The Impact of Institutional Investors on Firm Performance: Evidence from China

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ABSTRACT
We explore the impact of institutional investors on firm performance by using the data of the Chinese capital market from 2007 to 2020. We find that a higher proportion of institutional investors can lead to a better firm performance of listed companies. It means that institutional investors' shareholding can significantly promote the performance of listed companies. The above findings are tested in a series of robustness tests, such as adopting the next period of firm performance and adding more control variables into our regression model. Our findings provide a notion that institutional investors are playing a more and more important corporate governance role in emerging markets, such as the Chinese stock market.

Keywords: Firm performance, Institutional investors, Chinese capital market

1. INTRODUCTION

In the past 40 years, institutional investors have increasingly become one of the irreplaceable roles in the global capital market. According to the statistics of the RESSET database, China's institutional investors, such as funds and insurance, hold more than 31% of the total value of listed companies in Shanghai and Shenzhen, which showed that institutional investors have become the most important shareholders in China's capital market. Therefore, institutional investors have become an important force affecting enterprise management and investment decision-making. Compared with individual investors, institutional investors have many advantages such as capital, information and speciality. They can participate more in the company's daily business decisions and supervising the development of the invested company and improve the capital market.

Andreou et al. claim that institutional investors have a strong incentive to supervise the short-sighted behaviour of enterprise management and take corresponding actions in the capital market to improve the value of the company, such as improving the operation of the enterprise by reducing free-riding [1].

Boubaker et al. claim that there is often an interest convergence effect between institutional investors and listed companies. This benefit convergence effect will also enable institutional investors to help enterprises when they face difficulties [2]. Piotroski et al. claim that under the effect of the learning curve effect and the economic scale effect, the cost of institutional investors participating in corporate governance will decrease. All these suggested that institutional investors are very important to the management and development of the company [3].

The role of institutional investors is still controversial. The various researcher has discussed the role of institutional investors. As discussed in Du et al., [4] the positive effect of institutional investors is that the asymmetry of information disclosure and improves the quality of information disclosure. In China, the problem of information asymmetry has become one of the serious issues. There are very few channels and regulations that protect the interest of investors in the stock market. However, the institutional investors hold a larger share of the company’s stock. It uses the investment of the small investors. The main reason behind the decline in the asymmetric information with the institutional investors is that it makes the use of various risk management strategies and information
analysis techniques that reduce the risk of the individual investors [5]. Furthermore, the quality of information improves as being the holder of the larger share of the company’s share the institutional investors have the right to vote in the general meeting. They also attend general and other quarterly and annual meetings and disclose transparent information to the individual investors.

Next, an institutional investor tends to improve the quality of internal control and corporate governance of the companies. Alexiou et al. indicate that there are mainly three ways in which the internal control and governance role is played by the institutional investors [6]. Market control is taken via the route of debt and equity. This means that the institutional investor gains control over the capital structure of the company that provides them with the ticket for influencing them and forcing them to take better reforms of internal control and corporate governance in the company. Being the institutional investor provides the equity route to them using which they exert their dominant influence in the proper conduct of the management and internal management of the company [7]. There are certain legal regulations and protection rights given to the institutional investor using which they have the right for monitoring the management of the company. Even if there is no influence the presence of the institutional investors themselves makes the management accountable for their workings. Therefore, it can be said that overall it leads to proper management of the governance and internal control.

The next positive impact of institutional investors is that it improves the efficiency of enterprise investment and thereby increases financial performance. If the influence of the institutional investors is effective and prudent in bringing effective corporate governance, then it ultimately leads to increasing the financial performance. The bad the corporate governance is the lower the financial performance would be since bad corporate governance leads to poor decision making in the company[8]. However, the activism of the institutional investors and the other shareholders ensures that there is effective governance that took the decision for the welfare of the shareholders and does not indulge in the agency dilemma. Agency dilemma arises when the management of the company acts for their benefits rather than increasing the wealth of the shareholders. The institutional investors' group is considered as the power that makes the use of resources, power, checks systems, and balance to ensure the greater responsiveness of the company's management. Therefore, better monitoring and internal control of investment use and decision of capital budgeting ensure that the financial performance of the company is continuously increasing[9]. Furthermore, the hedge funds institutional investors resort to the various techniques of investments such as options, taking short positions, etc. Using these techniques, they land their investment in safe havens to protect themselves from the volatility in the markets. They ensure that they preserve their capital and earn positive returns in both downturns as well as uptrend periods.

