

# Why do Chinese firms voluntarily delist from U.S. stock exchanges?

by

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## **Abstract**

### **Why do Chinese firms voluntarily delist from U.S. stock exchanges?**

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This study investigated the potential reasons Chinese firms voluntarily delist from U.S. stock exchanges. Leuz, Triantis, and Wang (2008) argued that firms trade off between benefits and costs of public listing, and firms that have difficulties raising funds from stock markets are more likely to cease public reporting to avoid the high costs. In studying all Chinese firms voluntarily delisted from the New York Stock Exchange and Nasdaq from 2009 to 2017, the T-test empirical results showed that these delisted Chinese firms had significantly worse performance, measured by return on equity (ROE), and lower debt ratios than other active firms. In addition, the multivariate regression results showed the probability of delisting is significantly and negatively associated with firms' ROE and debt ratio. The finding regarding ROE is consistent with the theory proposed by Leuz et al.(2008). Firms with worse performance are less likely to be appreciated by investors, and therefore, they may choose to delist to avoid the costs of public reporting. The finding regarding debt ratio is not consistent with Leuz et al.(2008), which could be caused by the uniqueness of the Chinese economic environment. The U.S. stock markets were negatively influenced by the 2008 financial crisis, whereas Chinese markets were not. Chinese markets could potentially provide more funds to firms at lower costs than U.S. markets could. Moreover, Chinese financial markets have developed gradually, encouraging Chinese firms to go back to their local financial markets to avoid the underpricing induced by the equity home bias. Chinese firms with lower debt ratios are believed to be relatively safe investments with opportunities to go public on Chinese stock exchanges, which may encourage voluntary delisting from U.S. markets. Firms' delisting could cause investors to lose capital significantly; these findings will interest shareholders by providing leading indicators of delisting.

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## Chapter 1: Introduction

Why do firms go public? This question has been investigated by many studies and has been discussed in many finance courses. Every business major could probably name a couple of reasons for initial public offerings (IPOs): the access to capital markets, potential lower costs of raising funds, and the good reputation gained through public disclosures. Conversely, many stock exchanges have been shrinking in size.<sup>1</sup> Take the U.S. stock market as an example. There were more than 8,000 public traded firms on U.S. stock exchanges in the mid-1990s. However, by 2016, only 4,000 firms remained.<sup>2</sup> This raised a question: why do firms delist from stock exchanges? In particular, why do firms voluntarily delist from stock exchanges? Although the delisting phenomenon is significant severe now, the issue is understudied in the literature and almost never discussed in finance courses. This study tried to shed light on this delisting issue, investigating the potential reasons Chinese firms voluntarily delist from U.S. stock exchanges.

China has quickly become the second largest economic entity in the world. With the expansion of the Chinese economy, many Chinese firms are developing very fast, too. Many of them are large, profitable, and promising for growth opportunities. At the end of July 2019, *Fortune* magazine revealed its list of the world's top 500 companies. From mainland China, 119 firms made the list, whereas 121 firms were from the United States.<sup>3</sup> More important, three out of the top 10 firms were Chinese firms, beating the United States and Japan, which had two firms and one firm among the top 10, respectively.

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<sup>1</sup> <https://www.nytimes.com/2018/08/04/business/shrinking-stock-market.html>

<sup>2</sup> [https://www.theglobaleconomy.com/USA/Listed\\_companies/](https://www.theglobaleconomy.com/USA/Listed_companies/)

<sup>3</sup> <https://www.forbes.com/sites/panosmourdukoutas/2019/07/23/worlds-500-largest-corporations-in-2019-china-matches-america/#429b1cd31383>

Many Chinese firms chose to go public in U.S. stock exchanges—namely, the New York Stock Exchange and the Nasdaq Stock Exchange. As of February 25, 2019, there were 156 Chinese firms listed on major U.S. stock exchanges.<sup>4</sup> It is worth noticing that from 2009 to 2017, 85 Chinese firms voluntarily delisted from U.S. stock exchanges. These numbers reveal dramatic changes regarding the IPO and delisting of Chinese firms on U.S. stock exchanges.

Leuz, Triantis, and Wang (2008) argued that firms trade off between the benefits and costs of public listing, and firms that have difficulties raising funds from stock markets are more likely to cease public reporting to avoid the high costs. They found that firms with higher leverage or lower performance, which may increase the difficulty of getting funds from investors, are more likely to go dark. Going dark is one form of the voluntarily delisting. Going dark means firms' stocks are traded over the counter rather than publicly. This study focuses on voluntarily delisting from U.S. stock markets, which means removing from the set of U.S. publicly traded stocks. These stocks may go dark, go private, or go public on another stock market. Additionally, the delisting is not forced by the stock exchange or the government; instead, it is the firms' request to be delisted.

As with going dark, voluntary delisting could also be due to a trade-off between the benefits and costs of public listing. The costs are quite significant, such as the auditing expenses, the legal consulting costs, and all filing expenses. If firms cannot generate enough returns from the listing (e.g., the access to funds, the lower costs of capital), it is rational to delist from the stock exchange. Therefore, following Leuz et al. (2008), this study first proposed that the probability of Chinese firms' voluntary delisting is

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<sup>4</sup> <https://www.uscc.gov/chinese-companies-listed-major-us-stock-exchanges>

negatively associated with firm performance. Chinese firms with the worse performances are less likely to enjoy the benefits of listing on U.S. stock exchanges because it is harder for them to attract U.S. investors. Therefore, Chinese firms with the worst performances are more likely to voluntarily delist from the U.S. stock exchanges.

In addition, this study also proposed that there is a significant relationship between the likelihood of Chinese firms' voluntary delisting and the firm's leverage ratio. However, it is not conclusive whether the relationship is positive or negative. On the one hand, as Leuz et al. (2008) pointed out, firms with higher leverage are less likely to be preferred by shareholders. Therefore, there are lower benefits from listing as a public firm. On the other hand, low leverage firms may have lower needs for funds and also see lower benefits from listing as public firms.

To test the above-mentioned hypotheses, t-tests were conducted. After comparing all Chinese firms that voluntarily delisted from U.S. stock exchanges from 2009 to 2017 with all active firms on U.S. stock exchanges for the same period, it was evident that Chinese firms that voluntarily delisted from U.S. stock exchanges had significantly lower returns (proxied by ROE) and debt ratio. Another t-test was conducted to compare Chinese firms that voluntarily delisted from U.S. stock exchanges from 2009 to 2017 with all non-Chinese firms that voluntarily delisted from U.S. stock exchanges for the same period. The results again showed that Chinese delisted firms had significantly lower ROE and debt ratio. These results also indicated that performance and leverage are factors influencing Chinese firms' decisions to delist.

