FACTORS AFFECTING FINANCIAL PERFORMANCE OF FIRMS LISTED ON SHANGHAI STOCK EXCHANGE 50 (EEE50)

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UTCC *International Journal of Business and Economics* **IJBE**

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Abstract

The study examines the impacts of factors, including liquidity, asset utilization, leverage and firm size on financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50) (excluding financial firms). The study covers 28 companies listed on SSE 50 as a sample. Dependent variables of the study are return on assets (ROA) and return on equity (ROE), and independent variables are liquidity as measured by current ratio (CR), asset utilization as measured by total asset turnover ratio (TAT), leverage as measured by debt ratio (DR), and a dummy variable is firm size. This study uses annual data from financial statements starting from January 2008 to December 2012. Multiple regressions with Ordinary Least Squares are used. After taking into account the problems multicollinearity, heteroskedasticity and autocorrelation, the study finds that asset utilization and leverage are factors that affect financial performance of firms listed on SSE 50. For both types of firm performance measurement (ROA and ROE), the results show a positive and significant relationship between assets utilization and firm performance and a negative and significant relationship between leverage and firm performance.

Keywords: Firm Performance, Shanghai Stock Exchange 50 (SSE 50), Liquidity, Asset utilization, Leverage, Firm size

1. Introduction

1.1 Background of the study

As the stock market of China has been developing 20 years, the listed firm has become the leading role in the Chinese economy. Financial performance of listed firms becomes the issue of common concern of the stakeholders including the shareholder, the creditor, the company staffs and the government administration.

This study will attempt to evaluate and measure the impact of financial factors related to areas of liquidity, asset utilization and leverage on the financial performance. In order to study this case the researcher chose the firms listed on Shanghai Stock Exchange 50 (SSE 50) as a sample for this study the main reason for this choice because these companies are 50 largest stocks of good liquidity and representativeness in Shanghai Stock Exchange (SSE).

The main objective of this selection is to study and measure the strength and the weakness of the financial performance and the internal factors affecting this performance of these companies, as well as discover the extent of the application of these companies to the principles of financial management, which aims mainly to develop financial performance in various economic units, through the use of financial analysis methods, especially the method of financial ratio analysis. Measuring performance is very important because it builds on the results,

make different decisions in economic units. According to (Benjalux Sakunasingha. 2006) performance measures are the life blood of economic units, since without them no decisions can be made. Financial performance Measure is one of the important performance measures for economic units. Financial performance measures are used as the indicators to evaluate the success of economic units in achieving stated strategies, objectives and critical success factors (Katja Lahtinen, p. 11, 2009).

The main objective of financial performance measuring is to determine the operating and financial characteristics and the efficiency and performance of economic unity management, as reflected in the financial records and reports (Amalendu Bhunia, p. 429, 2010). Financial ratio analysis method is an important measure to financial performance analysis in the economic units. Ratio analysis method is the most commonly used financial tool to evaluate the current and past performance in the economic unit and to assess its sustainability (Dick W. Feenstra, et al, p. 7, 2000). It's the important analytical tools of finance, which provides managers with executives important insights regarding overhead cost structure, ability to raise capital, adequacy of working capital and contingency reserves, and efficient use of assets through the evaluation of a set of financial ratios, observations of trends in those ratios, and comparisons to average values for other companies in the industry, also this method it can be a productive starting point for assessing financial strengths and weaknesses, creditworthiness, and other attributes of a firm based on past performance (Joy S. Rabo, p. 91, 2008). Ratio analysis helps to determine the performance of liquidity, profitability and solvency position of economic units and it provides all assistance to the management to fix responsibilities (P. Periasamy, p. 234, 2005).

1.2 Problem Statement

The subject of financial performance has received significant attention from scholars in the various areas of business and strategic management. It has also been the primary concern of business practitioners in all types of organizations since financial performance has implications to organization's health and ultimately its survival. High performance reflects management effectiveness and efficiency in making use of company's resources and this in turn contributes to the country's economy at large. (Naser, and Mokhtar, 2004)

1.3 Objectives of the study

The study covers the following objectives:
1. To examine the effect of liquidity on financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50).
2. To examine the effect of asset utilization on financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50).
3. To examine the effect of leverage on financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50).
4. To examine the effect of firm size dummy on financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50)

2. Literature review

2.1 Firm Performance

According to Hansen and Mowen (2005), firm performance is very essential to management as it is an outcome which has been achieved by an individual or a group of

individuals in an organization related to its authority and responsibility in achieving the goal legally, not against the law, and conforming to the morale and ethic. Performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage.

