# An Event Based Study on the Name Change Effect on A-Share Quoted Firm Values 

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#### Abstract

Name change is not uncommon for businesses around the world. Previous researches focusing on developed markets showed mixed results on the relationship between equity valuation and corporate name changes. Such relationship poses a more baffling question in emerging markets with rapid economic and technological changes. Based on a sample of 150 companies which are quoted on Chinese AStock market and have changed the corporate name once between 2009 and 2019, the study investigates the impact of name change on companies' stock performance in terms of abnormal returns. The results show that companies undergone name changes experience abnormal return fluctuations around announcement dates. Investors respond positively to name changes owing to merger and acquisition in the short term, while name changes because of restructuring or reputation could degrade firms' market values. Name changes due to the change in business type generate no significant stock price reaction. From valuation management perspective, our findings indicate that name change serves more of a market signal to investors rather than an optimal value addition strategy to listing companies.


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## 1. Introduction

Name change is not uncommon in business practice. It is reported that over 30\% of CRSP-listed companies had undergone name change at least once after going public since 1925 (Wu, 2010). According to Wind database, there undergoes a company name change in about every two days in the A-share market of China. There had been 81 name changes among A-share listed companies in the first five months of 2018; and such numbers were 182 in 2016 and 153 in 2017, respectively.
According to Muzellec and Lambkin (2006), one of the main drivers for name change is the need for a company's identity redefinition in a fundamental manner as a result of significant changes in the company's structure, strategy, or business performance. Some rebrandings, such as those resulted from changes in company's structure or organization, are characterized by administrative necessities instead of marketing purposes. Examples of name changes of such nature include mergers and acquisitions, spin-offs, demerge, capital reorganizations, and share repurchases. Other reasons for name change are more associated with the need to develop a new image or rationalize the brand portfolio. These drivers may arise from changes either in competitive strength (e.g. erosion of market position and outdated image) or in external environment (e.g. legal obligation and major crises) (Asyngier, 2018). In this research, we classify the reasons of name change into the following four main categories: merger and acquisition, reconstruction, change in business, and reputation improvement. Such categorization and the corresponding definitions are presented in the following Table 1.

Table 1: Classification of name change reasons and their contents

| Merge and <br> Acquisition <br> (M\&A) | Reconstruction | Change in Business | Reputation <br> improvement |
| :---: | :---: | :---: | :---: |
| Merger | Change of company <br> control rights | Change and expansion <br> of the main business, <br> products, or services | Cater to the <br> market trend |
| Acquisition | Reorganization of <br> structure | Strip bad assets <br> off |  |
| Back-door listing |  |  | Change of <br> development <br> strategy |

Previous researches have shown mixed results about the relationship between corporate name changes and their market values. For instance, according to Howe (1982), name change has little effect on firm value for US companies. Other research results (Andrikopoulos, et al., 2008) also suggested that there would be no further reaction of name changes on stock prices beyond the short time horizons examined, and short-run stock returns due to renaming announcement are negligible
compared with long-run ones. On the other hand, Cooper et al. (2001) and Josev et al. (2004) reported the opposite result with evidence from specific industries, such as IT companies. Mase (2009) also suggested the overall positive effect of name change to firm values in UK. In contrast to the abundant studies on developed markets such as the U.S., research that focuses on emerging markets such China is relatively scarce. In order to fill this gap, this study aims to investigate the shortterm impact of company name change on firm values from Chinese A-Share market perspective. To be specific, the study will apply event study analysis to identify whether company name change is associated with short term abnormal return for A-share listed firms, the results and insights of which may be of interests to both company managers as well as investors.

## 2. Methodology

The data are openly available from the web of Shenzhen Stock Exchange (SZSE) as of the time of the current empirical study being done. At first, 196 non-ST quoted firms which have reported only once name change in A-stock market from 2009 to 2019 are chosen to be research sample. Since the public media usually immediately publishes the companies' name change information once it is announced, this study defines the name changing day as the announcement day. In addition, CSI 300 Index is chosen to be the market index, where the index is jointly released by Shanghai and Shenzhen stock exchanges and includes 300 target quoted companies on Astock market. Besides, quotations on the exchange of some companies were found suspended before or after the name changing announcement day, causing errors when collecting the daily return and calculating the abnormal return for such stocks. Therefore, this research excludes those companies, resulting in a final sample of 150 firms. Table 2 shows the detailed data sampling process.