The performance of the company is also linked with the financial stability and liquidity of the enterprise. Institutional investors are generally the financial institution that holds a large number of deposits of small individual, they include banks and other financial institutions[10]. At the time of any liquidity issues and solvency issues, that may arise when the company's current liabilities become more than the current assets or when the company needs additional capital in the form of debt. These institutional investors provide quick access to the capital to ensure the short term as well as long solvency of the company. This is because the institutional investors to have the shareholding in the company also don't want that the value of the market capitalization or the company to decline which would eventually cause a decline in their holdings [6]. As per the trade-off theory, it is important to have a balance between liquidity and profitability. The liquidity of the company must be maintained as even if the company has larger capital assets and long-term assets if it fails to have the liquidity to ensure short-term solvency it may become insolvent and the value of the company may decline. Thus, this is one of the major benefits that the companies get from institutional investors.

Though there are various positive effects of the institutional investor in the company however there are certain negative effects as well that including first that the institutional investors are perceived as the maker of the price of the stock. They can influence the demand and supply pattern through large-scale buying or selling that leads to large market movements. The institutional investors hold a large portion of the equity capital of the company. If the institutional investor decides to sell the shares, then there is a huge supply of the companies' shares in the market. The rise in the supply caused and downward pressure on the prices of the stock causing a large movement in the market. The behaviour of the individual investor also plays a vital role in causing the larger market movement. When the individual investors see that there the institutional investors are taking out their investment, they perceive that there is something wrong prevailing in the company and therefore they also tend to follow them and sell their share which further increases the volume of the trade and causes the prices to decline. Thus, they are often considered as market makers in the market. There is some risk also that are faced by the institutional investor that including the risk of non-compliance with the legal right of the shareholders of the company. There is a lack of qualified as well as experienced appraisers and there is also no proper and legal policy established for the payment of the dividends for the payment of the
dividend to the institutional investors[9]. Another negative impact of the institutional investors from the perspective of the company’s performance could be the delayed decision and control sharing. The institutional investors as discussed above also have a dominant position in the ownership of the company. They have the right to vote and also have the power to influence the decision of the company. However, sometimes they act for their wishes without taking into consideration the larger benefits. This creates discrepancies in the decision-making process and delays as there is again voting for the different ideas amongst the shareholders and then the decision takes place. Thus, the sharing of the control with the institutional investors causes another negative impact on the effectiveness and efficiency of the decision-making process in the companies.

Therefore, the analysis of the role of institutional investors is still worth studying. Based on the perspective of firm performance, we study what role institutional investors can play. Meanwhile, based on the above analysis of institutional investment and its role, we have the following guesses: on the one hand, institutional investors may enhance enterprise value. To enhance the value of the enterprise; On the other hand, institutional investors may weak/suppress enterprise value, buy quickly, retail trading, group trading, thus damaging the market value of enterprises.

It was found that the institutional investors have a dominant role to be played in the company's ownership that provides them with the advantage of influencing the corporate governance of the company. This ensures that good governance prevails in the company. Good corporate governance ensures that the management of the company acts Is good faith towards the shareholders of the company. This means that the management act as the agent for the shareholders who are the actual owner of the company. The institutional investors want to earn high profits in the form of returns from their share that can be achieved when the corporate governance decides for the benefits and growth of the company. Apart from that, it was also found that the institutional investors play a dominant role in the stock market that allows them to turn this capitalist form of the system into a system wherein the financial institutions have the privilege in terms of both productions as well as in the financial investment[10]. The institutional investors present in the market ensure that the proper flow of funds in the market. For instance, when there is low capital flow in the funds the institutional investor flows large chunks of investment that give rise to the flow of capital movement in the economy. Thereby the growth rate of the investment rises. Many a time when there is an issue relating to liquidity and financial stability, the institutional investor making the use of the various technique of hedging safeguards the companies from the situation. This is because their ultimate aim is to earn returns and reduce risk in both the boom and loss periods.

It has also been found that the larger influence of the institutional investor has a greater influence on the financial market. They can impact the prices of the shares in the market with the pattern of demand and supply. Thus, they have the power to weaken the value of the company.

