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# The Impact of Accruals on Investor's Financing Decision

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**Abstract:**

Based on the annual financial statement data of 40 listed companies in China in the past three years, this paper uses hierarchical regression to analyze how companies manipulate financial statements with the accrual basis component to influence investors' decisions. Accruals are a key measure of a company's financial health and profitability and have a significant impact on investor behavior. However, the accrual basis analysis relies on the accounting standards and the subjective judgment of the company management, and is not perfect. This analysis involves two models, and our research results show that accruals can produce 25% of the explanatory force on stock return, which means Accruals will have a significant positive impact on Stock return.

**Keywords:**-Accruals; Investors decisions; Stock return

## 1. Introduction

This paper examines how accruals affect the investors' financing decisions of a company. In the dynamic landscape of financial markets, the behavior of investors is a critical determinant of market efficiency and stability. Accrual accounting matches revenue and operating expenses that have not yet been paid for the same accounting period, such as customer payments or payments owed to suppliers, employees or tax authorities, according to the matching principle. Based on its nature, it is commonly treated as a key component of financial reporting, provide insights into a company's financial health and future cash flows. Despite their significance, the influence of accruals on investor behavior, particularly in the context of financing decisions, remains an underexplored area in financial research, and this study helps to provide clarity on how investors interpret accruals in the context of financing.

According to Dechow's research (1994), under circumstances where (i)the shorter the duration of the performance measurement interval, (ii)the greater the magnitude of fluctuations in the measurement of

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volatility pertaining to investment and financing activities within the firm's working capital requirements, and(iii)the elongation of the firm's operating cycle, the significance of accruals is hypothesized to enhance. Thus, accruals are projected to be a remarkable improvement in earning's ability to assess firm performance, as reflected in stock returns, under above conditions. In addition, this view is also consistent with the expression of FASB that accruals are capable to improve the ability of earnings related to measuring the firm performance.

Research into the impact of accruals on investors' financing behavior is crucial for several reasons. Firstly, it helps to understand how investors interpret accrual-based financial information when making investment decisions. Accurate interpretation is essential for making informed decisions that can affect the allocation of capital and the efficiency of financial markets. Secondly, such research can uncover biases or misinterpretations in investors' understanding of accruals, which can lead to market anomalies or inefficiencies. Moreover, by examining the relationship between accruals and financing behavior, researchers can provide insights into corporate financing strategies and how they are influenced by accounting practices. This can be particularly important for investors looking to evaluate a company's financial health and growth potential. As a result, understanding the impact of accruals can aid in the development of better accounting standards and regulatory policies that promote transparency and fairness in financial reporting, ultimately protecting investors and enhancing market integrity.

Due to the uncertainty of the actual receipt and payment time of accruals, it is possible for enterprises to optimize their financial statements and attract investment by operating accruals. From the following three aspects which have a great influence on investors' decision-making, accruals undeniably play an inevitable role. In terms of the profit quality evaluation, high accruals indicate that a company may use accounting practices to exaggerate its profitability, which may cause investors to cast doubt on its financial health. On the contrary, low accruals indicates that a company may have higher profit quality, because its profit mainly comes from actual cash flow. Moreover, companies with high accruals are likely to command high valuations, as investors may be attracted by inflated earnings. However, Companies with low accruals may command lower valuations because investors may view them as less profitable. Low accruals also demonstrate a better risk management in contrast to enterprises with high accruals. Based on the above analysis, it is evident that lower accrual components conduct more ideal results in financial statements, which explains why corporations have such incentives to manipulate accruals.

There are indeed many misconducts occurring in companies' financial reporting. For instance, some firms may intentionally reduce their amount in the 'allowance for irrecoverable bad debts' account to increase the 'trade receivables' account and decrease the 'irrecoverable bad debts expense' account. In that case, assets in above company's SOFP would be higher and the profit in SOPL would be augmented.

Cost of capital, based on Bethany McCamish's explanation (2021), can be simply defined as the ability to cover both asset and liability expenditures while generating a profit. From the perspective of investors, cost of capital demonstrates both the degree of potential risks and the rate of return that could be raised by investing money to a company. Thus, investors are interested in investing in companies that can generate returns exceeding the cost of capital, thereby ensuring a proportional reward for the assumed risk. To better protect investors' interest and gain a deeper insight into the accruals account, we conduct the research that delves the correlations between the accruals and the cost of capital which plays as an important economic principle determining the risk of investing in a company.

