Journal of
Applied Sciences

science
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Analysis of the Relationship Between Company's Growth and its Financial Performance Empirical Evidence from the Sample of Listed Companies of Strategic Emerging Industries in Anhui Province

[1,2]Ben-Qiang Wang and [1]Xue-Chun Yang
[1]Department of Financial Management, Faculty of Management, Hefei University,
Hefei City, 230601, Anhui Province, China
[2]Department of Business and Economics, Faculty of Business, Hohai University,
Nanjing City, 230601, Jiangsu Province, China

Abstract: It has important practical significance to be clarified the relationship between listed company's growth and its financial performance to promoting its sustainable development of strategic and emerging industries, but study achievements of it are quite rare in china. By selecting the weighted average concerning such TAIR, MBIRI and NAIRI as to be explained variable of company's growth and these indicators such ATIR, ALR, NPIRS as to explain variable of its financial performance, this study regression analysis of the relationship between listed company's growth and its financial performance of strategic emerging industries based on 2006-2012 sdata in Anhui Province. The research has shown that listed company's growth has significantly positively correlates with its finance performance of strategic emerging industries in Anhui Province. Therefore, the listed company should enhance its profitability through a variety of ways, increase its long-term debt and reduce short-term debt and speed up its all kinds of assets turnover appropriately to promoting its sustainable development of strategic and emerging industries in Anhui Province.

Key words: Strategic emerging industries, listed company, growth, financial performance

INTRODUCTION

The relationship between company's growth and its financial performance has been a hot topic in domestic or abroad academic circles. Myers (1977) pointed out that company's growth was inversely associated with its debt-ratio. In addition, industry attributes, assets-liabilities scale and governance structure had significant effects on company's growth. Wu and Jia (2002) pointed out that the arrangement of financing system, industry evolution, technology and knowledge economy, information disclosure and capital structure had been significant influencing factors of company's growth. Beck *et al.* (2005) thought that company's growth depends largely on its assets-scale. It is well known that company's growth has more significant effect through the financing system, the legal system and the high rate of corruption and so on in developing countries than in developed countries.

In recent years, the financial evaluation method about company's growth has been selected from single financial indicator such as P/B (Price to book ratio) (Song, 2001), net profit's increasing rate (Cen, 2002),

Tobin Q (Jiang, 2005), main business's increasing rate of income (Lv and Chao, 2006), net assets's increasing rate (Zeng and Ding, 2007) to setting up a multi-indicators evaluation model. Wu and Li (1999) had selected asset turnover, Gross profit on sale, asset-liability ratio, main business's increasing rate of income, period expenses and so on to constructing evaluation model. Wang and He (2005) had studied listed company's growth using these indicators such as main business's increasing rate of income, main business profit's increasing rate and net profit's increasing rate. Based on the regression analysis, Liu and Gan (2005) pointed out that net profit's increasing rate was positive correlation with ROE, meanwhile, it took negative correlation to asset-liability ratio. Lin *et al.* (2008) had selected net profit's increasing rate, main business's increasing rate of income, asset increasing rate and so on to studying listed company's growth.

The existing research on the relationship between company's growth and financial performance has been more discussed common problems while less studied the individual differences of disparate industry and different nature of companies. What is more, the research results on the relationship between company's growth and its

financial performance of strategic emerging industry does not see more. For this reason, in order to providing some valuable suggestions for its sustainable development in the future, this study will make a tentative study to the relationship between listed company's growth and its financial performance of strategic emerging industries in Anhui Province.

EMPIRICAL RESEARCH

Research hypothesis: In this article, listed company's growth of strategic emerging industries in Anhui province has been defined as the process of "expansion of quantity" to expanding these companies's scale and the process of "improve of quality" to improving these companies's quality. Therefore, the basic Hypothesis of this study is "good financial performance of listed Company, growth is better". Moreover, according to the definition[1] of financial performance and considering the multi variable might have collinearity problem This study has selected asset-turnover increasing rate (acronym: AT-IR), asset-liability ratio (acronym: ALR), net-profit's increasing rate of sales (acronym: NPIRS) as significant indicators to measuring these companies's financial performance. For this reason, this study puts forward the following three hypotheses.

