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A Political Theory of the Chinese Stock Market

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A POLITICAL THEORY OF THE CHINESE STOCK MARKET

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements of the degree of
Doctor of Philosophy

in

The Department of Political Science

by

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ABSTRACT

The Chinese stock market crash of 2015 attracted much attention from both the media and academia. Yet it was not a unique incident. The Chinese stock market fluctuates more frequently and drastically than most mature stock markets. The purpose of this work is to explain these unusual stock market fluctuations through a political lens. Traditional financial models and behavioral finance cannot sufficiently explain the unusual fluctuations of the Chinese stock market. Traditional financial models find that economic forces cannot explain all fluctuations in China's stock market. Behavioral finance attributes the fluctuations to investor's irrational behavior without explaining why investors behave more irrationally than other investors. Other explanations, like financial knowledge and the immature market arguments cannot sufficiently explain the fluctuations of Chinese financial markets. A common characteristic of previous literature is a lack of real political explanations. This work develops a political explanation of the Chinese stock market, with an emphasis on biased financial institutions. Biased financial institutions are the result of state-owned enterprises' interest and political influence, and cause behavioral changes in investors and the market environment. Drastic market fluctuations serve as a channel for market forces to input their interests into the political system. In reaction to these unusual market fluctuations, the Chinese government adjusts institutions to make concessions to private capital and to stabilize the market. Market fluctuations are the key force behind the Chinese government's institutional development. Three case studies will illustrate this theory: non-tradable share reform, circuit-breaker institution, and the international board. These cases demonstrate how Chinese institutional design conforms to the interest of state-owned enterprises, introduces bias, and shows how the government uses the reform process to make concessions.

CHAPTER 1: JUST ANOTHER “DOOMSDAY”

Alongside growth of the Chinese economy, the size of the Chinese stock market has also grown rapidly in recent years. The Chinese financial system is still a relatively isolated financial market compared with the Chinese real economy, yet it has already become an integral part of the global economy. Major fluctuations in the Chinese stock market often receive wide attention from world media and academia. The Chinese stock market is becoming a central target for systematic study. Although the Chinese stock market is highly political, most academic work to this point has been conducted by economists. These economists often take political factors into consideration when they study the Chinese political system, however, they neither adopt a political view for analysis, nor do they use a political approach in their studies. Political scientists' contribution to this research topic has been very limited because the field generally believes direct study of the Chinese stock market does not lie within the research agenda of political science.

Those who are familiar with the Chinese financial system observe that the Chinese stock market fluctuates much more frequently than other major financial markets. How can this phenomenon be explained? Due to the Chinese political system's tight regulation of Chinese financial system, and state-owned enterprises' deep connections with the stock market, we cannot sufficiently answer this question without considering political perspectives. The purpose of this work is to build a political theory of Chinese stock market fluctuations through a new institutionalist approach.

The stock market crash of 2015

From 2014 to 2016, the sharp fluctuations of the Chinese stock market shocked the world and impacted the global economy in many ways (Dua 2016). In early 2014, the Shanghai

composite index was hovering around 1900 points (Souhu Stock Historical Record Database). Since September 2014, the SCI has risen very sharply and reached more than 3000 points. The trend went continued through 2015, and the market closed higher than 5000 points in June 2015 (RoyalFlush Information Network 2016). On June 12, the Shanghai Composite Index reached 5178.18 (Zhang & Guo 2015). The trading center was full of people wanting to become rich overnight via this rampant speculation. The situation was not very different from the New York Stock Exchange on the day before the Great Depression.