The loss of internal control and corporate governance is another advantage from the instructional investors. This caused the delay in decision making and may also lead to dissatisfaction amongst the upper management of the company. This causes the dilution of the company’s control. Though the stability and liquidity are ensured with the institutional investors it also results in the duplication of the investment and unnecessary use of the assets that cause the debt capital of the company to rise[11]. The institutional investors increase their debt capacity in the company and act for their benefits as the creditors of the company and not as the shareholders of the company when their debt level increases above the shareholding. Thus, there is a conflict of interest that takes place between the institutional investors as creditors and institutional investors as shareholders of the company. This causes a decline in the financial performance of the company. Therefore, there are both pros and cons of institutional investors.

In this study, we collected the data of China's A-share listed companies from 2007 to 2020 to explore the impact of institutional investors on firm performance. We created a regression model with institutional investors as independent variables and firm performance as dependent variables. The empirical result showed that there is a significant positive correlation between firm performance and the proportion of institutional investors. And the regression model has passed the robust checks, such as using the firm performance of the t+1 period and adding more variables into the regression model. We can conclude that the increase in the proportion of institutional investors can significantly improve firm performance. The conclusion has important practical significance for company managers and institutional investors.

This study contributes to the extant literature in two ways.

First, this paper expands relevant research on factors affecting corporate value. Existing works of literature have studied the role of institutional investors from the perspectives of earnings management and stock price crash risk, etc. This paper further supplements the relevant role of institutional investors from the perspective of firm performance.

Second, this study expands relevant literature on the role of institutional investors in emerging capital
markets. This paper argues that, on the one hand, institutional investors may enhance the value of enterprises, because institutional investors can effectively supervise the management of enterprises: in a market dominated by institutional investors, the investment behaviour of the main body is more rational, and the security market will develop more smoothly, thus creating a favourable external governance environment for corporate governance. At the same time, institutional investors can improve the internal environment of corporate governance by their strength and effectively supervise the daily operational activities of the management by participating effectively in the company's business decisions through "voting with their hands". Moreover, institutional investors can make corporate decision-making more effective: institutional investors gather professionals in corporate governance, can better perform governance functions and increase the professionalism and scientificity of corporate decision-making. Pound pointed out, "In many companies, managers cannot choose better strategies rather than motivation". At the same time, on the other hand, institutional investors may also damage the market value of enterprises by quick buying and quick selling, retail trading, group trading and other behaviours. We find that institutional investors have gradually appeared the phenomenon of institutional retailization since 2003. First of all, it is reflected in the number of stock purchases. From the previous heavy position of individual stocks to the pursuit of the so-called optimized portfolio, institutional coverage of individual stocks is expanding year by year, and it is increasingly difficult to see the investment opportunities that institutional investors can obtain by relying on their own research and development capabilities. Secondly, the trading strategy adopted in the operation of stocks is more like retail behaviour. They buy when the stock price rises and are trapped at a high level. Or they sell early and can't take advantage of the rise.

2. DATA AND SAMPLE

2.1. Data and sample

This paper selects a-share listed companies from 2007 to 2020 as the research object. The reason why we choose 2007 as the sample starting year is that the new accounting standards were issued in 2007. In order to avoid the impact of the changes of accounting standards on the empirical results of this paper, we chose 2007 as the starting year. In addition, we also excluded listed companies in the financial industry (e.g., banks, insurance companies, and investment trusts), listed companies in the ST category, as well as the samples whose financial data were missing and the control variables could not be calculated. The financial data used in this study are obtained from China Stock Market Accounting Research (CSMAR) system.

2.2. Key variable

In this paper, INST is selected as the independent variable and ROA is selected as the dependent variable to represent enterprise value to study the influence of institutional investors on enterprise value. ROA is the return on assets, calculated by net profit divided by the book value of total assets. And INST is the shareholding ratio of institutional investors, calculated by the number of shares held by institutional investors divided by total equity.

2.3. Control variables

We control for several factors that may affect ROA. The variable size is the natural logarithm of the book value of total assets, usually, Size is proportional to ROA. The variable Lev is firm financial leverage, calculated by the book value of total debt divided by the book value of total assets. The variable Cashflow is the cash flow ratio, calculated by total cash flows divided by total assets. The variable Growth is the increased percentage of sales growth. The variable Board is the log of the number of directors. The variable Indep is the proportion of independent directors, calculated by the number of independent directors divided by the total number of directors. The variable BM is the Book-to-market ratio, calculated by the book value of equity divided by the market value of equity. The variable SOE is a dummy variable that equals 1 if the ultimate controlling shareholder of a listed firm is the state in year t and 0 otherwise.