According to Benjalux (2006) performance measures are the life blood of economic units, since without them no decisions can be made. Financial performance Measure is one of the important performance measures for economic units. Financial performance measures are used as the indicators to evaluate the success of economic units in achieving stated strategies, objectives and critical success factors (Katja, 2009).

2.2 Dependent variables

ROA: The reason for choosing this variable is that the return on assets (ROA)) it measures the effectiveness of the economic unity in using its assets to generate profit especially manufacturing, the higher this ratio, the better the economic unity of the as it indicates the management's efficiency in using its assets to generate profit (Mahdi and Kumars,, 2009), and also it represents the ratio of how much a firm has earned on its asset base, and the return on assets (ROA) .Will also be used in this study as a dependent variable because accordingly the net profit in relation to the selected firms asset base is a good way to measure the extent of returns on investments made in the firms, return on assets (ROA) has been used as a dependent variable by: Liargovas and Skandalis (2008); Hifza (2011); Ahsen et al. (2012); Sayeda (2011), Amal et al. (2012).

ROE: The reason for choosing this variable is that one of the most important profitability metrics is return on equity (ROE). According to Ward and Price (2006), Return on equity reveals how much profit a company earned in comparison to the total amount of shareholder equity found on the balance sheet. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. For the most part, the higher a company's return on equity compared to its industry, the better. One of the ways to measure the profit enjoyed by shareholders is by using return on equity (ROE) ratio, the reason is that ROE ratio is comparable between one companies to the other and can indicate the profitability of one industry with the other. (Helfert, 2001)

2.3 Independent variables

Liquidity

One of the most common measure of working capital is the current ratio. "Current ratio is a measure of relative liquidity that takes into account differences in absolute size. It is used to compare companies with different total current assets and liabilities" (Louderback et al., 2000).

Binti and Binti (2010) found that current ratio is negatively significant to financial performance of 172 listed Malaysian firms. Eljely (2004) empirically examined the relationship of liquidity and profitability as measured by current ratio and cash gap on a sample of 29 joint stock companies in Saudi Arabia and found significant negative relation between the firm's profitability and its liquidity level, as measured by current ratio using correlation and regression analysis.

Asset utilization

According to Ellis (1998), asset utilization measures which assets are capable of producing and what they actually produce. Conversely, asset dis-utilization represents losses in revenue in relation to the investment that may be attributable to the inefficient use of assets. Fleming, Heaney and McCosker (2005) pointed out that asset dis-utilization may increase agency costs because managers do not act in the best interests of the owners.

Okwo (2012) a study of Investment in fixed assets and firm profitability. It was found that the relationship is positive but the result is not statistically significant. Xu and Xu (2013), a research of the optimal allocation of assets structure and business performance, and the finding showed statistically significant relationship between assets Structure and business performance. Further, Jose et al. (2010), Wu et al. (2010) and Seema et al. (2011) pointed out asset utilization has a significant effect on firm's financial performance.

Leverage

According to Rajan and Zingales (1995), leverage can be defined as the ratio of total liabilities to total assets. It can be seen as alternative for the residual claim of equity holders.

Aquino (2010) studied the capital structure of listed and unlisted Philippine firms. His study showed that high debt ratio is positively associated with the firm's growth rate and profitability. Joshua (2005) research paper revealed significant relationship between the ratio of total debt to total assets and ROE. The results of Aivaziana et al (2005) examined the impacts of financial leverage on the investment decisions and found that this is a negative relationship. In another study, Ahna et al (2006) found that the negative impact of financial leverage on the investment in the unimportant sectors is much important than the key sectors. Results of Youmatelo (2012) show that financial leverage negatively affects the investment decisions and those companies with higher debts are less eager to invest in the capital assets.