- **Hypothesis 1:** It is showed positive correlation between ATIR and listed company's growth

One of the most important indicators of ATIR is a reflection of company's operating capacity which its average increasing rate reflects the quality of company's asset and its utilization efficiency. When the company ATIR is higher and liquidity is stronger, the efficiency of asset management is better, so as to promote healthy development of those companies. Therefore, this study assumes that ATIR and listed company's growth of strategic emerging industries will be to change in the same direction in Anhui Province:

- **Hypothesis 2:** When ALR is below 60%, it is showed positive correlation between ALR and listed company's growth

ALR is an important indicator to evaluating listed company debt-paying ability and financial risk. Described as the classical financial theory, ALR and t listed company's growth is a positive correlation before the capital structure of the company is not optimal; however, ALR and listed company's growth is a negative correlation after the capital structure of the company is

optimal. Tao and Zheng (2005) pointed out that the optimal capital structure of listed Company in China should be less than 60%. This study adopted their view:

- **Hypothesis 3:** It is showed positive correlation between NPIRS and listed company's growth

NPIRS is one of the important indicators to reflecting company's profitability and its business growth. The listed company has a stronger profitability can not only meet its internal funds needed, but also can be transferred a favorable financial signal to outside stakeholders which is conducive to maintain listed company sustainable growth in the whole production and operation process. Therefore, this study assumes that NPIRS has positive correlation with listed company's growth.

Data collection and variable design: Taking into account these factors such as industry classification, ST/PT, information disclosure, this study selected 35 listed Companies of strategic emerging industries in Anhui Province as a research sample which has been selected from A shares and the GEM market in Shanghai or Shenzhen. The research data comes from annual reports (2006-2012) of these listed compamies.

Design to be explained variable-listed company's growth: This study selects total assets increasing rate (acronym: TAIR) and main business increasing rate of income (acronym: MBIRI) to explain these listed companies's "expansion of quantity" of these listed companies and net assets increasing rat of income (acronym: NAIRI) to explain these listed companies's "improve of quality". In addition, the weighted average concerning such TAIR, MBIRI and NAIRI as alternative index of listed company's gowth of strategic emerging industries is as follows:

$$Growth = \alpha_1 * X_1 + \alpha_2 * X_2 + \alpha_3 * X_3$$

Growth: Company's gowth; X_1: TAIR; X_2: MBIRI; X_3: NAIRI; α_1, α_2, α_3: The weight of X_1, X_2, X_3: The weight value by using principal component analysis to determine.

Design to explain variable-financial performance: To be considered of the listed company's profitability, asset quality, debt risk, business growth and so on. This study selects these indicators such ATIR, ALR, NPIRS as explanatory variables.

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[1]Financial performance is refers to quantitative analysis and evaluation of company's profitability, asset quality, debt risk, business growth and other aspects in a certain period

Table 1: Total variable explained and factor value

Component	Initial eigenvalues			Extraction sum of squared loadings			Factor value	
	Total	Variance (%)	Cumulative (%)	Total	Variance (%)	Cumulative (%)	Principal component :11	
1	1.851	61.692	61.692	1.851	61.692	61.692	MBIRI	0.976
2	1.076	35.866	97.558				TAIR	0.926
3	0.073	2.442	100.00				NAIRI	0.203

Table 2: Descriptive statistics

Variable	N	Min	Max	Mean	Std.deviation	Variance
Growth	24	-0.10	2.32	0.5375	0.50761	0.258
NPIRS	24	-2.80	1.60	0.1570	0.73687	0.543
ATIR	24	-0.26	0.20	0.0281	0.12214	0.015
ALR	24	0.10	0.66	0.4383	0.18357	0.034

Table 3: Correlation of listed company's growth with ATIR, ALR and NPIRS

Variable	Correlation	NPIRS	ATIR	ALR
Growth	Pearson correlation	0.625**	0.461*	0.652*
	Significant (bilateral)	0.003	0.000	0.002
	covariance	0.023	0.029	0.028

Results of regression analysis: In order to determine the relationship between listed company's growth and its financial performance, this study builds the following multiple regression model:

$$Growth = \beta_1 + \beta_2 * Y_1 + \beta_3 * Y_2 + \beta_4 * Y_3 + \varepsilon$$

where, Y_1: ATIR; Y_2: ALR; Y_3: NPIRS; β_1, β_2, β_3, β_4: Regression coefficients: ε: Deviation.

To determine the weight coefficient of these indicators such as TAIR, MBIRI and NAIRI to affect the listed company's growth by the method of factor analysis. The results about total variable explained and factor value can be seen in Table 1.

Table 1 shows that there is a very strong correlation among TAIR, MBIRI and NAIRI. Therefore, These financial indcators can be aggregated into a total factor which to Measuring the listed company's growth of strategic emerging industries in Anhui Province. According to Table 1, Growth can be expressed as follows:

$$Growth = 0.976 * MBIRI + 0.926 * TAIR + 0.203 * NAIR$$

Descriptive statistics of the listed company's growth variables as shown in Table 2.