2.4. Model specification

To examine the relationship between the INS and firm performance(ROA), we construct the following empirical model:

\[ ROA_{t+1} = \beta_0 + \beta_1 INST_t + \sum_{q=2}^m \beta_q \text{ControlVariable}_t + \varepsilon_t \]  

where \( \beta_1 \) represents regression coefficients; \( \varepsilon \) is an error term; and Control Variable contains Size, Lev, Cashflow, Growth, Board, Indep, Dual, BM and SOE. ROA measures firm performance, whereas INST represents the shareholding ratio of institutional investors. A negative (positive) \( \beta_1 \) suggests that INST tends to decrease (increase) ROA. All the main variables are defined in Table 1.
Table 1. Variable definitions

| Variable | Definition |
|----------|------------|
| ROA      | Return on assets, calculated by net profit divided by the book value of total assets |
| INST     | The shareholding ratio of institutional investors, calculated by the number of shares held by institutional investors divided by total equity |
| Size     | The natural logarithm of the book value of total assets |
| Lev      | Firm financial leverage, calculated by the book value of total debt divided by the book value of total assets |
| Cashflow | Cash flow ratio, calculated by total cash flows divided by total assets |
| Growth   | The increased percentage of sales growth |
| Board    | Log of the number of directors |
| Indep    | The proportion of independent directors, calculated by the number of independent directors divided by the total number of directors |
| Dual     | A dummy variable that equals 1 if the ultimate controlling shareholder of a listed firm is the state in year t and 0 otherwise |
| BM       | Book-to-market ratio, calculated by the book value of equity divided by the market value of equity |

3. EMPIRICAL RESULTS

3.1. Summary statistics

Table 2 provides descriptive statistics for the variables used in our analysis. The mean value of ROA is 4%, and the minimum and maximum values are -29% and 23%, indicating that the average value of return on assets is 4% and the lowest and highest values of return on assets are -29% and 23% in the selected sample.

Table 2. Descriptive statistics

| Variable | N  | mean | sd  | min  | p50  | max  |
|----------|----|------|-----|------|------|------|
| ROA      | 32711 | 0.04 | 0.07 | -0.29 | 0.04 | 0.23 |
| INST     | 32712 | 0.38 | 0.23 | 0    | 0.38 | 0.88 |
| Size     | 32712 | 8.27 | 3.13 | 5.49 | 8.1  | 12.26|
| Lev      | 32712 | 0.45 | 0.22 | 0.06 | 0.44 | 1    |
| Cashflow | 32712 | 0.05 | 0.07 | -0.19 | 0.05 | 0.25 |
| Growth   | 32690 | 0.19 | 0.53 | -0.64 | 0.1  | 3.73 |
| Board    | 32600 | 2.14 | 1.61 | 0.2  | 1.61 | 2.2  |
| Indep    | 32600 | 0.37 | 0.31 | 0.33 | 0.35 | 0.57 |
| Dual     | 32175 | 0.25 | 0.43 | 0    | 0    | 1    |
| BM       | 32701 | 1.02 | 1.09 | 0.08 | 0.66 | 6.58 |
| SOE      | 32712 | 0.4  | 0.49 | 0    | 0    | 1    |

This table reports descriptive statistics on firm performance and control variables for the sample in 2007-2020.

3.2. Baseline results

Table 3 displays the results of the regression model. Specifically, the coefficient of the variable INST is 0.042 statistically significant at the 1% level, indicating that the increase of the proportion of institutional investors can increase the ROA of the company. This result is consistent with the notion that institutional investors can regulate the capital market and help to build up a healthy trading environment, leading to better firm performance.

Table 3. The impact of institutional investors on ROA

| Variable | (1)    | (2)    |
|----------|--------|--------|
| INST     | 0.042*** | 0.027*** |
|          | (24.89) | (17.08) |
| Size     | 0.009*** |        |
|          | (28.50) |        |
| Lev      | -0.137*** | (-78.61) |
| Cashflow | 0.259*** |        |
|          | (56.11) |        |
| Growth   | 0.028*** |        |
|          | (45.70) |        |
| Board    | -0.001 |        |
|          | (-0.29) |        |
| Indep    | -0.022*** | (-3.07) |
| Constant | 0.017*** | 0.015** |
|          | (4.89)  | (2.34)  |
| Observations | 32,711 | 32,577 |
This table reports the results from a regression of the impact of institutional investors on return on assets. The dependent variable is ROA and the test variable is INST. Reported in parentheses are t-values based on robust standard errors clustered by both firm and year. All variables are defined in Table 1.