Firm Size

Vijayakumar and Tamizhselvan (2010) found a positive relationship between firm size and profitability. Papadognas (2007) conducted analysis on a sample of 3035 Greek manufacturing firms and revealed that for all size classes, firms' profitability is positively influenced by firm size. Lee (2009) examined the role that firm size plays in profitability. Results showed that absolute firm size plays an important role in explaining profitability. Amato and Burson (2007) tested size-profit relationship for firms operating in the financial services sector. With the linear specification in firm size, the authors revealed negative influence of firm size on its profitability. Amarjit et.al (2010) found no significant relationship between firm size and gross operating profit ratio. The study of Falope and Ajilore (2009) also found no significant variations in the effects of working capital management between large and small firms in Nigeria using a sample of 50 quoted companies.

3. Methodology

3.1 Scope of the study

This study investigates and examines the effects of liquidity, asset utilization, leverage and firm size dummy on financial performance of firms listed on Shanghai Stock Exchange 50

(SSE 50). Therefore, the research is designed to use the quantitative research method and collecting the secondary data of firms' financial information. In order to achieve the aims of this study the researcher used the multiple linear regression analysis to identify the relationship between the financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50) and liquidity, asset utilization, leverage and firm size dummy. Data will be analyzed with two dependent variables are return on assets (ROA) and return on equity (ROE) to measure financial performance and four independent variables are liquidity as measured by current ratio (CR), asset utilization as measured by total asset turnover ratio (TAT), leverage as measured by debt ratio (DR), and a dummy variable is firm size dummy.

3.2 Population and Sample of the study

The study population consisted of all firms listed on Shanghai Stock Exchange 50 (SSE 50) during the period (2008-2012) which consists fifty of listed companies. But the researcher would rather to exclude financial service firms within these fifty companies, meaning only 28 manufacturing firms listed on SSE 50 as the sample of the study.

3.3 Data Collection

The present study mainly based on secondary data. Secondary data means is the data that have been already collected by and readily available from other sources. In order to make data consistency the data for this study was collected from the financial statements of firms listed on Shanghai Stock Exchange 50 (SSE 50) during the study period, namely the balance sheet and income statement published by www.jrj.com. Founded by a group of VC investors including IDG and VERTEX in 1999, www.jrj.com is the leading provider of financial data and information in China, and a leading Chinese finance portal in the world. Moreover, the researcher used other resources such as books texts and Journals. In order to collect the scientific content of the theoretical framework of the study and to explain the basic concepts of the study, also this data use to study, measuring and identified on a numerical scale.

3.4 Model of the study

Following is the regression equation:
$$Y = \alpha + b_1 X_{1it} + b_2 X_{2it} + \ldots\ldots\ldots\ldots\ldots\ldots + b_n X_{nit} + e$$
Where: Y: Dependent Variable, α: Constant Coefficient.bn: Regression Coefficient, Xn: Independent Variable, e: Error Term.

In this study, CR, TAT, DR and FSD (firm size dummy), will be taken as the explanatory variables and ROA and ROE will be used as the dependent variables. The regression models will be as follow:
Model 1: $ROA = \alpha + b_1 CR_{it} + b_2 TAT_{it} + b_3 DR_{it} + b_4 FSD_{it} + e$
Model 2: $ROE = \alpha + b_5 CR_{it} + b_6 TAT_{it} + b_7 DR_{it} + b_8 FSD_{it} + e$
(Where i is a company from 1 to 28; t is a time period from 2008 to 2012)

