

# Effects of Chinese Stock Market Policies on Chinese Stocks Listed in the United States

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## ABSTRACT

Chinese stock market policies have shown to increase stock volatility on domestic Chinese stock exchanges (Wang et al, 2017). However, little research has been conducted on the effects of Chinese stock market policy on Chinese stocks listed on U.S. exchanges. It was hypothesized that Chinese stock market policies had a major effect on Chinese stocks listed on U.S. stock exchanges. Key dates on which Chinese stock market policies were passed were studied to see if there was a relationship to Chinese stocks in U.S. markets. The list of policies was sourced from Wang and associates. A list of Chinese stocks that listed on U.S. exchanges before January 2021 was acquired from the U.S.-China Economic and Security Review Commission. Percentage change was analyzed for Chinese stocks one week, one month, and six months after a Chinese stock market policy was passed. Percentages were then averaged and compared to the mean percent movement of the iShares Russell 1000 ETF (Ticker \$IWB) for the same time periods. A two-sample t-test was conducted on the average percent movements of the three categories of Chinese companies and \$IWB. Since all P values were above the accepted alpha value of 0.05, it was concluded that there was no significant difference between Chinese companies and \$IWB for all three time periods analyzed in the study. This suggests that there is no causal relationship between Chinese stock market policies and the price of Chinese stocks on U.S. stock exchanges.

## Introduction

The stock market is one of the most common ways for people to invest their money (Langager, 2022). A stock, also called a share, is an asset that represents fractional ownership of a publicly traded corporation (Hayes, 2021b). Stocks are traded in large markets called stock exchanges. A stock exchange is defined as a place where investors buy and sell shares, as well as a place where companies can issue new shares to the public (Chen, 2021). The two primary stock exchanges in the United States are the NYSE, or New York Stock Exchange, and the NASDAQ, or National Association of Securities Dealers Automated Quotations (Morah, 2021). Private companies list their shares on public stock exchanges via the IPO, or initial public offering, process. In an IPO, a private company issues new shares to the public for purchase (Fernando, 2021).

A primary factor that leads to a stock increasing or decreasing in price is government economic policy, which drastically affects household stock investments (Gábor-Tóth & Georganakos, 2017). China is a prime example of this phenomenon. Since China has a centrally planned economy, the Chinese government has control over its economy unparalleled in other western countries. This means that the Chinese government has the ability to pass policies which greatly impact the price of Chinese stocks.

## Literature Review

Traditionally, Chinese economic policy has had a nominal impact on foreign investors. However, the 21st century has led to a growth in cross listed shares. Cross listing a share is when a stock is listed on an exchange other than its primary exchange (Kenton, 2020). Chinese companies are looking to list their shares abroad, especially in U.S. stock exchanges. This means that investors in the U.S. have greater access to shares of Chinese companies and Chinese companies have greater access to U.S. capital. In fact, U.S. investors now own approximately \$535 billion worth of Chinese securities (Borst, 2019).

There are several characteristics of Chinese companies that U.S. investors should be weary of before making an investment. For example, the Chinese government prevents Chinese companies in certain industries from directly listing their stock on foreign exchanges, but some companies bypass this by using a VIE (Shi, 2014). A VIE, or variable interest entity, is a company that has a contract with a business to share its revenues or profits. Ownership of stock in a VIE, however, does not translate to voting rights in the business the VIE has a contract with (Hayes, 2021c) (Whitehill, 2017). In other words, those that invest in VIEs do not actually own a part of the business and do not have control over how the business is operated. In this way, foreign investors are not buying into the actual Chinese company, but merely a company that is entitled to the profits of a Chinese company. Since VIEs are not based in China, they are free to list on any global stock exchange they desire. Although they appear to be breaking Chinese law, the Chinese government has failed to take significant steps to outlaw the VIE structure. Despite this, the ambiguous nature of Chinese companies using the VIE structure is a risk that must be taken into account by investors.