### 3.3. Robustness checks

After establishing the regression model, we found that we cannot judge whether the existence of institutional investors promotes the performance of the company or whether the good performance of the company attracts the investment of institutional investors. In order to solve this endogenous problem, we use ROA of the t+1 period to measure the company’s performance and establish a regression model between ROA of the t+1 period and INST of the t period.

The empirical results are presented in table 4. The coefficient of INST is significantly and positively related to ROA at the 1% level. This suggests that the increase of the proportion of institutional investors can increase the ROA of the company. Combined with the regression results, this also suggests that the regression results are robust.

Table 4. The impact of institutional investors on ROA in the next period

| VARIABLES  | (1)         | (2)         |
|------------|-------------|-------------|
| INST       | 0.042***    | 0.035***    |
|            | (22.86)     | (19.07)     |
| Size       | 0.003***    |             |
|            | (6.99)      |             |
| Lev        | -0.083***   |             |
|            | (-40.49)    |             |
| Cashflow   | 0.252***    |             |
|            | (46.70)     |             |

Table 5. Adding more control variables in the regression model

| VARIABLES  | (1)         | (2)         | (3)         | (4)         |
|------------|-------------|-------------|-------------|-------------|
| INST       | 0.027***    | 0.023***    | 0.031***    | 0.026***    |
|            | (17.40)     | (14.66)     | (19.27)     | (16.40)     |
| Size       | 0.009***    | 0.014***    | 0.010***    | 0.014***    |
|            | (28.68)     | (37.14)     | (29.84)     | (37.71)     |
| Lev        | -0.136***   | -0.122***   | -0.135***   | -0.121***   |
|            | (-77.75)    | (-66.98)    | (-77.02)    | (-65.64)    |
| Cashflow   | 0.257***    | 0.250***    | 0.257***    | 0.247***    |
|            | (55.52)     | (54.53)     | (55.85)     | (53.77)     |
| Growth     | 0.028***    | 0.027***    | 0.028***    | 0.026***    |
|            | (45.32)     | (43.77)     | (45.03)     | (43.00)     |
|        | Board  | Indep   | Dual   | BM      | SOE     | Constant |
|--------|--------|---------|--------|---------|---------|----------|
|        | 0.000  | -0.021**| 0.004***| -0.031***| -0.009***| 0.012*   |
|        | (0.11) | (-2.90) | (5.47) | (-24.05)| (-11.92)| (1.84)   |
|        | -0.001 | -0.022**| 0.022   | -0.010***| -0.007***| -0.022***|
|        | (1.14) | (-3.13) | (3.22) | (-23.10)| (-8.60) | (-4.12)  |
|        | 0.002  | -0.019***| 0.009   | -0.028***|         |          |
|        | (0.78) | (-2.65) | (1.35) | (-4.12) |         |          |
|        |        | -0.018**| 0.009   |         |         |          |
|        |        | (-2.55)| (1.35) |         |         |          |
| Observations | 32,052  | 32,573  | 32,577 | 32,048  |         |          |
| Industry FE | Yes     | Yes     | Yes     | Yes     |         |          |
| Year FE  | Yes     | Yes     | Yes     | Yes     |         |          |
| r2      | 0.323  | 0.355   | 0.326   | 0.337   |         |          |

4. CONCLUSION

Using unique data of the proportion of institutional investors by China's listed firm, we examine the impact of the proportion of institutional investors on firm performance. We find that the proportion of institutional investors is positively associated with firm performances after the robustness checks, such as adopting the next period of firm performance, and adding more control variables into our regression model, suggesting that institutional investors can promote the firm performance.

Our study adds to the growing literature on the role of institutional investors in emerging capital markets and expands the relevant research on the influencing factors of firm performance. We focus on the role of institutions in promoting firm performance and provide new evidence on the economic consequences of institutional investors. In developing regions, such as China, where the regulations on public and the legal environment are much weaker, the role of the institutional investors become pronounced. A little monitoring from institutional investors can promote the firm performance to a greater degree. Therefore, under the monitoring of institutional investors, firms show a lower tendency to some bad behaviours, such as buying and selling quickly, retail trading and group trading, leading to better firm performance.

Our study is beneficial to firms who want to promote firm performance in the emerging capital market. As information about institutional investors has a significantly positive impact on firm performance, firms can try to attract more institutional investors to invest in the company and let the institutional investors participate in daily business decision making and supervising.

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