Figure 1 Conceptual framework of the study
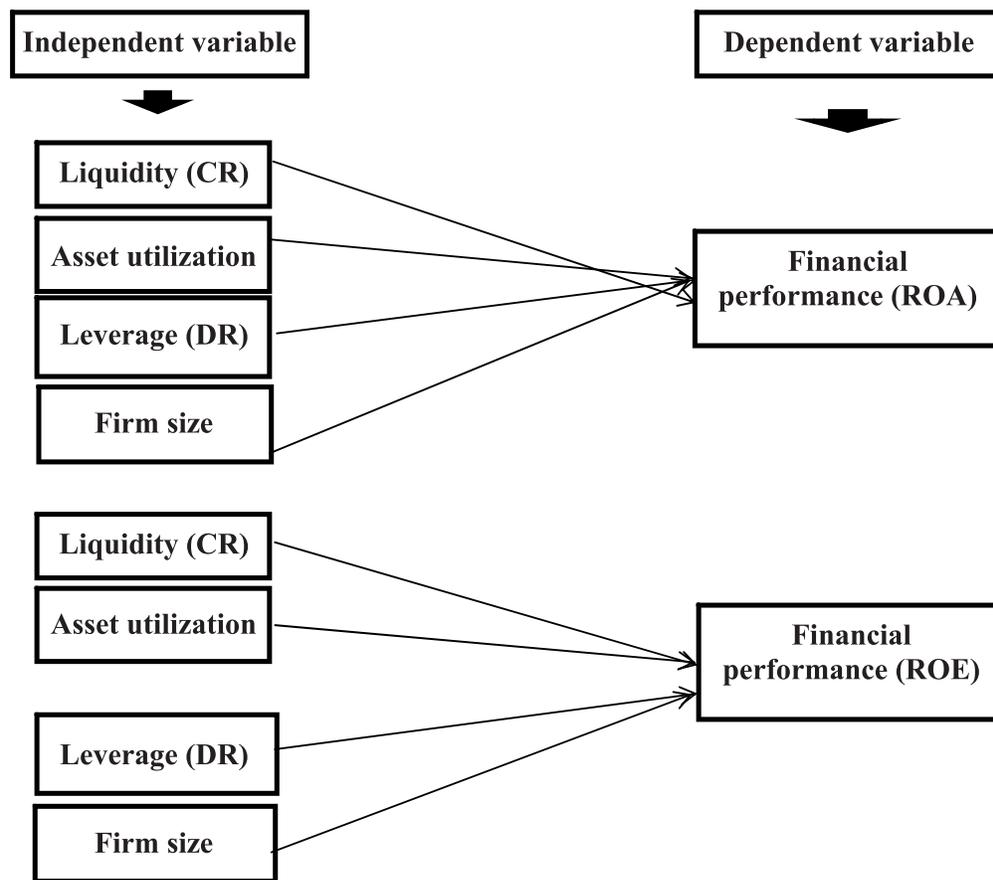
3.5 Hypothesis of the study

Hypothesis 1: Liquidity has a negative effect on financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50).

Hypothesis 2: Asset utilization has a positive effect on financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50).

Hypothesis 3: Leverage has a negative effect on financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50).

Hypothesis 4: There is no significant relationship between firm size dummy and financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50).

4. Results

4.1 Descriptive Statistics

Descriptive studies produced the mean, minimum, maximum and standard deviation for each variable of firms listed on Shanghai Stock Exchange 50 (SSE 50) during 2008-2012. Based

Table 2 the mean value of return on assets (ROA) is 12.58143% and the value of maximum is 62.97%, it means that firm performance of listed firms show good during the period. Also return on equity (ROE) show positive to support it with the value of mean 16.92093%. The mean value of current ratio (CR) is 1.360857 and the value of standard deviation is 0.721982. The mean value of total assets turnover ratio (TAT) is 1.043214 with the standard deviation is 0.801115. The mean value of debt ratio (DR) is 0.535429 with the standard deviation is 0.148049. The mean value of firm size is dummy 0.221429.

Table 2 Data descriptive statistics results for all variables (2008-2012)

Variables	N	Minimum	Maximum	Mean	Std. Dev.
Return on assets (%)	140	-17.68	62.97	12.58143	9.350741
Return on equity (%)	140	-60.5	61.75	16.92093	11.46193
Current ratio	140	0.33	4.61	1.360857	0.721982
Total assets turnover ratio	140	0.18	4.93	1.043214	0.801115
Debt ratio	140	0.21	0.85	0.535429	0.148049
Firm size dummy	140	0	1	0.221429	0.416699

4.2 Correlation Test

Table 3 shows a correlation matrix of all independent variables in this study. From the table, we can see that CR and TAT have a negative relationship, and the coefficient is -0.348672. CR and DR have a negative relationship, and the coefficient is -0.243584. CR and FSD have a negative relationship, and the coefficient is -0.193136. TAT and DR have a positive relationship, and the coefficient is 0.002114. TAT and FSD have a positive relationship, and the coefficient is 0.013585. DR and FSD have a positive relationship, and the coefficient is 0.015360. The results show that these four independent variables can be together in the same model when use the regression because none of the correlation has an absolute value above 0.8, meaning that there is no multicollinearity problem.