Another process that Chinese companies can go through to trade on foreign exchanges is through the ADR. An ADR, or American Depositary Receipt, is a share issued from an American bank that represents a specified number of shares of a foreign company (Hayes, 2021a). Oftentimes these techniques will be used in tandem for listings in the United States. This is because variable interest entities are based in countries other than the United States. For example, Alibaba, a massive Chinese technology conglomerate, has ADRs of its VIE listed on U.S. stock exchanges. This means that investors outside of China do not own any part of Alibaba. Instead, they own shares in a foreign company that has a contract to share profits with Alibaba.

Additionally, Chinese companies use the IFRS accounting system, as opposed to GAAP accounting. IFRS, or International Financial Reporting Standards, accounting generally requires less information about the operations of the company. GAAP, or Generally Accepted Accounting Principles, is the standard for companies based in the United States. It is much more specific on what must be reported on quarterly earnings reports. The more vague nature of IFRS accounting standards can lead to investors not making fully informed investing decisions. Additionally, companies that use IFRS often have discrepancies when reporting income compared to companies using GAAP accounting (Liu, 2011). Again, this makes it more difficult for investors to make fully informed decisions. Structural differences in Chinese companies cause inherent risk for investors, but Chinese government policy can cause additional volatility.

Chinese government policy has a measurable effect on Chinese stocks, both on domestic and international exchanges. For example, there have been several instances where the Chinese government passed legislation to persuade companies to willingly raise capital only in domestic exchanges. They are able to pass legislation banning Chinese companies from directly listing themselves in international stock exchanges, hence the use of the VIE, or with legislation offering companies benefits for delisting themselves from foreign exchanges. Delisting is the process of removing a stock or security from a stock exchange (Scott, 2021).

Chinese companies may willingly delist themselves from US exchanges for several reasons, such as long term underperformance due to poor investor sentiment, under inclusion in U.S. equity portfolios, and government policy. However, the Chinese government has become noticeably more hostile to the VIE model, leading many companies to delist themselves from foreign exchanges in order to avoid the wrath of government officials. (Hu et al., 2019). Due to the Chinese government's high level of control of the Chinese economy, they are able to either smooth turbulent markets or exacerbate a problem, as displayed by legislation passed during the 2015 Chinese stock market crash. Legislation passed during this crisis increased volatility and prolonged

the depressed market (Hou & Li, 2020). However, not all policies are treated the same in the eyes of investors. Research has indicated that different types of Chinese policy have different effects on Chinese stocks in domestic Chinese stock markets (Wang et al., 2017).

A relatively unexplored type of Chinese policy that has been researched is policy relating to Chinese stock markets and their effects on Chinese stocks listed on U.S. stock exchanges. Therefore, this leads one to wonder, are Chinese stocks listed on U.S. markets significantly affected by Chinese policy concerning Chinese stock exchanges? In this study, Chinese stock exchange policies were gathered, and stock movements were analyzed during certain time periods after the policy was passed. The iShares Russell 1000 ETF (ticker \$IWB) served as a baseline to compare Chinese stock performance to. It was hypothesized that data will support the conclusion that Chinese stock exchange policy had a negative impact on the return of Chinese stocks listed on U.S. stock exchanges. It was assumed that stock market policies from the Chinese government are a factor in large price movements in Chinese stocks and Chinese stocks will continue to be cross listed on US stock exchanges.

## Methods

A mathematical analysis was used to analyze Chinese stock prices on US stock exchanges in reaction to Chinese economic policy. The mathematical analysis fell under the research category of a causal comparison. Firstly, a list of policies related to changes in the Chinese stock market from 1994 to 2015 was located. The Chinese policies served as the independent variable in this study. The list of Chinese policy was compiled by Yang-Chao Wang and associates in the paper “Policy Impact on the Chinese Stock Market: From the 1994 Bailout Policies to the 2015 Shanghai-Hong Kong Stock Connect” (Wang et al., 2017). However, only policies from 2005 to 2015 were studied. This was because there were relatively few Chinese companies available to study before 2005. In total, 31 different policies were analyzed.