Figure 1: Comparison of 2015 market crash and the 1929 financial crisis



(Hexun Network: <http://news.hexun.com/2015-12-12/181156516.html>)

The two Chinese stock price indices had more than doubled in value over the course of a single year (Souhu Stock Historical Record Database). However, GDP growth rates in the same year were not commensurate compared to its own recent history. Although the Chinese economy experiences deviation between stock price and economic reality regularly (table 4), this particular bubble was still obvious to most experienced investors. The 2015 bubble was rapidly approaching its bursting point. At the same time, some so called “professional financial analysts” kept arguing that the Chinese stock market was in good health (Souhu 2015). Many

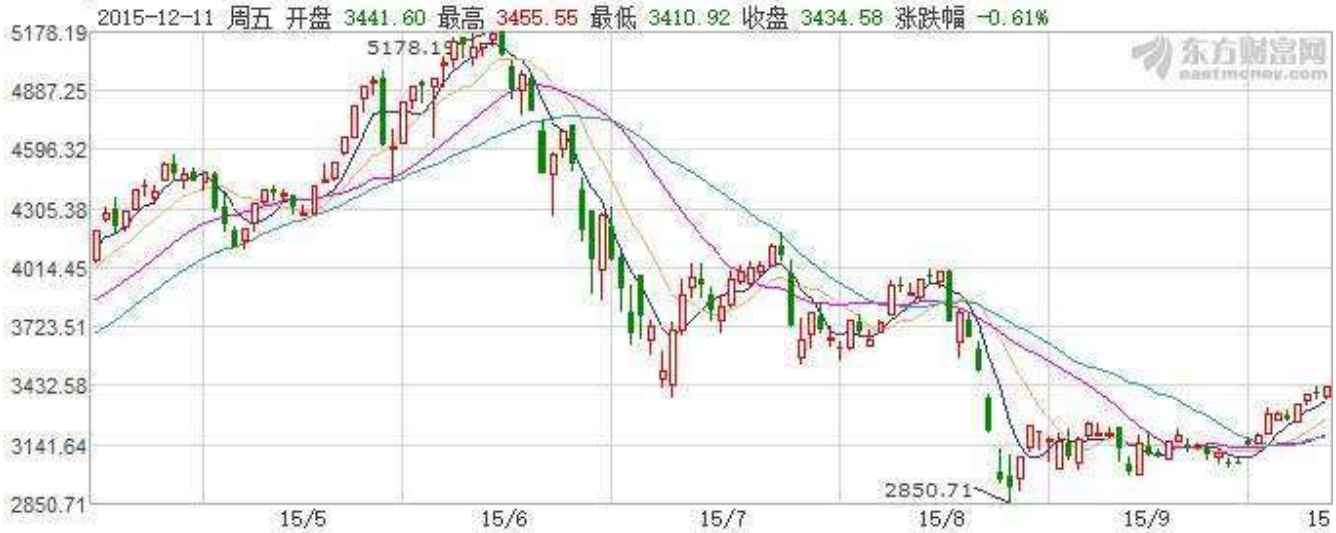
individual investors with low-level financial knowledge and very limited information put substantial amounts of their money into the stock market, an ill-advised move much like walking into a building prior to an earthquake.

In June 2015, the expected disaster finally happened. In the aftermath of the bubble bursting in June, the Shanghai Composite Index started to fall sharply from around 5000 points to the level of around 4000 points (Shi 2016). By this time, almost every private investor had already known the market was liable to crash, and a rapid sell-off occurred. The domino effect further damaged the market. The intensity of fluctuations was not entirely dissimilar from the Great Depression (table 1). By July 9th 2015, the Shanghai stock market had fallen 30% and around 1400 companies (more than half of all listed companies) filed for a trading halt in an attempt to prevent further losses (Dua 2016). The values of Chinese stocks continued to drop despite efforts by the Government to reduce the collapse (Shi 2016). The first round of free falling stopped on July 9 with a Shanghai Composite Index of 3373.54 (Souhu Stock Historical Record Database). After July 9, the fall in stock prices rapidly decelerated. On August 10, the stock price even increased 4.92 percent (Shi 2016).

However, the crisis was far from over. The second round of the crisis began in mid-August (SouthMoney 2015). The fall of the Shanghai Composite Index lasted for several days and again lost over 20 percent of its value (RoyalFlush Information Network 2016). Over two thousand stock accounts with assets over 100 million RMB disappeared in a one-week period. In September, the Shanghai Composite Index was around 2900 to 3100 points (Zhang & Guo 2015) (table 2). Over the final three months of 2015 and the first month of 2016, the stock market again went through several waves of fluctuation, eventually stabilizing around the 2700

level (Souhu Finance 2016). Compared to its levels in June 2015, the value of entire stock market lost over 40 percent in half a year (Souhu Finance 2016).