To better test the likelihood of delisting, a multivariate regression was performed. After controlling for year, industry, and firm size, the delisting was found to be negatively associated with ROE and debt ratio. The results suggested that Chinese firms with worse

performance are more likely to voluntarily delist from the U.S. stock exchanges, which is consistent with the findings of Leuz et al. (2008). Contradictory to Leuz et al., the regression results suggested that Chinese firms with lower debt ratio are more likely to voluntarily delist from the U.S. stock exchanges. This result might be explained by the uniqueness of the Chinese institutional environment. First, the sample period started after the 2008 financial crisis. At that time, the U.S. economy was not developing as fast as China's economy. The benefits of listing on U.S. stock markets might have been limited due to economic developments. Second, Chinese stock exchanges developed gradually and have become more attractive to Chinese firms. The U.S. stock market may no longer have been the optimal choice for some companies, which triggered the voluntary delisting. Lastly, Coval and Moskowitz (1999) argued that the equity home bias suggests that foreign stocks on U.S. markets (i.e., Chinese stocks in this study) are preferred less by U.S. investors. In other words, Chinese stocks are more likely to be underpriced on U.S. markets. A few Chinese companies, such as Homeinns Hotel Group and Harbin Electric, Inc., publicly complained that their stocks on the U.S. financial market were undervalued. Therefore, when Chinese markets become more developed, Chinese firms would be encouraged to go back "home" to avoid the underpricing in the United States. According to our data, around one third of Chinese companies that voluntarily delisted from the U.S. financial markets have relisted in China, such as 360 Security Technology Inc. and China Transinfo Technology. Besides the firms who already went public again in China, there are also voluntarily delisted Chinese companies that have tried to do IPOs in China but have not yet been successful, such as Winner Medical Group Inc. and Zhongpin Inc. This is because the IPO requirements are more stringent in China than in the United States.

This study has contributed to finance literature in several ways. First, it has highlighted the importance of investigating delisting. Second, this study has provided empirical evidence regarding the reasons for voluntary delisting.

More important, this study has contributed to the practice. Delisting harms investors' interests and could cost them a huge loss. This study suggests two leading indicators—ROE and debt ratio—could help investors assess the risk of delisting.

The remainder of this paper is organized as follows: it introduces the background of Chinese firms' IPOs at U.S. stock exchanges, reviews the delisting literature and proposes two hypotheses, describes the research design, reports the results, and then concludes.

## **Chapter 2: Background**

### **2.1 Trades**

Chinese firms' IPOs at U.S. stock exchanges are a form of trade of capital between the two countries. Countries can benefit from trading. From an economic standpoint, when countries do not have enough capacity or resources to meet their own needs, they start trading with other countries based on their comparative advantages. Trade between countries is also a process of optimal allocation of resources worldwide. Because trade is closely related to production, it may also lead to an increase in employment, which can benefit a country's economy. It is also worth mentioning that good regulation and control are necessary to make transactions more transparent and more secure.<sup>5</sup>

Throughout history, good foreign policy has usually promoted trade. China used its military power to maintain the trade value of the Silk Road in the third century BCE. Since that time, trade has been an important part of Chinese economy and has become an important tool for economic modernization. After China joined the World Trade Organization (WTO), its trade development started a new era of financial prosperity.

### **2.2 The Importance of WTO**

The WTO is an international organization responsible for establishing trade rules and regulatory systems. The WTO can maintain and assist better trades between countries.<sup>6</sup> The establishment of the WTO marked the most important international trade reform after the Second World War.

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<sup>5</sup> <https://www.britannica.com/place/China/Trade>

<sup>6</sup> [https://www.wto.org/english/thewto\\_e/history\\_e/history\\_e.htm](https://www.wto.org/english/thewto_e/history_e/history_e.htm)

### **2.3 Why China entered WTO?**

China became the 143rd member of the WTO on December 11, 2001, an event that has been of great significance and value for China. Graham Boden (2012) reported that China's accession has led to a dramatic increase in exports and reduced tariffs on both imports to and exports from China. The rapid development of export markets and more lenient investment restrictions have led to a rapid growth of capital in China. The WTO accession agreement has also made China's trade laws increasingly transparent, which have helped the Chinese firms adapt into the rest of the business world.

The joining of the WTO opened up China even more and made Chinese firms' exit much easier. After 2001, more Chinese companies were eager to go global. Some Chinese entrepreneurs chose foreign direct investment or wanted to go public in foreign financial markets.

### **2.4 Why Chinese companies go public in U.S.?**

Many of the Chinese firms that went public in the United States were Internet companies. Chinese companies in the Internet industry needed more funds in the early stage of development. However, Chinese banks were generally not willing to issue many loans to Internet companies without physical assets. Therefore, these Internet companies had to rely on overseas investment institutions such as angel investors, private equity investors, and venture capital investors.

Another reason a Chinese company might want to make an IPO in the overseas market is that the requirements of going public are more easily satisfied in the U.S. markets than in the Chinese markets. In the U.S. financial markets, if the company grows at a high level or is one of the leaders in its sales market as measured by market shares, it can apply to be listed without earning requirements. On the contrary, in Chinese financial

markets, the IPO requirements are more stringent, and one of the many requirements is that companies must be profitable for 3 consecutive years before submitting the IPO application. For companies in certain industries, it may be easier to list on the U.S. financial market than to list on the Chinese financial market.

## **2.5 How can Chinese companies enter US financial market?**

Simply put, Chinese companies can enter the U.S. financial market and raise funds in five ways: IPOs, American depositary receipts (ADRs), private equity, direct listing, and backdoor listing.

An IPO is the first time a company sells its shares to the public. It is an important process if a private company wants to become a listed company because it is the time when the public discovers this company and sets a price for it. Once the IPO is completed, the company can apply for listing on the stock exchange market. After that, companies could continue raising capital from investors by seasoned equity offerings.<sup>7</sup> Generally speaking, the stock price at the date of the IPO is usually underpriced because it is a way to attract investors. When the demand for stocks increases, the stock prices increase as well.

Private equity, the second way to sell securities in U.S. markets, means selling a company's shares to certain buyers instead of selling to the public. Although such transactions are free from the registration required by the U.S. Securities ACT, they are subject to many restrictions required by Rule 144A regulations on the sale of private equity securities. Rule 144A regulations were adopted by the U.S. Securities and Exchange Commission in 1990, and they only allow certain eligible securities to be sold

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<sup>7</sup><https://www.investopedia.com/terms/i/ipo.asp>

to qualified institutional investors. For instance, eligible securities require that a private placement memorandum (PPM) be sent to investors. The PPM is the disclosure document for companies that want to use private equity to raise capital; it describes the companies that sell securities and their investment risk. In the meantime, the transactions are also regulated to some extent. For example, as with IPOs, buyers must have the right to obtain information from the issuing company, even if the information is still not disclosed to the public.

American depositary receipts (ADRs) are the third method by which a Chinese company could raise funds from the United States. ADRs are a type of security issued by U.S. commercial banks in U.S. dollars to assist foreign securities in trading in the U.S. markets. By this method, U.S. banks could purchase the foreign stocks in their domestic currencies first and then sell the according stock to U.S. investors in U.S. dollars. In other words, ADRs allow U.S. investors to buy foreign stocks without the across-the-board institutional risks and currency risks. The prices of ADRs are based on the underlying foreign stocks. In fact, many foreign company stocks are traded on the U.S. stock exchange this way, including those of the giant Chinese technology company Tencent, which is currently ranked 237 on the Fortune 500 list.<sup>8</sup>

The direct listing process means that the companies sell shares directly to the public without the help of underwriters, thus eliminating underwriting fees. Compared to IPOs, direct listing has no lockup period. Besides, companies do not issue new shares. Contrarily, companies only need a simple process to register existing shares and then trade in financial markets.