Table 2 shows that the listed company's average NPIRS is 1.57% which the highest is 160% and the lowest is -280%. Thus, it can be seen one big difference in business growth and profitability among 35 listed companies of strategic emerging industries in Anhui Province. On the other hand, the listed companies's ATIR is 2.81% which the highest is 20% and the lowest is -26%. From here we can seen that there is a big difference between assets quality and management efficiency among these listed companies.

Some companies to speeding up the total asset-turnover and to improving profitability can enhance their growth. Otherwise some are can not. In the end, We can seen the listed companies's capital structure is more reasonable and the risk of debt is relatively lower because of the listed companies's average ALR being 43.83%.

Regression analysis: Correlation of listed company's growth and ATIR, ALR, NPIRS such as shown in Table 3.

It follows from the Table 3 that the listed company's growth has asignificantly related to ATIR, ALR and NPIRS at the 0.01 level significantly correlated (bilateral) which the correlation coefficients were 0.461, 0.652, 0.625, respectively. Therefore, By the regression analysis, the relationship between listed company's growth and its financial performance can been seen in the model:

$$Growth = 0.084 + 1.56 * Y_1 + 0.615 * Y_2 + 0.82 * Y_3$$

$$(-0.016)\ (6.798)**\ (3.436)**\ (6.678)**$$

$$F = 20.932,\ sig.\ F = 0.003;\ R^2 = 0.671,$$
$$AdjR^2 = 0.547;\ D\text{-}W = 8.677$$

As we can seen, the equation has a better goodness of fit and strong explanatory power because of its correlation coefficient reaching 0.947 and 0.880, respectively. Meanwile, the independent variable can well explain the dependent variable in accordance with F test value being equal to 20.932 and passing through the 1% level of significance test in the equation. Moreover, Due to D-W value being equal to 8.677 and passing through the 5% level of significance test, The equation has non-existent itself correlation. Thus, the regression equation takes on significantly higher and stronger interpretation. In addition, Due to theirs passing through the 5% level of significance T test, the listed company's growth has a significant correlation with ATIR, NPIRS and ALR:

- The result showed a positive correlation between the listed company's growth and ATIR. Meanwhile which ATIR increases 1%, the listed company's growth will increase 1.56%. Therefore, when ATIR is higher, the listed company's assets liquidity is

stronger, management quality and utilization efficiency is better. All these contribute to the healthy growth of the listed companies

- The result showed a positive correlation between the listed company's growth and ALR. Meanwhile which ALR increases 1%, the listed company's growth will increase 0.615%. Therefore, It is indicated that the listed company's ALR is more reasonable in the presen which to improve the solvency and to reduce financial risk is conducive to the healthy growth of the companies
- The result showed a positive correlation between the listed company's growth and NPIRS. Meanwhile which NPIRS increases 1%, the listed company's growth will increase 0.82%. Therefore which to improve the listed company's profitability and to expand its production and operating scale is not only to meet the listed company internal funding needs, but also to all stakeholders transferring favorable financial signal

CONCLUSION

The foregoing studies has shown that the listed company's growth has an observably correlative relationship with its financial performance of strategic emerging industries in Anhui Province. In other words, financial performance is one of the factors which influence the listed company's growth of strategic emerging industries in Anhui Province. The research indicates that importance should be attached to the following points.

First of all, the listed companies of strategic emerging industries should enhance theirs profitability through a variety of ways in Anhui Province. As everyone knows, to improve their profitability will be supportive of long-term sustainable development of the listed companies of strategic emerging industries in Anhui Province. Therefore, In order to obtain more profit, the listed companies of strategic emerging industries should take advantage of their technology superiority to expand market share in Anhui Province. At the same time, the listed companies of strategic emerging industries should strengthen their cash-flow management and reduce their financial risks so as to improve their yields on cash in Anhui Province.

Secondly, the listed companies of strategic emerging industries should increase their long-term debt and reduce their short-term debt in Anhui Province. As everyone knows, to improve their solvency will be conducive to reduce financial risks and ensure their continuous operations of the listed companies of strategic emerging

industries in Anhui Province. Therefore, on the one hand, the listed companies of strategic emerging industries should make good use of long-term debt to help their grows strong in Anhui Province; on the other hand, the listed companies of strategic emerging industries should reduce short-term debt scale in order to reduce their financial pressure and to promoting their healthy growth in Anhui Province,

Thirdly, the listed companies of strategic emerging industries should speed up their all kinds of assets turnover appropriately in Anhui Province. As everyone knows, the listed companies of strategic emerging industries to speed up all kinds of assets turnover will be helpful to increase their utilization efficiency and to further enhance their profitability in Anhui Province.

ACKNOWLEDGMENTS

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