Table 3 The correlation between the independent variables

	CR	TAT	DR	FSD
CR	1			
TAT	-0.348672	1		
DR	-0.243584	0.002114	1	
FSD	-0.193136	0.013585	0.01536	1

Note: CR is current ratio; TAT is total assets turnover ratio; DR is debt ratio; FSD is firm size dummy.

4.3 Regression Analysis

4.3.1 Heteroskedasticity Test

Table 4 shows the results of White test in Model 1. Return on assets (ROA) is a dependent variable. Based on Table 4 we can see the P value of F-statistic is 0.2563 and the P value of Obs*R-squared is 0.2531, both of them above significant level 0.05. So we can say that there is no heteroskedasticity problem in Model 1.

Table 4 Heteroskedasticity Test: White for Model 1

| F-statistic | 1.244168 | Prob. F(13,126) | 0.2563 |
| Obs*R-squared | 15.92684 | Prob. Chi-Square(13) | 0.2531 |

Table 5 shows the results of White test in Model 2. Return on equity (ROE) is a dependent variable. Based on **Table 5** we can see the P value of F-statistic is 0.1247 and the P value of Obs*R-squared is 0.1294, both of them above significant level 0.05. So we can say that there is no heteroskedasticity problem in Model 2.

Table 5 Heteroskedasticity Test: White for Model 2

| F-statistic | 1.503658 | Prob. F(13,126) | 0.1247 |
| Obs*R-squared | 18.80249 | Prob. Chi-Square(13) | 0.1294 |

4.3.2 Autocorrelation Test

Table 6 shows the results of Breusch-Godfrey Serial Correlation LM Test in Model 1. Return on assets (ROA) is a dependent variable. Based on **Table 6** we can see the P value of F-statistic is 0.0000 and the P value of Obs*R-squared is 0.0000, both of them below significant level 0.05. So we can say that there exists an autocorrelation problem in Model 1.

Table 6 Breusch-Godfrey Serial Correlation LM Test for Model 1

| F-statistic | 14.11750 | Prob. F(2,133) | 0.0000 |
| Obs*R-squared | 24.51640 | Prob. Chi-Square(2) | 0.0000 |

Table 7 shows the results of Breusch-Godfrey Serial Correlation LM Test in Model 2. Return on equity (ROE) is a dependent variable. Based on **Table 7** we can see the P value of F-statistic is 0.0002 and the P value of Obs*R-squared is 0.0003, both of them below significant level 0.05. So we can say that there exists an autocorrelation problem in Model 2.

Table 7 Breusch-Godfrey Serial Correlation LM Test for Model 2

| F-statistic | 8.870384 | Prob. F(2,133) | 0.0002 |
| Obs*R-squared | 16.47668 | Prob. Chi-Square(2) | 0.0003 |

4.3.3 Multiple Regression Analysis

Table 8 shows the results of multiple regression analysis in Model 1. Return on assets (ROA) is a dependent variable. Results show that the variables of current ratio (CR) and total assets turnover ratio (TAT) are positive related with return on assets (ROA). While the variables of debt ratio (DR) and firm size dummy (FSD) are negative related with return on assets (ROA). The significant coefficients are as follows: Coefficient of total assets turnover ratio (TAT) is 2.294013 indicating that when the total assets turnover ratio (TAT) increases by 1 percentage point with the assumption that other variables remain constant, then the return on assets (ROA)

will increase by 2.294013 percent. Coefficient of debt ratio (DR) is -35.45244 indicating that when debt ratio (DR) increases by 1 percentage point with the assumption that other variables remain constant, then the return on assets (ROA) will decrease by 35.45244 percent. Coefficient of firm size dummy (FSD) is -2.926341 indicating that when firm size dummy (FSD) increases (mean if a firm grows in total assets to over average level) with the assumption that other variables remain constant, then the return on assets (ROA) will decrease. The model identified for the variables studied is as follows:

ROA = 26.94039+ 2.114934 CR + 2.294013TAT* - 35.45244 DR* - 2.926341 FSD*

Table 8 The results of the Newey-West estimation about the impact of factors on ROA

	Coefficient	Std. Error	t-Statistic	Prob.
C	26.94039	2.944247	9.150179	0.0000
CR	2.114934	1.771914	1.193587	0.2347
TAT	2.294013	0.833493	2.752289	0.0067
DR	-35.45244	5.091774	-6.962690	0.0000
FSD	-2.926341	1.405312	-2.082343	0.0392

Table 9 shows the result of multiple regression analysis in Model 2. Return on equity (ROE) is a dependent variable. Results show that the variables of current ratio (CR) and total assets turnover ratio (TAT) are positive related with return on equity (ROE). While the variables of debt ratio (DR) and firm size dummy (FSD) are negative related with return on equity (ROE). The significant coefficients are as follows: Coefficient of total assets turnover ratio (TAT) is 2.493034 indicating that when the total assets turnover ratio (TAT) increases by 1 percentage point with the assumption that other variables remain constant, then the return on equity (ROE) will increase by 2.493034 percent. Coefficient of debt ratio (DR) is -19.32528 indicating that when debt ratio (DR) increases by 1 percentage point with the assumption that other variables remain constant, then the return on equity (ROE) will decrease by 19.32528 percent. The model identified for the variables studied is as follows:

ROE = 23.11837+ 1.611894 CR + 2.493034TAT* - 19.32528 DR* - 2.910471 FSD

Table 9 The results of the Newey-West estimation about the impact of factors on ROE

	Coefficient	Std. Error	t-Statistic	Prob.
C	23.11837	4.125024	5.604421	0.0000
CR	1.611894	1.806058	0.892493	0.3737
TAT	2.493034	1.167549	2.135272	0.0345
DR	-19.32528	7.266856	-2.659373	0.0088
FSD	-2.910471	2.034044	-1.430879	0.1548

5. Conclusion and discussion

5.1 Conclusion

This study intends to investigate factors that affect financial performance of firms focusing only on firms listed on Shanghai Stock Exchange 50 (SSE 50) excluding financial firms, namely a sample of 28 companies. The dependent variable of the study is return on assets (ROA) and return on equity (ROE), and independent variables are liquidity as measured by current ratio (CR), asset utilization as measured by total asset turnover ratio (TAT), leverage as measured by debt ratio (DR), and a dummy variable is the firm size dummy. This study uses the annual data from financial statements starting from January 2008 to December 2012.

The research used the quantitative research method. In order to achieve the aims of this study, the multiple linear regression analysis has been used to examine the impact of factors on financial performance of firms listed on Shanghai Stock Exchange 50 (SSE 50). At the beginning of the estimation, descriptive analyses have been done to all dependent and independent variables. Then, through correlation test, there is no multicollinearity problem in independent variables. Moreover, through heteroskedasticity test, there is no heteroskedasticity problem in models. But the autocorrelation test shows there is an autocorrelation problem in models. So finally "Newey-West" option in Eview 6.0 has been used to correct autocorrelation problem and complete multiple regression.

Table 10 shows the summary of results of the study. This study find following results: First, current ratio has a positive but insignificant impact both on ROA and ROE, so liquidity positively but insignificantly affects firms' financial performance. Second, total assets turnover ratio has a positive and significant impact both on ROA and ROE, so assets utilization positively and significantly affects firms' financial performance. Third, debt ratio has a negative and significant impact both on ROA and ROE, so leverage negatively and significantly affects firms' financial performance. Fourth, firm size dummy has a negative and significant impact on ROA but a negative and insignificant impact on ROE, so big firm or small firm makes no different effect on firms' financial performance.

Table 10 The Summary of results of the study

		CR	TAT	DR	FSD
ROA	Coefficient	2.114934	2.294013***	-35.45244***	-2.926341**
	P-value	0.2347	0.0067	0	0.0392
ROE	Coefficient	1.611894	2.493034**	-19.32528***	-2.910471
	P-value	0.3737	0.0345	0.0088	0.1548

Note: ***, ** and * indicate 1%, 5% and 10% significant levels, respectively.