The next section develops a multiple regression analysis about how accruals affect investors' financing activities.

## 2. Research design

### 2.1 . Stock return & Cost of capital

In order to concrete investors' financing activities through certain financial index, we choose stock return as the bench mark that measures the cost of capital which implies investors' financial decisions. Stock return, defined as the minimum return an investor will accept for owning a company's stock, as compensation for a given level of risk associated with holding the stock (Sean Ross,2024), though has some differences with the cost of capital, we set them equal under a favorable stage where the expected return on securities issued by a company is consistent with the investors' required return.

### 2.2 . The independent variables: Accrual, Market value of equity and Book-to-market ratio

Based on our initial hypothesis, accruals would demonstrate a positive linear relation with the cost of capital, also the stock return as limited in our research. However, in light of the fact that stock return is indeed subjected to complex factors including the market risk, the market capitalization of a stock, and the operating profitability of a stock's underlying company, etc. (Michael Maiello,

2019). We cannot precisely analyze the correlation between accruals and stock return by simply only using the accrual account. In that case, there occurring a must for us to identify certain confounding variables which are a type of extraneous variables that are related to a study's independent and dependent variables. Thus, we pick the market value of equity and the book-to-market ratio as the confounding variables aiming to enhance the stringency and the relevance of our research.

### 2.3 . Measurement of Variables

There are various ways to measure accruals, however, we simply calculate accruals as the net of net income and the operating cash flows. Besides, due to the reason that we cannot accurately figure out the market price of every share issued, we calculate the market value of equity based on the closing price of stock on the last day of the year. In summary, we obtained our data according to the following formulas designed:

Accruals = Net Income - Cash Flow from Operating Cash Flow

Book Value of Equity = Total Shareholders' Equity

Market Value of Equity = (Total Shareholders' Equity / Book Value Per Share) * Closing Price of Stock on the Last Day of the Year

Stock Return = (Closing Price of Stock on the Last Day of the Year - Closing Price of Stock on the First Day of the Year) / Closing Price of Stock on the First Day of the Year

## 3. Data Analysis

### 3.1 . Sample Selection

Our research selects 40 Chinese companies that have listed in America, including Alibaba, JD, Tencent and other representative Chinese corporations. To ensure the veracity, precision, and authority of the data, we procure financial statement data and share price data from the Sina Financial website. Following our design, we collect and calculate the accruals account, the market value of equity, the book-to-market ratio and the stock return of above firms during the period from 2021-2023 based on the companies' financial reporting and the stock price of either the start and the end of each year. Which deserves a specific attention is that all figures are recorded in millions of dollars and keep two decimal places.

**Table 1 Sample selection of Tencent**

| Company | Accruals | Book Value of Equity | Market Value of Equity | Book-to-Market Ratio | Stock Return |
|---|---|---|---|---|---|
| Tencent2023 | -16031.00 | 123189.00 | 383468.89 | 0.32 | -0.15 |
| Tencent2022 | -18793.00 | 112614.00 | 436044.70 | 0.26 | -0.27 |
| Tencent2021 | 14336.00 | 137556.00 | 604789.96 | 0.23 | -0.20 |

### 3.2 . Descriptive statistics

**Table 2 Summary Statistics**

| | Mean | SD | P25 | P50 | P75 | N |
|---|---|---|---|---|---|---|
| Net income 2023 | 2158.29 | 3840.05 | 160.50 | 789.00 | 2775.50 | 40 |
| Net income 2022 | 4038.32 | 18187.50 | -9.02 | 245.50 | 2024.50 | 40 |
| Net income 2021 | 1838.37 | 7004.71 | -192.25 | 372.00 | 1198.00 | 40 |
| Operating cash flow 2023 | 4894.86 | 8047.85 | 256.25 | 1524.00 | 6028.25 | 40 |
| Operating cash flow 2022 | 3869.23 | 7626.00 | 109.50 | 809.00 | 2827.50 | 40 |
| Operating cash flow 2021 | 3582.85 | 7780.06 | 217.00 | 705.50 | 2981.25 | 40 |
| Accruals 2023 | -2736.57 | 4982.38 | -2690.75 | -768.50 | -50.09 | 40 |
| Accruals 2022 | 169.09 | 16725.15 | -1763.50 | -461.10 | -54.19 | 40 |
| Accruals 2021 | -1744.48 | 5373.74 | -1987.25 | -452.50 | -114.19 | 40 |