Secondly, a list of all Chinese companies that were listed on the three largest U.S. stock exchanges as of May 5, 2021 was located in a 2021 report by the U.S.-China Economic and Security Review Commission. The report stated that a company is considered Chinese if:

(1) it has been identified as being from the People’s Republic of China (PRC) by the relevant stock exchange; (2) it lists a PRC address as its principal executive office in filings with U.S. Securities and Exchange Commission; or (3) it has a majority of operations in the PRC, including companies structured offshore but whose value is ultimately tied through a relationship in the PRC. (USCC, 2021).

It is also important to note that the list from the U.S.-China Economic and Security Review Commission did not include companies that are exclusively based in Hong Kong. From this list, only stocks that completed an IPO before January 2011 were included. This was primarily due to time constraints. However, this skewed the selection of stocks towards more traditional industries, while excluding many technologically-oriented companies. Lianluo Smart Limited was not included because it merged with U.S. based company Newegg, Inc. (SEC, 2021a). Ossen Innovation Co., Ltd. was excluded from the study because it also underwent a merger, resulting in the company no longer trading on any U.S. stock exchanges (SEC, 2021b). SGOCO Group, Ltd. was included in the study. However, officials at SGOCO Group completed a name change of the company to TROOPS, Inc. (ticker \$TROO) (SEC, 2020). The company was analyzed under this name. A complete list of stocks included in this study can be found in appendix B. These stocks served as the dependent variable in the study.

Three different time frames were examined for each of the 31 different pieces of policy. The time frames were one week, one month, and six months after the policy was passed. This was done in order to have a more holistic view of how Chinese stock market policies impact Chinese stocks in the U.S. over time. However, the U.S. stock market is closed on Saturday, Sunday, and certain holidays. Hence, several dates used were not precisely one week, one month, or six months after the policy was passed. If a date happened to fall on a Saturday, the date was moved one day previous to Friday. If a date happened to fall on a Sunday, the date was

moved one day forward to Monday. If the date happened to fall on a Sunday and the stock market was closed the following day, the previous Friday was used. All dates used are included with the stock percent movements in appendix A to avoid confusion.

For each of the selected time frames, the percent movement, or how much a stock has increased or decreased in value over a given time, of the stocks was collected. All information regarding stock price was collected from Yahoo Finance. After the percent movement of Chinese stocks was collected for each time frame, they were averaged. If Yahoo Finance was unable to provide the percent movement for a stock on a certain date, the section was marked with “N/A” and not averaged. After the averages for each time frame were calculated, the percent movement of the iShares Russell 1000 ETF (ticker \$IWB) was collected for the same dates. The iShares Russell 1000 ETF was used as a baseline for which to compare the averages of the Chinese companies to. The iShares Russell 1000 ETF was specifically selected because the Russell 1000 index incorporates 92% of the total market capitalization of all stocks in the U.S. equity market (Ganti, 2021).

Once all data was compiled for all 31 pieces of policy, the average percent movement for Chinese stocks for each time period was collected in appendix A. The percent movement of \$IWB over the same time period was also collected in the same table. The values for Chinese companies and \$IWB were then averaged for each time period, giving 6 different means with which the analysis will hinge upon. A two-sample t-test assuming equal variances was conducted for each time period in order to determine if there was a statistically significant difference between the percent movement of Chinese stocks and \$IWB after policy was passed.

The hypothesis was that, overall, stock market policy from the People’s Republic of China had a negative impact on Chinese companies listed on major U.S. stock exchanges. This hypothesis was supported by research conducted by Wang and associates, which concluded that certain Chinese stock market policies did increase volatility on Chinese stock exchanges (Wang et al, 2017). Volatility, in terms of stock exchanges, refers to rapid price changes over a short period of time. Volatile securities are often inherently riskier due to rapid price changes (Hayes, 2021d). Other potential conclusions included finding that Chinese stock market policies had a positive effect on cross listed Chinese companies or finding that there was no strong correlation between policies and Chinese companies on U.S. stock exchanges.