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<sup>8</sup> <https://fortune.com/global500/tencent-holdings/>

Backdoor listing is a strategy for company listings, the fifth method by which a Chinese company can go public in the United States. In this strategy, companies acquire companies that are already listed as going public. The reason companies choose backdoor listing is that companies may not conform to all standards listed on the stock exchange or follow all of the cumbersome procedures. Compared to an IPO, the backdoor listing can help companies spend less time and money going public.<sup>9</sup>

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<sup>9</sup> <https://www.jiemian.com/article/2042733.html>

## **Chapter 3: Literature Review & Hypotheses**

### **3.1 Literature review– go dark**

After firms voluntarily delist from the stock exchange, many of them choose to go dark. Marosi and Massound (2007) and Leuz et al. (2008) used the term “dark company” to refer to companies turned into over-the-counter trading. What are the benefits of switching to over-the-counter trading? It is clear that firms do not need to pay the high costs of public listing. In the meantime, firms that go dark can still have the same benefits as publicly traded firms, including the decreased information asymmetry, the increased liquidity (Easley & O’Hara, 2002; Leuz & Verrecchia, 2000), the enlarged investor base (Basak & Cuoco, 1998; Merton, 1987), and probably the lower cost of capital (Botosan, 1997).

### **3.2. Literature review - voluntary delisting**

Macey, O’Hara, and Pompilio (2008) pointed out that when a company voluntarily delists from the market, it takes the initiative to apply for delisting, whereas involuntary delisting may be incurred by violating regulatory requirements or by bankruptcy. In this report, we only focused on voluntary delisting.

Different scholars have different interpretations of the reasons for delisting because their research directions are not the same. In the existing literature, Balios, Eriotis, Missiakoulis, and Vasiliou (2015) reported that companies with low liquidity and high leverage were more likely to delist from the markets. There are more variables that can lead a company to voluntarily delist from the market. Pezzi (2018) reported that the agency costs and the number of years listed might be important factors. He believed that not all low-quality companies or poor profitability companies would delist in the market, and the possibility of delisting companies to be relisted should be considered.

Furthermore, he believed that if the company has a profitable income and a high ROA, it is more likely to stay in the financial market for a longer period.

After analyzing all the companies that delisted from London's alternative investment market, Pour and Lasfer (2013) argued that one of the major reasons companies voluntarily delist is that those firms entered the market to rebalance their leverage level rather than to raise funds for potential growth opportunities.

Bharat and Dittmar (2010) reported that when a company goes public, investors have less information about the real values than insiders do. Information asymmetry leads to adverse selection problems that affect corporate value and stock price. Therefore, companies with information asymmetry are more likely to be privatized in order to avoid the cost of adverse selection. However, Marosi and Massound (2007) used the ratio of intangible assets to total assets to measure the level of information asymmetry between internal and external stakeholders. Their research results showed that the intangible assets to total assets ratio has little effect on whether the company delists from the market, which means that information asymmetry is not a factor in delisting decisions.

Marosi and Massound (2007) also reported that publicly listed companies with low growth opportunities might have agency conflicts between managers and shareholders due to free cash flow problems. When a firm keeps excess cash, shareholders would question whether this company used cash flows reasonably to obtain higher growth opportunities, and on top of that, shareholders would question whether managers were using the cash for their own interests if the company had too much free cash flow. Therefore, companies with high free cash flow are not likely to attract investors, which leads to the conclusion that companies with more free cash flow are more likely to go private.

Many scholars have made their own hypothesis and used data analysis to find out key factors that lead to companies' delisting. Almost all scholars agree that companies voluntarily delist from the market when they cannot earn benefits from those markets.

### **3.3 Literature review - home bias**

Because this study focused on the question of why Chinese firms (foreign firms) voluntarily delist from U.S. markets, home bias needs to be addressed. Home bias can be understood as a behavioral bias in which investors prefer more of their local securities, probably due to familiarity with local companies. Lewis (1999) pointed out that the proportion of domestic assets held by investors in their portfolio is much higher than that suggested by the standard portfolio theory. This phenomenon is named "home bias of equity." A similar point was also raised by Coval and Moskowitz (1999). When the U.S. investment managers help investors to choose stocks, they prefer to choose local companies with high leverage. The evidence indicates that that home bias is present.

The information cost is a common cause of home bias. Jeske (2001) noted that investors face the cost of obtaining information when they want to purchase foreign stocks. Many investors do not have enough information about these nondomestic companies because of the information costs, which may lead to the reluctance to buy these stocks. From an economic perspective, the demand for these stocks is low because they are not recognized by investors, which leads to the undervaluation of the company. A couple of Chinese companies publicly complained that their companies were undervalued in the U.S. market, probably due to home bias. The home bias explains why an increasing number of Chinese firms have delisted from U.S. markets in the past 10 years.

### 3.4 Hypotheses development

This report mainly analyzed why Chinese firms voluntarily delist from U.S. financial markets. We proposed two reasons and formulated two hypotheses.

We suspected that one of the reasons companies voluntarily delist from U.S. financial markets is poor operational outcomes or profitability. More specifically, we anticipated that poor profitability is an important factor in deciding to voluntarily delist. When firms' performances are weak, investors appreciate them less and probably discount their stock prices. Therefore, the benefits of listing on a stock exchange are lower, and possibly even lower than the costs of listing. As a result, firms may choose to voluntarily delist from the stock market.

Throughout the literature, it was not difficult to find that many scholars, such as Marosi and Massoud (2007), believed that companies with poor profitability will voluntarily delist. Furthermore, Pezzi (2018) asserted that a company with a higher ROA will stay in the financial markets for a longer period than companies with lower ROA. There should be no exception for Chinese companies.

Formally, the first hypothesis is as follows:

*Hypothesis 1: There is a negative relationship between a Chinese firm's profitability and its probability of voluntary delisting.*

Pour and Lasfer (2013) reported that one of the reasons a company would voluntarily delist from the market is that the company wants to adjust the leverage level. Higher financial leverage could contribute to the company's voluntarily delisting from the market because debt is enough to maintain the company's operations and future growth need. Alternatively, because of the high debt ratio, investors may become concerned

about firms' ability to pay interests and principals and cause them to hesitate to invest in such firms. When those firms are not appreciated by investors, their benefits of public listing diminish, leading to voluntary delisting. In contrast, companies with low financial leverage may choose to delist from the financial market too. The low leverage could be an indicator that the firm is not growing. In this case, firms do not need to stay on the financial market due to their low needs of funds; investors may be discouraged from buying their shares, further encouraging firms to leave the market.

Another reason for foreign firms to delist from financial markets can be explained with the theory of home bias. Coval and Moskowitz (1999) suggested that nondomestic stocks may not appeal to local investors. Jeske (2001) reported that investors do not have enough information about those nondomestic companies, so they might not purchase nondomestic companies' stock. Over time, foreign companies are undervalued, mitigating the benefits of public listing. Firms with a lower leverage ratio are generally believed to be a safe investment, which makes it possible for them to go public on their home exchanges, where their stocks could be appropriately priced. Finally, foreign companies with the chance to be listed on home stock exchanges might choose to delist from U.S. financial markets.

We believe that financial leverage is also an important factor for a company in deciding whether to delist or not. However, we are not certain whether the impact is positive or negative.

Formally, the second hypothesis is presented below without positive or negative indicators:

*Hypothesis 2: There is a strong relationship between a Chinese firm's leverage and its probability of voluntary delisting.*

## Chapter 4: Research Design

### 4.1 Sample

This report analyzed why Chinese companies voluntarily delist from U.S. financial markets. Because of the lack of studies on the delisting topic, few related data exist. Because there is no source of data specifying Chinese firms that delisted in the past, we started the data analysis by identifying delisted firms, including voluntarily delisted Chinese firms and non-Chinese firms, as well as non-voluntarily delisted Chinese firms and non-Chinese firms.