5.2 Discussion

Following shows the discussions of four main results of this study:

First, liquidity positively but insignificantly effect on firms' financial performance in this study. This is supported by many previous studies (Afza and Nasir, 2007; Similarly and Syed, 2010) which stated that there is no significant relationship between profitability and working capital management policy.

Second, assets utilization positively and significantly effects on firms' financial performance in this study. This is supported by many previous studies (Sayeed and Hogue, 2009; Adelegan, 2008; Jose et al, 2010; Wu et al, 2010; Seema et al, 2011) which stated that there is a positive and significant relationship between assets utilization and firm performance. Higher asset utilization should help firms improve their market share by focusing on their areas of competence, by increasing their speed, by liberating resources to fund expansion, and by reducing costs that permit lower prices to be sustained. Elimination of surplus assets, such as facilities, inventories, receivables, frees up resources that can be used to expand market position, for example, by acquisitions. It also reduces paperwork and increases a firm's speed of response. With fewer surplus assets and functions to administer, managers can focus their attention on their core competence and on what they do best. If firms utilize their assets more efficiently, asset utilization (sales revenue divided by assets) will increase and unit costs should decrease. Lower unit costs, in turn, should allow firms to cut and sustain lower prices and gain market share without lowering profit margins.

Third, leverage negatively and significantly effects on firms' financial performance in this study. This is supported by many previous studies (McConnell, 1995; Aivaziana et al, 2005; Ahna et al, 2006; Mura and Marchika, 2010; Mattsa, 2011; Youmatelo, 2012; Cai and Zhang, 2011) which stated that an increase in the leverage has a negative impact on their performance. Companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt; they may also be unable to find new lenders in the future. In alignment with most previous studies, it was that low leverage might be beneficial, because highly leveraged firms may confront aggressive strategies from their less leveraged rivals and lose market share in an oligopoly product market. Companies with higher financial leverage impose limitations on the investment opportunities. The higher debt level leads to less investment in capital assets, finally decreases firm value.

Fourth, big firm or small firm no different effect on firms' financial performance in this study. This is supported by many previous studies (Amato and Burson, 2007; Amato and Wilder, 1985; Amarjit et al, 2010; Falope and Ajilore, 2009) which stated that there is no significant relationship between firm size and firm performance.

5.3 Limitations and Future Research

There are some limitations of this study that prevent us for further improvement:

First of all, it would be the scope of the study that was limited to the top 50 listed companies in Shanghai stock exchange excluding financial companies. The sample is small and it cannot represent different sectors of the economy. The findings may have been different if a larger sample was included, and the period studied from 2008 to 2012, it ranges quite small to show the long term impact of these variables to the financial performance. To overcome the scope of the study, for future research we suggest including a larger sample and extending the study period.

Secondly, the annual data is also only the best we can obtain at this point. Due to the fact that the Chinese economy continues to develop, we will expect to see more new data sets available, which might perhaps reflect quarterly statistics. As some of the researchers found that, the result has shown more exact by using quarterly data on carrying out the relevant empirical studies.

Thirdly, this study selects only four factors to test factors affecting financial performance of firms listed on Shanghai stock exchange 50. Meanwhile there are a lot of other factors can be use, like GDP, IP and so on. The additional variables should be more relevant to the study and be supported by related supporting materials.

Finally, this research used only quantitative method to identify. If the study had also included a qualitative component in designing the research, it would have provided more comprehensive insight into the boards' accountability to all firms listed on Shanghai stock exchange 50.

5.4 Recommendations

Based on the research findings the following reachable recommendations were presented for this study:

It is positive to have high consideration of utilizing the company assets efficiently. Because the assets utilization of the company is an important factor as it influences its market share. If assets utilization increases, unit cost will decrease. Lower unit costs, in turn, should allow firms to cut and sustain lower prices and gain market share without lowering profit margins. So listed firms are recommended to increase their assets utilization.

Great attention should be paid to leverage. Companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt; they may also be unable to find new lenders in the future. On the other hand, leverage can increase the shareholders' return on their investment and make good use of the tax advantages associated with borrowing. Listed firms almost have high debt ratio, it is risky and less profits. It is better to reduce some debt for them.

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