The methods for this study were determined by reviewing relevant literature in the field. The primary paper that inspired this study was the piece by Yang-Chao Wang and associates, where the list of policies was located. The list of policies provided by Wang gave this study proper dates with which to conduct the analysis. The research by Wang and associates also showed that certain policies created volatility on domestic Chinese stocks, which helped spark interest into the effects of policy on Chinese companies in U.S. markets. T-tests have also been used to analyze stock returns, as shown by Gahkar and associates in their paper “Impact Of Union Budget On Indian Stock Market.” (Gakhar et al., 2015). In this paper, researchers used paired t-tests in order to analyze stock performance for different time periods before and after Union budget changes were enacted. Not only did this paper inspire the use of t-tests, but it also added credibility to the decision to include different time frames to study for each piece of Chinese policy.

## Results

After collecting all stock percent movements, the means for the Chinese companies and \$IWB were then compared for each time period. In the “One week” category, the Chinese companies had a mean percent change of -1.01% and \$IWB had a mean percent change of -0.58%. This means that, on average, one week after a Chinese stock market policy was passed, the collection of Chinese stocks decreased by -1.01% and \$IWB decreased by -0.58%. In the “One month” category, the Chinese companies had a mean percent change of -3.55% and \$IWB had a mean percent change of -1.93%. In the “Six month” category, the Chinese companies had a mean percent change of 6.59% and \$IWB had a mean percent change of -1.77%. In these instances, a negative mean value means that stocks in that time frame experienced a decrease in price of that percentage on average. The means

between the two groups were different in each category, which led to the possibility that there was a correlation between policy and the returns of Chinese companies on stock markets in the United States. All means are shown in table 1. The full process of calculating the means is shown in appendix C.

**Table 1.** Chinese Companies vs. \$IWB means 1 Week, 1 Month, and 6 Months after policy is passed.

	<b>1 Week</b>	<b>1 Month</b>	<b>6 Months</b>
<b>Chinese Companies</b>	<b>-1.01%</b>	<b>-3.55%</b>	<b>6.59%</b>
<b>\$IWB</b>	<b>-0.58%</b>	<b>-1.93%</b>	<b>-1.77%</b>

A t-test with an alpha value of  $\alpha = 0.05$  was used to determine if the mean values were significantly different. In this instance, a significant difference meant that, for the respective time period, Chinese stock market policies had a significant effect on the returns of the analyzed Chinese stocks. A two sample t-test assuming equal variances was conducted on the one week category,  $t(60) = -0.32$ ,  $p = 0.75$ , but no significant difference was found. The same test was conducted for the one month category,  $t(60) = -0.66$ ,  $p = 0.51$ , but no significant difference was found. A final test was conducted on the six month category,  $t(60) = 0.99$ ,  $p = 0.33$ , but no significant difference was found. The results of the three t tests can be found in tables 2a, 2b, and 2c.

**Tables 2a (1 Week), 2b (1 Month), and 2c (6 Months).** The results of two sample t-tests assuming equal variances for each timeframe, with focus on the two-tail P value.

<i>1 Week</i>	<b>Chinese Stocks</b>	<b>\$IWB</b>
<b>Mean</b>	-1.01%	-0.58%
<b>Variance</b>	0.003763917849	0.001520088559
<b>Observations</b>	31	31
<b>Pooled Variance</b>	0.002642003204	
<b>Hypothesized Mean Difference</b>	0	
<b>df</b>	60	
<b>t Stat</b>	-0.3226864002	
<b>P(T&lt;=t) one-tail</b>	0.3740272756	
<b>t Critical one-tail</b>	1.670648806	
<b>P(T&lt;=t) two-tail</b>	0.7480545511	
<b>t Critical two-tail</b>	2.000297759	

<i>1 Month</i>	<b>Chinese Stocks</b>	<b>\$IWB</b>
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<b>Mean</b>	-0.03545806452	-0.01929354839
<b>Variance</b>	0.01352298452	0.005170992624
<b>Observations</b>	31	31
<b>Pooled Variance</b>	0.00934698857	
<b>Hypothesized Mean Difference</b>	0	
<b>df</b>	60	
<b>t Stat</b>	-0.6582527804	
<b>P(T&lt;=t) one-tail</b>	0.2564468207	
<b>t Critical one-tail</b>	1.670648806	
<b>P(T&lt;=t) two-tail</b>	0.5128936414	
<b>t Critical two-tail</b>	2.000297759	