As the first step, we downloaded all available data from Wharton Research Data Services (WRDS). The initial sample consisted of all stocks included in the WRDS's New York and Nasdaq stock exchanges from 2001 to 2018. There were 119,122 observations in total.

As the second step, we used global company keys as the company identification to determine when and whether a company goes public or delists. If a company disappeared from the database in a year, we highlighted this company as a potential delisted company. Then we used Bloomberg to find the Form-25 to check whether these firms were actually delisted and find out whether the companies had delisted voluntarily. Form-25 is the form every firm must file if it leaves the stock exchange. Hence, firms that issued Form-25 were defined as the delisted companies. On the Form-25, firms must disclose the reason/type of delisting, which would indicate whether the delisting was voluntary. All delisting observations that did not show a firm was forced to delist were defined as voluntary delisting. We defined IPO firms as the firms that did not exist in the database before the sample period and appeared for the first time during the sample period.

To eliminate the influence of the 2008 financial crisis, we set 2009 to 2017 as the final sample period. The data indicated that there were 1,783 companies that delisted from the U.S. financial market from 2009 to the end of 2017.

The third step was to find out how many of these 1,783 companies were Chinese, based on their headquarters' geographic location. It is worth mentioning that many companies set up their headquarters in tax havens. The reason is companies want to avoid high tax rate. For these companies, we checked more information (e.g., news about the firm) to determine whether they were Chinese companies or not. 89 of the delisting companies were Chinese companies, and only 4 of these Chinese companies were not delisted voluntarily. Among the 1,694 non-Chinese firms delisted from 2009 to 2017, 1,644 were delisted voluntarily. For Chinese delisted firms, 95.5% were delisted voluntarily while 97% of non-Chinese firms' delisting was voluntary. These ratios suggest that voluntary delisting has dominated.

Fourth, we summarized how many companies are active or are still listed in U.S. financial markets. We identified companies that existed at the start of the sample period (i.e., 2009) and were still listed in the U.S. financial markets in early 2018 as active companies. There were 4,806 companies meeting this definition.

As the fifth step, we decided to use ROE as an indicator to measure the corporate profitability, and liability-to-asset ratio (debt ratio) as an indicator to measure financial leverage. ROE was calculated as the net income or loss divided by the total equity. Debt ratio was calculated as the total liability divided by the total assets.

## **4.2 T-Test**

We choose the t-test as our preliminary test. The t-test was used to determine whether there is a significant difference between the observations in two groups. We used

the first t-test to verify whether there was a significant difference in the profitability and financial leverage of those voluntary delisting Chinese companies and active companies. In the model, the 85 Chinese firms voluntarily delisting were defined as Group 1 and the 4,806 active companies were defined as Group 0. We used the ROE ratio to show the companies' profitability and debt ratio to show the companies' financial leverage. As the research progressed, we used the second t-test to verify whether there was a significant difference between the profitability and financial leverage of voluntarily delisting non-Chinese companies and Chinese companies. We defined Group 1 to include 85 voluntarily delisting Chinese companies and Group 0 otherwise.

To better understand the relationship between a company's profitability, its financial leverage, and its voluntary delisting, we would need to conduct further research after controlling for other factors that might also influence delisting. We used multivariate regression next.

### **4.3 Regression**

Because of the data limitation, in our report we could only focus on the impact of corporate profitability and financial leverage on voluntary delisting. We established a multivariate regression model to test the relationship between profitability, financial leverage and delisting. *Delist* as a dependent variable in this regression model stood for the voluntarily delisting company. *Delist* takes the value of 1 if the observation is one of the 85 Chinese voluntary delisted companies and takes the value of 0 if the observation is one of the active companies. ROE and debt ratio were independent variables. The natural logs of asset, fiscal year, and standard industry classification were used as control variables. We used these variables to construct a regression model to explore the reasons Chinese companies delisted from the U.S. financial market.

To test Hypotheses 1 and 2, our regression model was as follows:

$$Delist_{it} = \beta_0 + \beta_1 ROE_{it} + \beta_2 DebtRatio_{it} + \beta_3 Asset_{it} + \beta Year + \beta SIC + \varepsilon_{it}$$

Where

$Delist_{it} = 1$  if the firm  $i$  was a Chinese company that voluntarily delisted from the financial market, and 0 otherwise;

$ROE_{it}$  = net income for firm  $i$  in year  $t$  divided by total equity for firm  $i$  in year  $t$ ;

$DebtRatio_{it}$  = total debt for firm  $i$  in year  $t$  divided by total assets for firm  $i$  in year  $t$ ;

$Asset_{it}$  = natural log of total assets;

$Year$  = dummy variables to present the fiscal years in the sample (i.e., 2009-2017);

$SIC$  = dummy variables of the standard industry classification.

Hypothesis 1 predicted that  $\beta_1$  would be significant and negative. Hypothesis 2 predicted that  $\beta_2$  would be significant but could be positive or negative.

## Chapter 5: Results

### 5.1 Descriptive Statistics

**Table 1: Summary Statistics**

<b>Panel A: Dependent Variables</b>						
<b>Variables</b>	<b>N</b>	<b>Value</b>	<b>Percent</b>	<b>Value</b>	<b>Percent</b>	
Delist	37,095	1	1.05%	0	98.95%	
<b>Panel B: Independent Variables</b>						
<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Std Dev</b>	<b>25th</b>	<b>50th</b>	<b>75th</b>
ROE	37,095	0.079	19.274	-0.042	0.075	0.152
Debt Ratio	37,095	0.682	2.920	0.394	0.607	0.859
Asset	37,095	7.146	2.428	5.681	7.189	8.661
<u>Variable definitions</u>						
<b>Dependent variable:</b>						
Delistit = 1 if the firm i was a Chinese company that voluntarily delisted from the financial market, and 0 otherwise;						
<b>Independent variables:</b>						
ROE <sub>it</sub> = net income for firm i in year t divided by total equity for firm i in year t;						
DebtRatio <sub>it</sub> = total debt for firm i in year t divided by total assets for firm i in year t;						
Asset <sub>it</sub> = natural log of total assets.						

Table 1 shows the summary of statistics for the sample used in regressions. Panel A shows the descriptive statistics for dependent variables, and Panel B reports the descriptive statistics for independent variables.

Based on Panel A of Table 1, the number of Chinese companies getting delisted in the U.S. financial markets was a small part of the sample, about 1.05%.

Based on Panel B of Table 1, the mean of ROE in the sample was 0.079, accompanied by a large standard deviation, indicating that there is a large difference between ROEs in different companies. It can also be said that the data in the sample had a large degree of dispersion. The mean value of the debt ratio in the sample was 0.682, and the standard deviation was 2.920. Relative to the ROE, the debt ratio was less discrete in the data sample.

## 5.2 Number of IPO and Delisting

**Table 2: Number of IPOs and Number of Delisting by Year**

Year	# of IPO	# of delisting
2009	373	205
2010	286	189
2011	329	213
2012	371	169
2013	305	164
2014	242	206
2015	267	230
2016	316	197
2017	179	210
<b>Total</b>	<b>2,668</b>	<b>1783</b>

Table 2 shows the number of IPOs and the number of delisted firms from the U.S.

financial markets in each year (from 2009 to 2017). The number of delisted firms increased from 205 to 210 from 2009 to 2017 (2.4% increase).