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| | | | | | | |
|---|---|---|---|---|---|---|
| Book value of equity 2023 | 20698.13 | 36379.92 | 2425.00 | 6783.50 | 20426.25 | 40 |
| Book value of equity 2022 | 19813.18 | 36488.40 | 2357.00 | 6552.50 | 16770.25 | 40 |
| Book value of equity 2021 | 21078.03 | 39763.10 | 2457.00 | 6662.00 | 17087.25 | 40 |
| Market value of equity 2023 | 35680.53 | 73505.26 | 2397.11 | 9583.39 | 28869.38 | 40 |
| Market value of equity 2022 | 40592.55 | 83259.56 | 2808.94 | 9259.47 | 36252.13 | 38 |
| Market value of equity 2021 | 55146.13 | 115717.89 | 3195.37 | 14955.02 | 64843.90 | 37 |
| Book-to-market ratio 2023 | 1.46 | 1.71 | 0.36 | 0.78 | 1.85 | 40 |
| Book-to-market ratio 2022 | 1.38 | 2.17 | 0.35 | 0.71 | 1.27 | 40 |
| Book-to-market ratio 2021 | 0.88 | 0.85 | 0.33 | 0.65 | 1.23 | 40 |
| Stock return 2023 | -0.01 | 0.37 | -0.26 | -0.09 | 0.15 | 40 |
| Stock return 2022 | -0.33 | 0.82 | -0.41 | -0.28 | -0.03 | 40 |
| Stock return 2021 | -0.29 | 0.35 | -0.60 | -0.34 | -0.02 | 40 |

Table 2 presents the key components of the data we collected, both the direct variables we used in the regression analysis and the indirect data helpful in calculating the variables under study are included. Accruals have a significantly high standard deviation, indicating a prominent volatility, which is attributes to the big fluctuation of net income and operating cash flow, with conspicuous standard deviations respectively. The mean of accruals is negative in two of three years, which is primarily driven by the huge amount of operating cash flows. Both the book value of equity and the market value of equity have the high standard deviations throughout three years, demonstrating a wide range of amount among the 40 companies selected. From the P50 of the book-to-market ratios that are all less than 1.00, we can infer that most companies' stocks are overvalued.

Overall, the mean and median values of all indicators exhibit proximity, however, there is a notable presence of large standard deviations, indicating substantial variations in financial performance across companies. Furthermore, certain indicators (such as accruals and equity return) display significant disparities between their medians and means, suggesting the influence of extreme values or outliers on the overall averages.

## 3.2 . Regression Analysis

**Table 3 Output results of regression equation model**

| | Model 1 | | | | | Model 2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | B | SE | t State | P-value | β | B | SE | t State | P-value | β |
| Intercept | -0.149* | 0.073 | -2.059 | 0.047 | - | -0.101 | 0.065 | -1.556 | 0.129 | - |
| Market value of equity | 0 | 0 | -0.425 | 0.673 | -0.07 | 0 | 0 | 0.728 | 0.471 | 0.111 |
| Book-to-market ratio | -0.043 | 0.034 | -1.248 | 0.22 | -0.207 | -0.075* | 0.031 | -2.404 | 0.021 | -0.362 |
| Accruals | | | | | | 0.000 | 0 | 3.562 | 0.001 | 0.566 |
| $R^2$ | 0.041 | | | | | 0.291 | | | | |
| Adjusted $R^2$ | -0.011 | | | | | 0.232 | | | | |

| | | |
|---|---|---|
| F | F (2,37) = 0.789, p = 0.462 | F (3,36) = 4.921, p = 0.006 |
| $\triangle R^2$ | 0.041 | 0.25 |
| $\triangle$ F | F (2,37) = 0.789, p = 0.462 | F (1,36) = 12.688, p = 0.001 |