<i>6 Months</i>	<b>Chinese Stocks</b>	<b>\$IWB</b>
<b>Mean</b>	0.06593870968	-0.01766129032
<b>Variance</b>	0.1972709778	0.02422400712
<b>Observations</b>	31	31
<b>Pooled Variance</b>	0.1107474925	
<b>Hypothesized Mean Difference</b>	0	
<b>df</b>	60	
<b>t Stat</b>	0.9890202315	
<b>P(T&lt;=t) one-tail</b>	0.1633125139	
<b>t Critical one-tail</b>	1.670648806	
<b>P(T&lt;=t) two-tail</b>	0.3266250278	
<b>t Critical two-tail</b>	2.000297759	

Therefore, the data failed to reject the null hypothesis that there was no difference between the returns of Chinese cross listed companies and \$IWB one week, one month, and six months after a policy was passed.

## Discussion

As shown in Tables 2a, 2b, and 2c, three two sample t-tests assuming equal variances failed to show that there was a significant statistical difference between Chinese companies on U.S. markets and the iShares Russell 1000 ETF one week, one month, and six months after policy was passed. This disproves the initial hypothesis that there would be a statistically significant difference between Chinese companies and \$IWB in all three time frames. This conclusion is a valuable addition to the body of research because it allows researchers to see that, as a whole, Chinese companies are not significantly affected by policy relating to Chinese stock exchange. The results indicated that investors in the U.S. do not think that this type of policy affects Chinese companies drastically, and therefore do not sell or buy significantly when the policy is passed. Table 2a, with  $p = 0.75$ , supports this idea and shows that Chinese companies and \$IWB were most similar in the percent movement of the stocks one week after policy was passed. However, this does not eliminate the possibility that individual Chinese stock market policies had a statistically significant impact on the returns of Chinese stocks on U.S. stock exchanges. Individual policies were not analyzed in this study, but future research into the individual policies in this study may show statistically significant results.

The results provide a significant contribution to the field and body of literature. This is primarily because there has been little research on the effects of Chinese stock market policies on Chinese companies listed on U.S. stock exchanges. Additionally, the majority of studies conducted on foreign stocks on U.S. stock exchanges do not look at one country in particular, but instead choose to include all foreign stocks from all countries into the research.

Although the results prove that policy relating to Chinese stock exchanges do not have a significant effect on the percent movements of Chinese companies, it does not eliminate the possibility of other types of policy having major effects on the percent movement of stocks. For example, after its massive IPO in mid-2021, Chinese ride-hailing company “Didi” was investigated by the Cyberspace Administration of China (Analytica, 2021). After the investigations were announced, the stock began a steady decline, eventually losing -87.83% of its value at its lowest point. The Didi investigations show that the Chinese government can pursue actions that cripple the price of individual stocks. Therefore, although the results prove that policy related to Chinese stock exchanges does not have an effect on Chinese companies in the U.S., investors must not rule out the possibility of the Chinese government passing different types of legislation or taking actions that target specific companies or industries.

The results of the study are externally valid because they can be repeated easily. The percent movements of all stocks for all 31 pieces of policy can be located on Yahoo Finance. Once the percent movements of the stocks are calculated and averaged, three two sample t-tests assuming equal variances can be conducted, producing the same results. The results are internally valid because both the list of Chinese companies used and the list of policies analyzed are from credible sources. The list of policies were originally used by Wang et al. (2017) to determine volatility in Chinese stock indexes. Hence, all policies analyzed are valid and are applicable to the study. The list of Chinese stocks was retrieved from the list by the U.S. - China Economic and Security Review Commission of all Chinese companies on all major U.S. stock exchanges (USCC, 2021). This resource provided all Chinese stocks listed on U.S. exchanges, along with their listing date. Therefore, all possible companies that fit the criteria for the study were included.

