40.8048	0.0000	-0.1444	-0.4363	0.6632
SIZE	0.7684	34.4529	0.0000	0.9294	7.6825	0.0000
PINVGIT	-0.0554	-2.7699	0.0063	-0.0562	-2.6579	0.0087
AR(3)	0.1870	12.5745	0.0000	0.1800	7.9265	0.0000
adjusted coefficient of determination	0.4111		0.4800			
DW	1.7504		1.8800			
F statistic(P_value)	15.9258(0.0000)			15.3515(0.0000)		

The results indicate that the effect of mentioned variables on stock returns is positive and negative, respectively; and at 99% confidence level is verifiable. Coefficients of variables ACCGSTRA1 and ACCGSTRA2 are 1.94 and 35.2, respectively; and confirm that the effect of differentiation strategy and cost leadership strategy is significantly positive on the relationship between accruals current growth (ACCG) and stock returns. This effect at 95% confidence level is verifiable. Also, value of these coefficients indicates that the effect of accruals current growth (ACCG) on stock returns in companies with cost leadership strategy is stronger. Furthermore, LTNOAGSTRA1 and LTNOAGSTRA2 coefficients are -0.78 and 1.45, respectively; and this suggests that the effect of long-term net operating assets growth (LTNOAG) on stock returns in companies with differentiation strategy and cost leadership strategy is negative and positive, respectively; although this effect was significant only in companies with differentiation strategy.

Summary and Conclusion

In this study the effect of assets age was examined to explain companies' stock returns and some evidence was presented about the effect of asset age and business strategies on the relationship between assets growth and companies' performance. Ratios analysis is a suitable tool for decision making. These ratios are based on financial statements and the financial statements are prepared based on historical data. The instability of money value causes the financial statements include a mix of different monetary values that generally comparing these different monetary values ruins the possibility of determination of defined relationships in analyzing the financial statements. Asher and Melissa (2010) show that increase of assets age reduces the usefulness of rate of return on operating assets. So, it is expected that a negative relationship exist between asset age and stock returns. Unlike the result of studies carried out by Asher and Melissa (2010), the results from test of relationship between asset age and companies stock returns in both models suggested that there was a significant and direct relationship between assets age and stock returns and increase of the mentioned variable led to increase of studied companies' stock returns. The results from previous studies suggest that assets growth will lead to poor subsequent performance and usually it is attributed to market excessive optimism in pricing growth (Firefield et al, 2003; Cooper et al, 2008). Many researches confirm that return premium that is obtained from stock with low asset growth is consistent with risk compensation (Gomez, Kogan and Zhang, 2003; Li Livdan and Zhang, 2008). In fact, companies have mix of growth options and assets in place and growth options compared to assets in place are more risky. When companies use growth options, the risk of company's mix of assets will be reduced because new assets will be replaced and systematic risk reduction after using growth options indicates a negative relationship between investment and future return. It seems in companies with old assets, share of growth options is added in mix of assets and mix of assets has a greater risk. Therefore it is expected that increase (decrease) of assets age will lead to increase (decrease) of assets growth effect. The results show a negative relationship between assets growth and current return of stock for all companies and imply stronger negative relationship between assets growth and stock returns for companies with old

assets. By separation the asset growth to accruals current growth (ACCG) and long-term net operating assets growth (LTNOAG), the results indicated that the negative effect of assets growth concentrated in long-term net operating assets growth and by increase of asset age this effect was stronger. This result is consistent to results of Asher and Melissa (2010) study. In following review of the effect of business strategies on the relationship between asset growth and current performance, companies were categorized based on cost leadership strategy and differentiation strategy. The aim of cost leader companies from using assets is to enhance the managerial efficiency. Increasing advances in technology and innovation in the production process are factors that reduce the operational efficiency of assets. Taking advantage of growth options in order to improve assets management is more important for those companies that consider promotion of efficiency and effectiveness (cost leader companies). Managers of these companies are trying to provide a unique mix of assets by taking advantage of systematic and firm programs and achieve cost advantage. Li, Li and Zhang (2008) benefited from indexes of cost of external finance to find that according to theories based on risk and asset growth, the asset growth effect and other factors are stronger for companies that have higher cost of external finance. Limitations due to increase of the debts and requirements and commitments contained in financing agreements of discriminant companies are among the factors that inhibit creativity and innovation of managers and finally they cause the process of developing sustainable competitive advantage face with problem. On the other hand, the higher levels of debt and increase of leverage in discriminant companies is considered a high-risk approach. Therefore, it is expected that differentiation strategy by increase of the risk will cause increase of negative effect of asset growth. Test results indicate that assets growth effect in companies with differentiation strategy and cost leadership strategy became negative and positive, respectively. By separation of asset growth to accruals current growth (ACCG) and long-term net operating assets growth (LTNOAG), the results indicate that the effect of accruals current growth in companies with differentiation strategy and cost leadership strategy is significantly positive, although this effect in companies with cost leadership strategy was stronger. On the other hand, the effect of long-term net operating assets growth (LTNOAG) in companies with differentiation strategy and cost leadership strategy was negative and positive, respectively. However, this effect was significant only in companies with differentiation strategy.

Limitations

The limitations of this study are the lack of clear and accurate reflection of research and development (R&D) costs in companies financial statements which can be an index and basis in determination and separation of companies' business strategy.

Future Suggestions

By verification the relationship and reverse role of assets growth with company productivity, managers of companies and non-financial economic units should try to rank investments and select the most profitable projects for investment in order to achieve higher profitability and more sustainable operating performance. Applying strategies has effect on the financial performance of companies and will lead to improve their performance. Since applying the cost leadership strategy will not lead to sustainable long-term economic performance because it can be easily imitated by competitors, but applying differentiation strategy can lead to a sustainable economic performance because it needs more time to be imitated by competitors performance, it is proposed that companies and institutions consider the above factors and use them in order to stabilize their financial performance and its improvement. Also, the following studies are suggested to be performed:

1. Looking for determination the factors affecting the performance based on competitive differentiation strategy.
2. Assessing the relative changes of importance of business strategies during company life cycle.
3. In the present study to separate different types of business strategies the indexes of profit margin and accounts and notes receivable turnover were used. It is suggested that exogenous variables be studied in such studies.

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