**Figure 1: The trend of IPOs and Delisting in 2009-2017**

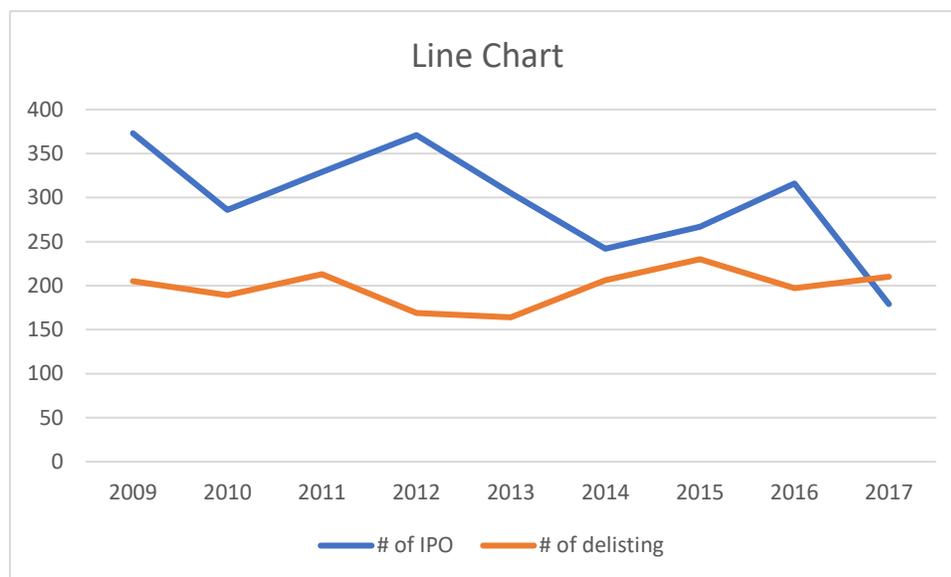


Figure 1 clearly shows the trend of the numbers of IPOs and delisted firms between 2009 and 2017. Although the number of IPOs dropped significantly, the number of delisting increased significantly.

**Table 3: Number of Delisting of Chinese firms by Year**

Year	# of Chinese companies delisted from U.S. markets	# of Chinese companies voluntarily delisted from U.S.
2009	2	2
2010	8	8
2011	13	13
2012	12	12
2013	12	12
2014	14	14
2015	19	17
2016	1	0
2017	8	7
<b>Total</b>	<b>89</b>	<b>85</b>

Table 3 shows the number of Chinese companies delisted from 2009 to 2017, and the number of Chinese companies voluntarily delisted in each year.

**Figure 2: The trend of Chinese firms' Delisting in 2009-2017**

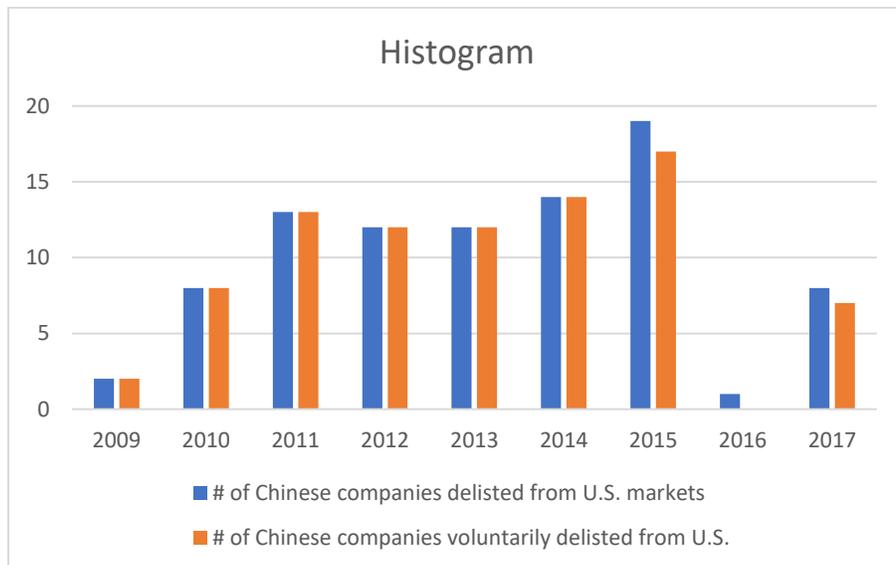


Figure 2 shows the number of Chinese companies delisted and the number of Chinese companies voluntarily delisted from 2009 to 2017. There is a significant upward trend from 2009–2015 for the number of Chinese companies delisting. In 2016 delisting was rare, but it became more frequent again in 2017.

**Table 4: Number of Delisting of Non-Chinese firms by Year**

Year	# of Non-Chinese companies delisted from U.S. markets	# of Non-Chinese companies voluntarily delisted from U.S.
2009	203	197
2010	181	178
2011	200	193
2012	157	149
2013	152	149
2014	192	184
2015	211	209
2016	196	192
2017	202	193
Total	1694	1644

Table 4 shows the number of non-Chinese companies delisted from U.S. stock exchange between 2009 and 2017, and the number of non-Chinese companies voluntarily delisted in each year. The number seems to be stably around 200 each year.

**Figure 3: The trend of Non-Chinese firms' Delisting in 2009-2017**

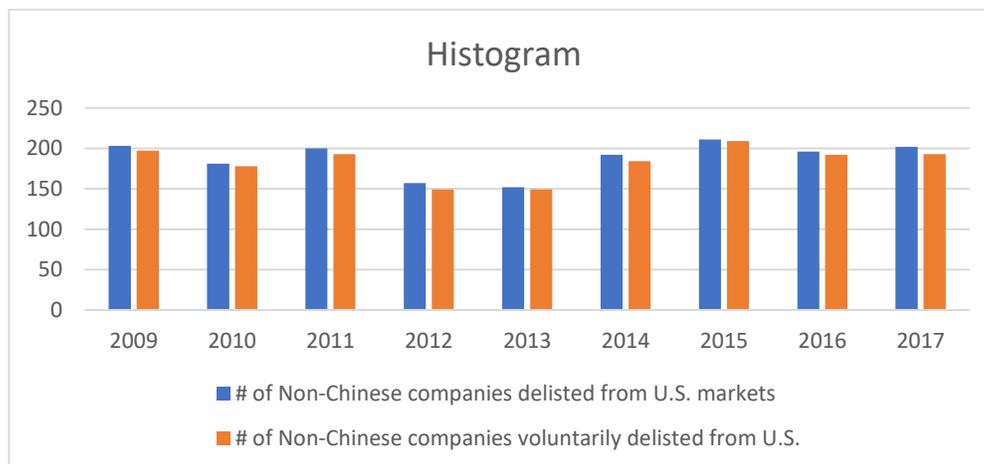


Figure 3 shows the number of Non-Chinese companies delisted and the number of Non-Chinese companies voluntarily delisted from 2009 to 2017. There is no obvious fluctuation from 2009 to 2017 for the number of Non-Chinese companies delisting.