The lack of a statistically significant difference between the Chinese companies and \$IWB for all three time frames analyzed in this study comes with major implications. Firstly, investors in the U.S. can more confidently invest in Chinese companies without fears of the Chinese government passing stock market policies that impact their returns. This is because the results prove that there is no causal relationship between Chinese stock market policy and the movement of Chinese stocks on U.S. stock exchanges. Additionally, legislators looking to lessen or strengthen restrictions on Chinese securities in U.S. markets can be better informed about

the effects of Government stock market policy on Chinese stocks. The results also imply that there may be mispricing of Chinese companies in U.S. markets. Compared to other companies in different countries, Chinese companies are often undervalued on foreign exchanges (Chen et al., 2014). A primary factor for this is the perceived risk of the Chinese government passing legislation that causes stock prices to fall. Chiang and Chen support this conclusion by finding that geopolitical uncertainty increases the perceived downside risk for stocks in China, leading to adverse effects on stock performance (Chiang & Chen, 2021). However, since the results indicate that stock market policies do not have a significant impact on Chinese companies one can conclude that Chinese companies in U.S. markets, as a whole, are underpriced. This presents an opportunity for investors to profit from undervalued companies. Additionally, it means that it may be more difficult for Chinese companies to raise funds on foreign stock exchanges because they are already undervalued. These undervalued companies would not want to issue more shares to investors at a price that undervalues their business.

Additional research can be conducted in the future to further explore the effects of policy on Chinese companies by replicating this study with an expanded sample size of Chinese companies. Most importantly, this would incorporate newer, technology-oriented Chinese companies, which would give researchers a more holistic view of the effects of policy on Chinese companies in U.S. markets. Weighing the collection of Chinese stocks by market capitalization could prove to be a more fitting comparison for the Russell 1000 index as well. Additional tests can be run to see if certain industries are disproportionately affected by policy compared to others. Similarly, research can be conducted to see if certain types of policy affect Chinese companies in different ways. This would be majorly influential for investors in determining if an individual piece of legislation will have an influence on Chinese stocks. Future researchers can change the benchmark for the U.S. market as well. Researchers may choose to compare the returns of Chinese companies after policy is passed to other indexes or groups of stocks instead of \$IWB.

Instead of changing the selection of stocks, researchers also have the possibility to change the time frame of the study. Researchers could include policies from before 2005 or after 2015 to analyze. By analyzing policies from different years, researchers may discover that policies from a certain year produced a greater statistical difference than those in other years.

## Conclusion

In this study, 31 different Chinese stock market policies were analyzed to see if they had a statistically significant effect on Chinese stocks listed on U.S. stock exchanges. The percent movements of 54 different cross listed Chinese stocks were collected and compared to the percent movement of the iShares Russell 1000 ETF. Three times periods were analyzed: 1 week after the policies was passed, 1 month after policies were passed, and 6 months after policies were passed. A two-sample t test was run for each time period, and the P values of these tests failed to disprove the null hypothesis. Therefore, it can be concluded that Chinese stock market policies do not have a statistically significant effect on the price of Chinese stocks listed on U.S. stock exchanges.

## Limitations

There are several limiting factors of this analysis that could have had an influence on the results. First, the sample size of Chinese stocks used for the study may have been insufficient. The exclusion of Chinese companies that completed an IPO after January 2011 in this study has likely played a role in the results. The sample size of Chinese stocks leaned more towards traditional industries and excluded many technology-oriented companies. It is possible that expanding the sample size of Chinese stocks would indicate a statistically significant



difference in percent movement between the new group of Chinese companies and \$IWB. Additionally, choosing \$IWB to represent the U.S. market may have negatively influenced the results. However, this is unlikely, as the Russell 1000 index includes the vast majority of stocks in U.S. equity markets based on market capitalization (Ganti, 2021). There is also disagreement in literature regarding the effectiveness of using t-tests to study stock returns. Some researchers claim that using a t-test with conventional critical values can lead to over rejection of the null hypothesis (Campbell & Yogo, 2006). However, since the three t-tests failed to reject the null hypothesis, this is not a major concern for this study. A final limiting factor of the project is that the Russell 1000 index is weighted by market capitalization (Ganti, 2021). This means that companies with a larger market capitalization make up a larger share of the index. The analysis of Chinese stocks did not weigh each stock by market capitalization, and treated each company equally. This means that less valuable Chinese companies had a disproportionate impact on the study. Weighing the collection of Chinese stocks may provide future researchers different results than those found in this study.