Table 2: Name change event description

| Name | Sample Size <br> (Stock Number) |
| :--- | :---: |
| Name change quoted companies in Shenzhen Exchange Party from <br> 2009 to 2019 | 392 |
| Non-active name change events (ST stock) | 107 |
| Companies which have changed name more than once | 89 |
| Companies which stopped quotation around the announcement date | 46 |
| The classifications (reasons) of sample: | - |
| Change in business | 36 |
| M\&A (Merge and Acquisition) | 14 |
| Reconstruction | 23 |
| Reputation improvement | 77 |

To analyze the abnormal returns around the name change announcement day, we adopted two methods suggested by Brown and Warner (1985), namely market adjusted abnormal return and market model abnormal return. For market adjusted abnormal returns, the abnormal returns are calculated by

$$
A R_{i, t}=R_{i, t}-R_{m, t}, t=-60, \ldots \ldots,+66
$$

where $R_{i, t}$ and $R_{m, t}$ represent the daily stock return for firm i and market index return on day $t$, respectively. On the other hand, the market model abnormal returns are defined as

$$
\mathrm{AR}_{\mathrm{i}, \mathrm{t}}=\mathrm{R}_{\mathrm{i}, \mathrm{t}}-\left(\widehat{\alpha_{1}}+\widehat{\beta_{1}} \mathrm{R}_{\mathrm{m}, \mathrm{t}}\right)
$$

where $\widehat{\alpha_{1}}$ and $\widehat{\beta_{1}}$ are parameters of the market model for firm i estimated by the market model over an estimation period from $t=-60$ to $t=-21$ before the announcement day. This process was repeated for each firm to have a series of regression coefficients that describe the pre-name change relationship between each stock and market index. Then the cumulative abnormal return (CAR) over various event windows was calculated with both cross-sectional and time series data by the following formula. For instance, for the event window from $t=k$ to $t=1$,

$$
\operatorname{CAR}(\mathrm{k}, \mathrm{l})=\sum_{\mathrm{t}=\mathrm{k}}^{\mathrm{l}} \sum_{\mathrm{i}=1}^{\mathrm{N}} \frac{\mathrm{AR}_{\mathrm{it}}}{\mathrm{~N}}
$$

where N is the number of firms.
A t-statistics measuring whether or not the CAR is significantly different from zero over the period from $\mathrm{t}=\mathrm{l}$ to $\mathrm{t}=\mathrm{k}$ was then calculated using the dependence adjusted method (Brown \& Warner, 1985) to avoid the possible correlations of abnormal returns during the event period. For example, with a holdout period of $t=-30$ to $t=$ -16,

$$
\mathrm{T}=\sum_{\mathrm{t}=\mathrm{k}}^{\mathrm{l}} \frac{\mathrm{AR}_{\mathrm{t}}}{\sqrt{\sigma_{\text {holdout }}^{2} \mathrm{M}}},
$$

where $\sigma_{\text {holdout }}^{2}$ is the variance of the abnormal return computed over the holdout period and M is the number of days from $\mathrm{t}=\mathrm{k}$ to l . The null hypothesis is that the mean CAR of the sample stocks would be equal to zero for any given event window. The standard deviation of the abnormal return in the pre-event period is calculated as

$$
\hat{S}\left(A R_{i}\right)=\left[\sum_{t=-\left(t_{1}+T\right)}^{t=-t_{1}}\left(A R_{i, t}\right)^{2} /(T-1)\right]^{1 / 2}
$$

where the time period length $T$ from $t=-60$ to $t=-21$ starting $t_{1}+T$ days before the event is used for estimation. Correspondingly, the standardized abnormal return ( t value) for each firm on event day $t=0$ is:

$$
A^{\prime} R_{i, 0}=\frac{A R_{i, 0}}{\hat{S}\left(A R_{i}\right)}
$$

and assuming that $A^{\prime} R_{i, 0}$ has a Student t -distribution.

## 3. Results and Analysis

Following the empirical practice for financial data windowing (see Kot, 2011; Biktimirov, 2017, e.g.), the event windows $[-5,0],[-1,0],[-1,+1],[-1,+5],[-1$, $+10]$ and $[-1,+20]$ are used. We choose $[-5,0]$ as the first event window to analyze the potential prior knowledge of a company's move of name change. To take a closer look at the day before the announcement date, $[-1,0]$ is included as the second event window. The $[-1,+1]$ window is selected to help to identify if there exists immediate reaction from investors. We further include $[-1,+5],[-1,+10]$ and $[-1,+20]$ windows to assess price reaction after the announcement date, in a gradually increasing length of event period. The average name change effect in terms of CARs of the selected sample is illustrated by Figure 1.


Figure 1: Average CAR before and after name change announcement date
The following Table 3 presents the stock price reaction (in percentage) associated with announcements of corporate name changes over three event windows. The abnormal return was calculated as the difference of the return for each stock from the return of the market index. Cumulative abnormal returns are the sum of the abnormal returns over the event windows. T-statistics are reported in parentheses.
${ }^{*},{ }^{* *}$, and ${ }^{* * *}$ indicate significance level at the $10 \%, 5 \%$ and $1 \%$, respectively.