### 5.3 T-Test

#### 5.3.1 Chinese voluntarily delisted firms versus Active firms

In Tables 5 and 6 and Figures 4 and 5, voluntarily delisted Chinese firms were defined as Group 1, and active firms were defined as Group 0. The t-test presented in

Table 5 compares different ROEs between voluntarily delisted Chinese firms and active firms on the U.S. market. The mean of Chinese delisted firms' ROE was -1.621, and the mean of active firms' ROE was 0.097. Furthermore, the *p* value was 0.080. The results suggest that the mean value of ROE for Chinese delisted companies is significantly lower than for other active firms on the U.S. market. Our hypothesis 1 is support by the results to some extent.

**Table 5: The Difference of ROEs between Chinese Voluntarily Delisted Firms and Active Firms**

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
0	36,705	0.097	0.099	19.077	-0.098	0.292
1	390	-1.621	1.666	32.907	-4.897	1.656
Combined	37,095	0.079	0.100	19.274	-0.117	0.275
diff		1.718	0.981		-0.205	0.641
Hypotheses Tests:						
diff = Mean (0)- Mean(1)						
diff<0 <i>p</i> value =0.960						
diff !=0 <i>p</i> value =0.080						
diff>0 <i>p</i> value =0.040						

Figure 4 virtually displays the results of the t-test in Table 5; the mean of ROE between Chinese delisted firms and active firms was significantly different.

**Figures 4: Compare the Mean of ROEs between Chinese Voluntarily Delisted Firms and Active Firms**

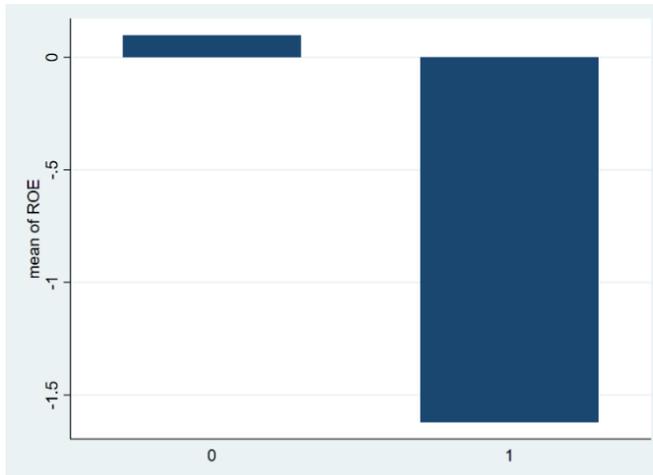


Table 6 presents the results of a t-test comparing the debt ratios of Chinese voluntarily delisted firms and active firms on the U.S. stock exchanges. The mean of Chinese delisted firms' debt ratio was 0.381 and the mean of active firms' debt ratio was 0.685. The  $p$  value was 0.039, indicating that the mean value of debt ratio for Chinese voluntarily delisted companies was significantly lower than for other active firms on the U.S. market.

As discussed in the hypotheses development section, we predict both lower debt ratio and higher debt ratio could contribute to the delisting decision. The t-test result supports a negative relationship between delisting decision and the debt ratio. It is probably because firms with lower debt ratio have fewer growth opportunities and lower need for fund. They may choose to delist to save costs. Also, the delisting could be triggered by home bias. Chinese firms are undervalued on the U.S. market, and firms with

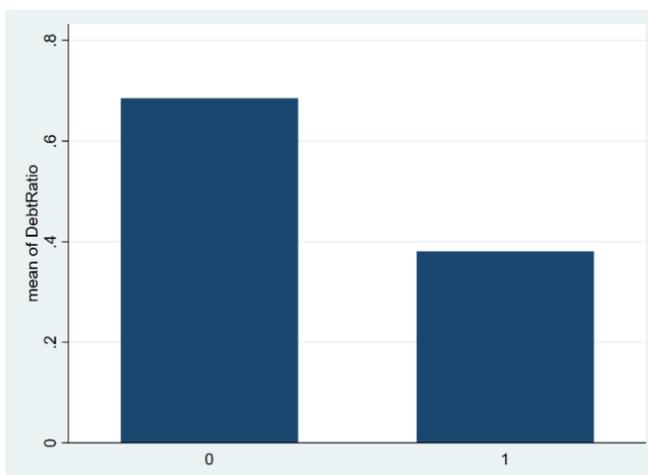
lower debt ratio are considered to be better investment with opportunities to go back to Chinese market. The hypothesis 2 is supported by the t-test result.

**Table 6: The Difference of Debt Ratios between Chinese Voluntarily Delisted Firms and Active Firms**

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
0	36,705	0.685	0.014	2.933	0.657	0.712
1	390	0.381	0.013	0.263	0.354	0.407
combined	37,095	0.682	0.014	2.920	0.655	0.709
diff		0.304	0.147		0.0154	0.593
Hypothesis Tests:						
diff = Mean (0)- Mean(1)						
diff<0 <i>p</i> value =0.981						
diff !=0 <i>p</i> value =0.039						
diff>0 <i>p</i> value =0.019						

Figure 5 displays the results of the t-test of Table 6; the mean of the debt ratio for Chinese delisted firms and active firms was significantly different.

**Figures 5: Compare the Mean of ROEs between Chinese Voluntarily Delisted Firms and Active Firms**



### 5.3.2 Chinese voluntarily delisted firms versus non-Chinese voluntarily delisted firms

In Tables 7 and 8 and Figures 6 and 7, we defined Chinese voluntarily delisted firms as Group 1 and non-Chinese voluntarily delisted firms as Group 0.

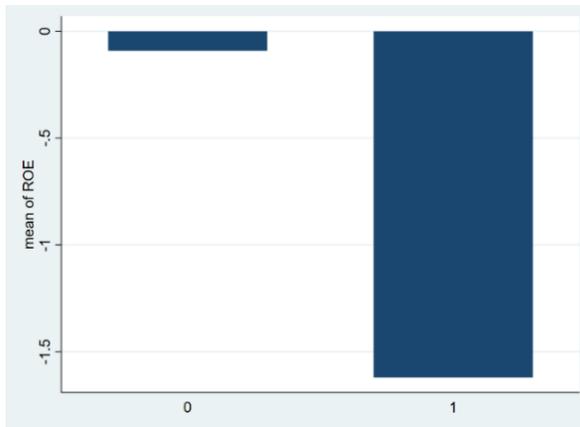
Table 7 presents the t-test results, showing the difference of ROE between Chinese voluntarily delisted firms and non-Chinese voluntarily delisted firms. The mean of Chinese delisted firms' ROE was -1.621. However, non-Chinese delisted firms had a slightly higher mean ROE than Chinese delisted firms did, with a value of -0.091. The *p* value implies a significant difference between the Chinese delisted firms' ROE and the non-Chinese delisted firms' ROE. The mean value of Chinese delisted firms' ROE was significantly lower.

**Table 7: The Difference of ROEs between Chinese Voluntarily Delisted Firms and Non-Chinese Voluntarily Delisted Firms**

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
0	9,085	-0.091	0.092	8.029	-0.272 0.090
1	390	-1.621	1.666	32.907	-4.897 1.656
combined	9,475	-0.166	0.120	10.691	-0.400 0.069
diff		1.530	0.555		0.442 2.618
Hypothesis Tests:					
diff = Mean (0)- Mean(1)					
diff<0 <i>p</i> value =0.997					
diff !=0 <i>p</i> value =0.006					
diff>0 <i>p</i> value =0.003					

Figure 6 displays the results of the t-test in Table 7; the means of the ROE of Chinese delisted firms and that of non-Chinese delisted firms were significantly different.