Table 3 provides the multiple regression results of two different model. In terms of Model 1, we choose market value of equity and the book-to-market ratio as the independent variables, trying to delve the correlation between these two variables and stock return. From the R square in Model 1, we can infer that market value of equity and the book-to-market ratio account for 4.1% in the factors for the variance in stock return, demonstrating that there is weak relation between these variables. In addition, we can find that Model 1 fails to pass the F-test (F=0.789, p>0.05), which means that market value of equity and the book-to-market ratio do not have an dominant impact on stock return. Therefore, the rationality of our design that taking market value of equity and the book-to-market ratio as the confounding variables could be further improved.

With respect to Model 2, we add Accruals as the independent variables into Model 1 and get a new regression result. After the adjustment, we can see that F-number changes into a considerable amount (p<0.05), showing that accruals have interpretive meaning to the model. Moreover, the amount of R square increased from 0.041 to 0.291, showing accruals have 25% impact on changes in stock return. To be more specific, the coefficient of accruals is 0.000, the t State and the p-value of accruals is 3.562 and 0.001 respectively, interpreting that accruals is indeed positively relate to stock return, which is faithfully consistent with our initial hypothesis. Thus, our analysis proves that accruals truly play a significantly positive role in investors' financing decisions.

4.Conclusion

This research set out to examine the influence of accruals on investors' financing behavior, with a particular focus on how accruals might affect stock returns, thereby influencing investment decisions. Through a hierarchical regression analysis, we have been able to isolate the impact of accruals from other financial variables, providing a clearer picture of their role in the financing behavior of investors.

## 4.1 Key Findings from Hierarchical Regression Analysis

Our initial model, which included 'Market value of equity' and 'Book-to-market ratio' as predictors, explained only 4.1% of the variance in 'Stock return', with an R-squared value of 0.041. This model failed to achieve statistical significance, as indicated by the F-test, suggesting that these variables alone do not have a substantial impact on stock returns.

However, upon introducing 'Accruals' into the model, we observed a significant improvement in the model's explanatory power. The R-squared value increased, indicating that with the inclusion of accruals, the model now accounts for 29.1% of the variance in stock returns. This increase was statistically significant, as evidenced by the change in F-value, highlighting the importance of accruals in explaining stock returns.

The coefficient for 'Accruals' was found to be 0.000, which is significant, suggesting a positive relationship between accruals and stock returns. This implies that an increase in accruals is associated with higher stock returns, potentially indicating that investors view accruals as a positive signal when making financing decisions.

## 4.2 Implications for Investors and Financial Reporting

The significant relationship between accruals and stock returns has important implications for both investors and the financial reporting process. For investors, our findings suggest that they should consider accruals when evaluating potential investments, as they'll be able to make more reasonable investment decisions and appear to be associated with higher returns. This could be due to the fact that accruals may provide insights into a company's earnings management practices or future cash flow expectations.

For financial reporting, the positive association between accruals and stock returns underscores the importance of accurate and transparent reporting of accruals. Companies should ensure that their accruals are calculated and reported in a manner that reflects their true economic impact, as investors are using this information to make investment decisions.

## 4.3 Limitations and Future Research

While our study provides valuable insights, it is not without limitations. The data used in this analysis may not be fully representative of all investors or all types of investments. Future research could expand the sample size and include a more diverse range of financial variables to further explore the relationship between accruals and investors' financing behavior.

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### 4.4 Final Thoughts

Additionally, the cross-sectional nature of our data limits our ability to draw conclusions about causality. Longitudinal studies could provide a more in-depth understanding of how accruals influence financing decisions over time.

In conclusion, our research has demonstrated that accruals play a significant role in investors' financing decision, particularly in relation to stock returns, which agrees well with the previous literature. The inclusion of accruals in financial models substantially improves the model's ability to predict stock returns, indicating that investors should not overlook this important financial metric. As the financial landscape continues to evolve, understanding the nuances of how accruals influence investment decisions will be increasingly important for both investors and the companies they invest in.

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