Table 3: Stock price reaction around the announcement date

| Event Windows | [-5, 0] | [-1, 0] | [-1, +1] | [-1, +5] | $[-1,+10]$ | [-1, +20] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panel A: Market Model CARs |  |  |  |  |  |  |
| All | -0.48 | 0.26 | 0.31 | -0.41 | -1.71* | -1.69* |
|  | (-0.69) | (0.66) | (0.64) | (-0.55) | (-1.75) | (-1.28) |
| Change in Business | -0.05 | 0.19 | 0.59 | 1.70 | -2.92 | -6.05* |
|  | (-0.03) | (0.18) | (0.47) | (0.88) | (-1.16) | (-1.77) |
| Merger or Acquisition | 4.49** | 3.11** | 3.69** | 1.19 | -0.45 | -0.71 |
|  | (2.05) | (2.46) | (2.39) | (0.50) | (-0.14) | (-0.17) |
| Restructuring | -0.43 | -0.46 | -1.08 | $-2.33 * *$ | -0.89 | -2.38 |
|  | (-0.42) | (-0.77) | (-1.49) | (-2.09) | (-0.61) | (-1.21) |
| Reputation or Clarification | $-2.68{ }^{* *}$ | -0.28 | -0.29 | -1.55* | -1.47 | 0.5 |
|  | (-3.31) | (-0.61) | (-0.51) | (-1.77) | (-1.28) | (0.32) |
| Panel B: Market Adjusted CARs |  |  |  |  |  |  |
| All | -0.6 | 0.36 | 0.52 | -0.18 | -1.71* | -2.09 |
|  | (-0.83) | (0.86) | (1.02) | (-0.23) | (-1.67) | (-1.5) |
| Change in Business | -0.55 | 0.29 | 0.81 | 2.17 | -2.49 | -5.66 |
|  | (-0.31) | (0.28) | (0.64) | (1.12) | (-0.98) | (-1.65) |
| Merger or Acquisition | 3.5 | 2.69* | 3.26* | 0.42 | -2.43 | -3.96 |
|  | (1.55) | (2.07) | (2.05) | (0.17) | (-0.76) | (-0.92) |
| Restructuring | 0.69 | 0.1 | -0.24 | -0.56 | 1.22 | 1.75 |
|  | (0.68) | (0.17) | (-0.33) | (-0.52) | (0.85) | (0.90) |
| Reputation or Clarification | $-2.62^{* *}$ | -0.28 | -0.25 | -1.54* | -1.56 | -0.54 |
|  | (-3.20) | (-0.60) | (-0.43) | (-1.73) | (-1.35) | (-0.34) |

Panel A of Table 3 shows the average of market model CARs for each event window for all 150 stocks as well as each of the four categories of reasons for name change. And the t-statistics are reported in parentheses. The results suggest that investors' responses diverge with respect to the name change reasons. For firms that change their names because of change in business type, investors do not promptly and vehemently respond until days after the announcement. The CARs are insignificant prior to the event, but are significantly negative for the $[-1,+20]$ period. For merger or acquisition announcements, the CARs are significantly positive at the $5 \%$ level prior and around the event day with $4.49 \%, 3.11 \%$ and $3.69 \%$ for the $[-5,0],[-1,0]$ and $[-1,+1]$ windows, respectively. This result suggests that investor might have the information or confidence of the company's incoming name change prior the news, which is consistent with the findings of Kot (2011). However, further analysis shows that such investment sentiment does not last long and gradually diminishes after the announcement. For firms changing name due to restructuring purpose,
investors respond with persistent negative reactions throughout the prior and post event periods, especially significant for the $[-1,+5]$ window. When name changes are motivated by reputation or clarification, the CARs are significantly negative in the $[-5,0]$ and $[-1,+5]$ periods. The corresponding CARs are $-2.68 \%$ and $-1.55 \%$. The results suggest that investors might have the knowledge of the planned name change but react negatively to it. However, they tend to reverse their attitudes in longer periods after the announcement, suggested by the positive CAR in the $[-1$, +20] window.
Panel B of Table 3 presents the market adjusted CARs. For change in business and restructuring, no significant CARs are identified. For name changes due to merger or acquisition, CARs are significantly positive in the $[-1,0]$ and $[-1,+1]$ windows. For reputation or clarification announcements, there show significantly negative CARs in the $[-5,0]$ and $[-1,+5]$ periods. These results are generally consistent with the results achieved from the market model CARs.

## 4. Concluding Remarks

In this research, the stock price reaction to corporate name change has been explored using event study method. The results show that the CAR of companies undergone a name change experienced a gradual descend before the name change announcement date due to potentially divulging statements or moves from the company. However, an obvious fluctuation of CAR is immediately seen once the name change news is announced. The uptrend will continue for just 2-3 days before a downward trend in CAR. Therefore, the results tend to support that it is not rationale for either investors to pursue the opportunity of abnormal return or for companies to expect a rising valuation using name change strategy. Different reasons of name change may lead to distinct impacts on companies' market value. Firstly, M\&A strategy is the only reason that may cause significant positive effect on their stock price. This is reasonable since merger has the ability to exploit economy of scale, reduce the transaction cost, boost market share and market competitiveness, and improve the management of the acquired enterprise. Because of this, M\&A yielded more advantages to the firm's performance compared with other reasons. Additionally, firms which change their names in order to pursue higher reputation show significant negative results, which implies that changing name for the pursuit of hot spots is not a shortcut to improve the firm value. Correspondingly, investors should carefully analyze the reasons behind company name change to optimize investment. The main limitation of the current research is that the sample size is not large enough, which may hamper the comparability of the results to studies based on big-data analysis. Additionally, long-term performances of the sample companies were not focused in this research. Future directions are recommended to address these issues.

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