**Figures 6: Compare the Mean of ROEs between Chinese Voluntarily Delisted Firms and Non-Chinese Voluntarily Delisted Firms**



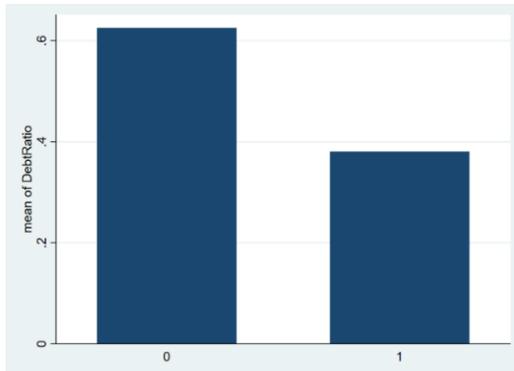
**Table 8: The Difference of Debt Ratios between Chinese Voluntarily Delisted Firms and Non-Chinese Voluntarily Delisted Firms**

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
0	9,085	0.625	0.006	0.585	0.613	0.638
1	390	0.381	0.013	0.263	0.355	0.407
combined	9,475	0.615	0.006	0.578	0.604	0.627
diff		0.245	0.030		0.187	0.303
Hypothesis Tests:						
diff = Mean (0)- Mean(1)						
diff<0 <i>p</i> value =1.000						
diff !=0 <i>p</i> value =0.000						
diff>0 <i>p</i> value =0.000						

Table 8 compares the debt ratios of Chinese voluntarily delisted firms and non-Chinese voluntarily delisted firms. The mean of the Chinese delisted firms' debt ratio was 0.381, and the mean of the non-Chinese delisted firms' debt ratio was 0.625. The *p* value was 0.000. There was a significant difference between the Chinese delisted firms' debt ratio and the non-Chinese delisted firms' debt ratio.

Figure 7 clearly displays the results of the t-test in Table 8; the means of the debt ratios of Chinese delisted firms and non-Chinese delisted firms were significantly different.

**Figures 7: Compare the Mean of Debt Ratio between Chinese Voluntarily Delisted Firms and Non-Chinese Voluntarily Delisted Firms**



#### 5.4 Multivariate regression

The t-test results reported in the previous section helps us observe the differences between Chinese voluntarily delisted firms and other firms. In this section, we use multivariate regression to better understand the associations between delist and other factors.

Table 9 presents the regression results. The coefficient of ROE was negative, suggesting ROE and delisting have a negative relationship. The  $p$  value was 0.093, and the ROE was significantly associated with delisting at the 10% level. The results support Hypothesis 1, which is that Chinese firms with lower profitability are more likely to voluntarily delist from the U.S. stock exchange. The results of the ROE exhibited by the regression were consistent with the theory proposed by Leuz et al. (2008). Investors will not be interested in companies with poor profitability, which may lead companies to delist from the market and avoid the cost of staying in the financial markets.

**Table 9: Regression Results**

```
. reg Delist ROE DebtRatio Asset i.DataYearFiscal i.SIC
```

Source	SS	df	MS	Number of obs	=	37,095
Model	9.69756926	22	.440798603	F(22, 37072)	=	43.44
Residual	376.202148	37,072	.010147878	Prob > F	=	0.0000
				R-squared	=	0.0251
				Adj R-squared	=	0.0246
Total	385.899717	37,094	.010403292	Root MSE	=	.10074

Delist	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ROE	-.0000455	.0000271	-1.68	0.093	-.0000987	7.61e-06
DebtRatio	-.0003645	.0001653	-2.21	0.027	-.0006885	-.0000405
Asset	-.001559	.0002335	-6.68	0.000	-.0020167	-.0011012
DataYearFiscal						
2009	.0171726	.006993	2.46	0.014	.0034661	.0308791
2010	.0169796	.0069816	2.43	0.015	.0032954	.0306638
2011	.0143011	.0069681	2.05	0.040	.0006434	.0279588
2012	.0097951	.0069525	1.41	0.159	-.003832	.0234222
2013	.0055402	.0069407	0.80	0.425	-.0080638	.0191442
2014	.001998	.006932	0.29	0.773	-.011589	.015585
2015	-.0016712	.0069233	-0.24	0.809	-.015241	.0118987
2016	-.0060745	.0069135	-0.88	0.380	-.0196251	.0074761
2017	-.0058946	.0069083	-0.85	0.394	-.019435	.0076458
2018	-.0072869	.0069211	-1.05	0.292	-.0208524	.0062787
SIC						
1	.003328	.0112174	0.30	0.767	-.0186584	.0253143
2	.008507	.0110595	0.77	0.442	-.0131699	.0301838
3	.0108032	.0110552	0.98	0.328	-.0108654	.0324718
4	.0072213	.0111391	0.65	0.517	-.0146117	.0290543
5	.007542	.0111695	0.68	0.500	-.0143506	.0294346
6	.0055846	.0110588	0.50	0.614	-.016091	.0272602
7	.0433493	.0110933	3.91	0.000	.0216061	.0650924
8	.0314113	.0114009	2.76	0.006	.0090652	.0537575
9	.0269964	.0137893	1.96	0.050	-.000031	.0540238
_cons	.0055097	.0129735	0.42	0.671	-.0199188	.0309382

The coefficient for the debt ratio is negative, and the  $p$  value is 0.027, suggesting the debt ratio is significantly associated with delisting at the 5% level. The finding that the debt ratio and Chinese delisting firms' have a negative relationship is consistent with Hypothesis 2. Chinese companies with lower debt ratios are more likely to delist from the U.S. market. However, this result differs from the results of Leuz et al.'s (2008) study, which looked at U.S. firms. The different results could be attributed to China's unique

economic environment. First, the U.S. stock market was adversely influenced by the 2008 financial crisis and the Chinese market was unaffected. After that, Chinese stock markets developed quickly and became more attractive to investors. Chinese companies with lower debt ratios were relatively safe investments and might have the chance to go public in China. That is probably one of the reasons for the finding that the debt ratio is negatively associated with the probability of voluntarily delisting. Another reason is that many Chinese companies are undervalued in U.S. financial markets due to home bias. Coval and Moskowitz (1999) proposed that equity home bias means foreign stocks in the U.S. financial market are usually not favored by investors. Firms with lower debt ratios may want to go to another stock exchange to adjust their price appropriately.

There is also a negative correlation between the assets and delisting at a level of significance of 1%. Larger firms are less likely to voluntarily delist. One of the voluntarily delisting requirements is that the number of shareholders must be lower than a threshold. Larger firms usually have a larger number of shareholders, making the voluntarily delisting more difficult for them.

The coefficient of “year” from 2009 to 2011 has a negative correlation, with delisting, significant at the 5% level. Since 2008, many Chinese companies have delisted from the U.S. financial market. This result was consistent with the trends described earlier.

## **5.5 Robustness Tests**

To test the robustness of the results, Logit model and Probit models were used to examine the hypotheses again. The results of Probit Model are reported in Table 10, and the results of Logit Model are reported in Table 11. Overall, they are consistent with the

findings in Table 9. It suggests that the findings of the study are not influenced by the models used.

Due to the multicollinearity between the dummy dependent variable (i.e., *Delist*) and the dummy control variables of years and industries, we had to drop the dummies of industries from the regression model in order to make the regression model executed. We acknowledge this is a limitation of the robustness tests.