There are also limitations to the generalizability of the results. One major limitation of the results is that they cannot be extrapolated to foreign companies on U.S. stock exchanges based in countries other than China. Qinqin Wu and associates found that investor sentiment in ADRs makes a significant difference in the pricing of shares in domestic markets and foreign markets (Wu et al., 2017). Borst (2019) shows that investor sentiment in Chinese companies in U.S. markets is different from sentiments for other markets. Additionally, Borst reports that U.S. investors own approximately 2% of stocks on the Chinese stock market, compared to an average of 18% for other markets in advanced economies. Therefore, it can be concluded that investor sentiment in Chinese companies is lower than foreign companies based in Western countries. An additional limitation to the generalizability of the results is that these results cannot be construed to newer technology Chinese companies on U.S. exchanges. Additional research must be conducted before determining if Chinese stocks with a more recent IPO date behave in a similar manner to their more mature counterparts.

A major limitation that was overcome in the research was selecting an appropriate sample size of Chinese companies to analyze. It was eventually decided to include only companies still listed on U.S. stock exchanges, as opposed to including companies that had delisted from U.S. exchanges. This was done in order to make the results more applicable to current times. Additionally, only stocks listed before January 2011 were included primarily due to time constraints, which inadvertently excluded many technology companies from the study.

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## References

- Borst, N. (2019). How Exposed Are U.S. Investors to China? *Seafarer*.  
<https://www.seafarerfunds.com/documents/Prevailing%20Winds%20-%20How%20Exposed%20Are%20U.S.%20Investors%20to%20China.%202019-08.pdf>
- Campbell, J., & Yogo, M. (2006). Efficient tests of stock return predictability. *Journal of Financial Economics*, 81(1), 27–60. <https://doi.org/10.1016/j.jfineco.2005.05.008>
- Chen, J. (2021). Stock Market. *Investopedia*. <https://www.investopedia.com/terms/s/stockmarket.asp>

Chen, Y.-M., Huang, Y. S., Wang, D. K., & Wu, C.-C. (2014). Going private transactions by U.S.-listed Chinese companies: What drives the premiums paid? *International Review of Economics & Finance*, 32, 79–91. <https://doi.org/10.1016/j.iref.2014.01.008>

Chiang, T. C., & Chen, X. C. (2021). Evidence of Policy Uncertainty and Geopolitical Risk on Chinese Stock Prices. *Advances in Pacific Basin Business, Economics and Finance*, 37–56. <https://doi.org/10.1108/s2514-465020210000009002>

Fernando, J. (2021). What Is an Initial Public Offering (IPO)? *Investopedia*. <https://www.investopedia.com/terms/i/ipo.asp#:~:text=What%20is%20an%20Initial%20Public, equity%20capital%20from%20public%20investors.>

Gábor-Tóth, E., & Georgarakos, D. (2017). Economic Policy Uncertainty and Stock Market Participation. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3006651>

Gakhar, D. V., Kushwaha, N., & Ashok, V. (2015). Impact Of Union Budget On Indian Stock Market. *Scholedge International Journal of Management & Development ISSN 2394-3378*, 2(11), 21. <https://doi.org/10.19085/journal.sijmd021103>

Ganti, A. (2021). Russell 1000 Index. *Investopedia*. [https://www.investopedia.com/terms/r/russell\\_1000index.asp](https://www.investopedia.com/terms/r/russell_1000index.asp)

Hayes, A. (2021a). American Depository Receipt (ADR). *Investopedia*. <https://www.investopedia.com/terms/a/adr.asp>

Hayes, A. (2021b). Stock. *Investopedia*. <https://www.investopedia.com/terms/s/stock.asp>

Hayes, A. (2021c) Variable Interest Entity (VIE). *Investopedia*. <https://www.investopedia.com/terms/v/variable-interest-entity.asp>

Hayes, A. (2021d). Volatility. *Investopedia*. <https://www.investopedia.com/terms/v/volatility.asp>

Hou, Y., & Li, S. (2020). Volatility and skewness spillover between stock index and stock index futures markets during a crash period: New evidence from China. *International Review of Economics & Finance*, 66, 166–188. <https://doi.org/10.1016/j.iref.2019.11.003>

Hu, G., Lin, J.-C., Wong, O., & Yu, M. (2019). Why have so many U.S.-listed Chinese firms announced delisting recently? *Global Finance Journal*, 41, 13–31. <https://doi.org/10.1016/j.gfj.2018.10.002>

Kenton, W. (2020). Cross-Listing. *Investopedia*. <https://www.investopedia.com/terms/c/cross-listing.asp#:~:text=Will%20Kenton%20is%20an%20expert.in%20English%20literature%20from%20NYU.>

Langager, C. (2022). How to Start Investing in Stocks: A Beginner's Guide. *Investopedia*. <https://www.investopedia.com/articles/basics/06/invest1000.asp>

Liu, C. (2011). IFRS and US-GAAP comparability before release no. 33-8879. *International Journal of Accounting & Information Management*, 19(1), 24–33. <https://doi.org/10.1108/18347641111105917>

- Morah, C. (2021). What Are All of the Major U.S. Stock Exchanges? *Investopedia*.  
<https://www.investopedia.com/ask/answers/08/security-market-usa.asp>
- Oxford Analytica (2021), "Didi debacle shines light on China's new normal", Expert Briefings.  
<https://doi.org/10.1108/OXAN-DB263188>
- Scott, G. (2021). Delisting. *Investopedia*. <https://www.investopedia.com/terms/d/delisting.asp>
- SEC. (2020). NOTICE OF ANNUAL GENERAL MEETING. Retrieved from:  
[https://www.sec.gov/Archives/edgar/data/1472095/000110465920125841/tm2036097d1\\_ex99-1.htm](https://www.sec.gov/Archives/edgar/data/1472095/000110465920125841/tm2036097d1_ex99-1.htm)
- SEC. (2021a). Form 20-F. Retrieved from:  
[https://www.sec.gov/Archives/edgar/data/1474627/000121390021019034/f20f2020\\_lianluosmart.htm](https://www.sec.gov/Archives/edgar/data/1474627/000121390021019034/f20f2020_lianluosmart.htm)
- SEC. (2021b). Schedule 13E-3. Retrieved from:  
[https://www.sec.gov/Archives/edgar/data/0001485538/000110465921002990/tm212698d1\\_sc13e3.htm](https://www.sec.gov/Archives/edgar/data/0001485538/000110465921002990/tm212698d1_sc13e3.htm)
- Shi, S. (2014). Dragon's House of Cards: Perils of Investing in Variable Interest Entities Domiciled in the People's Republic of China and Listed in the United States. *Fordham International Law Journal*, Vol. 37.  
<https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=2339&context=ilj>
- Wang, Y., Tsai, J., & Li, Q. (2017). Policy impact on the Chinese stock market: From the 1994 bailout policies to the 2015 Shanghai-Hong Kong stock connect. *International Journal of Financial Studies*, 5(1), 4.  
<https://doi.org/10.3390/ijfs5010004>
- Whitehill, B. (2017). Buyer Beware: Chinese Companies and the VIE Structure. *Council of Institutional Investors*, 1-19. [https://www.cii.org/files/publications/misc/12\\_07\\_17%20Chinese%20Companies%20and%20the%20VIE%20Structure.pdf](https://www.cii.org/files/publications/misc/12_07_17%20Chinese%20Companies%20and%20the%20VIE%20Structure.pdf)
- Wu, Q., Hao, Y., & Lu, J. (2017). Investor sentiment, idiosyncratic risk, and mispricing of American Depository receipt. *Journal of International Financial Markets, Institutions and Money*, 51, 1–14.  
<https://doi.org/10.1016/j.intfin.2017.09.026>
- USCC. (2021). Chinese Companies Listed on Major U.S. Stock Exchanges. Retrieved from:  
[https://www.uscc.gov/sites/default/files/2021-05/Chinese\\_Companies\\_on\\_US\\_Stock\\_Exchanges\\_5-2021.pdf](https://www.uscc.gov/sites/default/files/2021-05/Chinese_Companies_on_US_Stock_Exchanges_5-2021.pdf)