In Table 10, *Delist* is negatively and significantly associated with ROE at the five percent level, and it is negatively and significant associated with debt ratio at the one percent level. In Table 11, *Delist* is negatively and significantly associated with both ROE and the debt ratio at the one percent level. Both Hypothesise 1 and 2 are supported by the two tests.

**Table 10: Probit Model Results**

Probit regression	Number of obs	=	32,936
	LR chi2(12)	=	487.96
	Prob > chi2	=	0.0000
	Pseudo R2	=	0.1152
Log likelihood = -1873.8095			

Delist	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
ROE	-.0020698	.000943	-2.19	0.028	-.0039181 -.0002215
DebtRatio	-.8109952	.084426	-9.61	0.000	-.9764672 -.6455233
Asset	-.0818448	.0106165	-7.71	0.000	-.1026527 -.0610368
DataYearFiscal					
2009	.3738233	.2561764	1.46	0.144	-.1282733 .8759198
2010	.3652297	.2560361	1.43	0.154	-.1365919 .8670513
2011	.3200305	.2561148	1.25	0.211	-.1819452 .8220063
2012	.234665	.2565519	0.91	0.360	-.2681676 .7374976
2013	.1124796	.2574947	0.44	0.662	-.3922007 .6171599
2014	-.0072578	.2588326	-0.03	0.978	-.5145605 .5000448
2015	-.1921706	.2619842	-0.73	0.463	-.7056501 .321309
2016	-.6740645	.2823949	-2.39	0.017	-1.227548 -.1205806
2017	-.6199021	.2777067	-2.23	0.026	-1.164197 -.0756069
2018	0	(empty)			
_cons	-1.433341	.2583717	-5.55	0.000	-1.93974 -.926942

**Table 11: Logit Model Results**

Logistic regression	Number of obs	=	32,936
	LR chi2(12)	=	490.30
	Prob > chi2	=	0.0000
Log likelihood = -1872.6384	Pseudo R2	=	0.1158

Delist	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
ROE	-.0050312	.0016814	-2.99	0.003	-.0083267 - .0017357
DebtRatio	-2.219607	.2268188	-9.79	0.000	-2.664163 -1.77505
Asset	-.172951	.0256445	-6.74	0.000	-.2232134 - .1226887
DataYearFiscal					
2009	1.145363	.7223911	1.59	0.113	-.2704971 2.561224
2010	1.134184	.7219529	1.57	0.116	-.2808178 2.549185
2011	1.018242	.7225229	1.41	0.159	-.3978767 2.434361
2012	.798603	.724206	1.10	0.270	-.6208147 2.218021
2013	.4815099	.7271401	0.66	0.508	-.9436586 1.906678
2014	.1421864	.732101	0.19	0.846	-1.292705 1.577078
2015	-.3742638	.7435472	-0.50	0.615	-1.83159 1.083062
2016	-1.769501	.8251124	-2.14	0.032	-3.386691 -.15231
2017	-1.609031	.8064	-2.00	0.046	-3.189546 -.0285163
2018	0	(empty)			
_cons	-2.693991	.7258293	-3.71	0.000	-4.11659 -1.271392

## 5.6 Additional Test

Besides the main research question that why Chinese firms voluntarily delist from U.S. stock exchanges, we are also interested in understanding what happened to those firms after delisting. Among 85 Chinese companies that voluntarily delisted, 27 of them have been relisted in Chinese stock exchanges. We are curious what factors attribute to the relisting at home country's stock exchange.

We conducted an additional test and reported the results in Table 12. Due to the small sample size, we only included the two variables of tests – ROA and Debt ratio. The dependent variable, *Relist*, equals 1 if the firm went public in China and 0 otherwise. The coefficient of ROA was positive, suggesting profitable firms are more likely to be relisted in Chinese stock exchanges. The *p* value was 0.015, and the profitability was significantly associated with relisting at the 5% level. The coefficient of Debt Ratio was positive, but

the  $p$  value points that there is not a significant relationship between Debt Ratio and relisting.

**Table 12: Additional Test Results**

`. reg RelistinChina ROA DebtRatio`

Source	SS	df	MS	Number of obs	=	390
Model	1.26385189	2	.631925947	F(2, 387)	=	3.02
Residual	81.033584	387	.209389106	Prob > F	=	0.0501
				R-squared	=	0.0154
				Adj R-squared	=	0.0103
Total	82.2974359	389	.211561532	Root MSE	=	.45759

RelistinCh~a	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
ROA	.2592996	.1057113	2.45	0.015	.0514594 .4671398
DebtRatio	.0897784	.0981568	0.91	0.361	-.1032089 .2827657
_cons	.2684052	.0435332	6.17	0.000	.1828141 .3539963

## **Chapter 6: Conclusion**

Why do firms go public? Many people who have knowledge about finance may say they are going to capital markets for more and potentially lower costs of capital. Many companies are getting delisted, but very few relevant literatures can be found. This raises our interest in why many companies choose to delist from the market after a few years.

When a company voluntarily delists, it will likely buy back its shares at a lower price, which can cause unexpected harm to investors. Investors face not only the loss of capital but also the loss of confidence in the whole financial market. This study sheds light on this important but understudied issue in the hope that more researchers will pay attention to the issue of delisting in the future.

This study focused on Chinese firms that voluntarily delisted from U.S. markets from 2009 to 2017. With the economic development of China, more and more Chinese companies decided to list in the U.S. financial market. On February 25, 2019, 156 Chinese companies were listed on U.S. stock exchanges. However, from 2009 to 2017, 85 Chinese companies voluntarily delisted from the U.S. stock exchange. Why do Chinese companies voluntarily delist from the U.S. financial market? To solve this problem, we proposed two hypotheses in this paper. The first was that companies with lower profitability are more likely to delist from the markets, and the second was that financial leverage has a strong influence on the company's delisting. To verify the abovementioned two hypotheses, we carried out t-tests. The result showed that the means of ROE and debt ratio of Chinese voluntarily delisted firms were significantly lower than that of active firms. The other t-test was for the comparison between Chinese voluntarily delisted firms

and non-Chinese voluntarily delisted firms. The result was that the means of the ROE and debt ratio were significantly lower in Chinese firms than in non-Chinese firms.

To better test the factors influencing the decision of voluntary delisting, a multivariate regression was performed. The final regression result showed the ROE had a negative relationship with delisting, meaning that companies with poor profitability were more likely to voluntarily delist from the U.S. financial markets, which was consistent with Leuz et al.'s (2008) finding. However, the Chinese companies with lower debt ratios were more likely to voluntarily delist, which is not consistent with Balios et al. (2015), who argued that companies with high leverage ratios are more likely to delist from the markets. Why is the research result of leverage inconsistent with the conclusion of Balios et al. (2015)? It may be due to home bias. Coval and Moskowitz (1999) proposed that equity home bias means foreign stocks in the U.S. financial market are usually not favored by investors. When the U.S. investment managers help investors to choose stocks, they prefer to choose local companies with high leverage. Many Chinese companies indicate that their companies in the U.S. financial market are undervalued. Eventually, the company may voluntarily delist from foreign financial markets and relist in its home country. In the sample, 85 Chinese companies voluntarily withdrew from the market, and 27 of them have returned to China to relist.

To conclude, delisting can cause incalculable damage to investors. This study proposed two factors that lead to a company's voluntary delisting—ROE and debt ratio—and that can help investors better assess and avoid the investment risks brought by delisting.

## Reference

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