Figure 2: General Tendency of 2015 Shanghai Composite Index



(http://money.163.com/15/1219/04/BB628Q6100253B0H.html#from=relevant#xwwzy_35_bottomnewskwd)

Just an “ordinary” disaster

The 2015 crisis was not the first time the Chinese stock market found itself in this type of crisis. Just like other capital markets, the Chinese stock market often goes through fluctuations. Unlike western countries, however, the fluctuations of the Chinese stock markets are often more frequent and drastic. Under the instruction of Deng Xiaoping, China started its stock market in 1990 (Chen and Shi 2002). Since then, the Chinese stock market has experienced eight crises in 25 years. The crisis in 2015 was barely a surprise.

The first stock crisis appeared just two years after the creation of the market, in 1992 (Qieying 2017). On May 26, 1992, the Shanghai Composite Index suddenly reached 1429 points (NetEase Historical Stock Transaction Record Data). That was an unbelievably high number at that time since the Shanghai Composite Index started at 100 points in 1990.

However, after merely five months, it fell back to 400 points in November. The value of the SCI shrank by 70 percent. Because the Chinese stock market was still small at that time, it did not significantly impact the larger economy, nor did it cause significant international impact. During 1992, Chinese GDP still increased by 12 percent (China Economic Net 2015).

The second stock crisis occurred just one year later, in 1993 (Qieying 2017). After the Shanghai Composite Index reached 400 points in 1992, it quickly returned to more than 1500 points in February of 1993 (Qieying 2017). In just a two-month period, the value of the stock market had tripled. However, after merely four days, it started to fall again. This time the stock market fell consecutively for seventeen months, representing a very rare losing streak in the global financial history. On July 29, 1994, the Shanghai Composite Index returned to 335. The entire stock market lost 80 percent of its value during this market shock (NetEase Historical Stock Transaction Record Data).

The third stock crisis began on September 13, which was only one month after the second previous round of crisis. From July through September, the stock index value returned to 1053 points in a little bit more than one month (Qieying 2017). However, the stock value started to fall again on September 13 (Hexun 2010). According to Souhu Stock Historical Record Database, this time the bear market lasted for sixteen months, and the Shanghai Composite Index fell back to 512.80 on January 19, 1996 (Souhu Stock Historical Record Database).

This cycle of volatility continued, with a new wave of market fluctuations began in 1997. The stock market started a long-term bear market that lasted over two years. By May 1999, it had lost one-third of its value from 1997 (RoyalFlush Information Network 2016). Despite the long duration of 1997 financial disaster, there is only month between the bear market from

1997 to 1999 and another long-term bear market that lasted from June 1999 to January 2001. After the previous crisis ended in May 1999, the stock market suddenly increased by 70 percent due to newly emerging Internet technology stocks (Hexun 2010). From May until June, 1999, the Shanghai Composite Index grew, reaching 1756 points (NetEase Historical Stock Transaction Record Data). However, another bear market began after a very short period and lasted almost half year. In January 2001, the Shanghai Composite Index returned to 1361(Souhu Stock Historical Record Database). Yet continuing the trend, in the same year a new crisis occurred. The Shanghai Composite Index reduced from 2245 to 1346 points, losing more than 40% of its value (NetEase Historical Stock Transaction Record Data

The seventh crisis was from 2007 to 2008. The Shanghai Composite Index fell from 6124.04 to 2990.79 points, shedding more than 50 percent of its value (Souhu Stock Historical Record Database). This new crisis was six years removed from the previous crisis, representing an unusually stable period for the Chinese financial system. This crisis had two clear causes; first, the global financial crisis severely damaged world consumption and negatively impacted Chinese exports (Nastase et al. 2009). Secondly, the sudden adjustment of stamp duties for securities increased from 1 percent to 3 percent (Guo et al. 2012: p.915). This policy change immediately triggered severe market fluctuation, not only due to the increased transaction cost of stocks, but also because of the abrupt timing of this change. Both financial practitioners and common investors were caught unaware by this policy change.

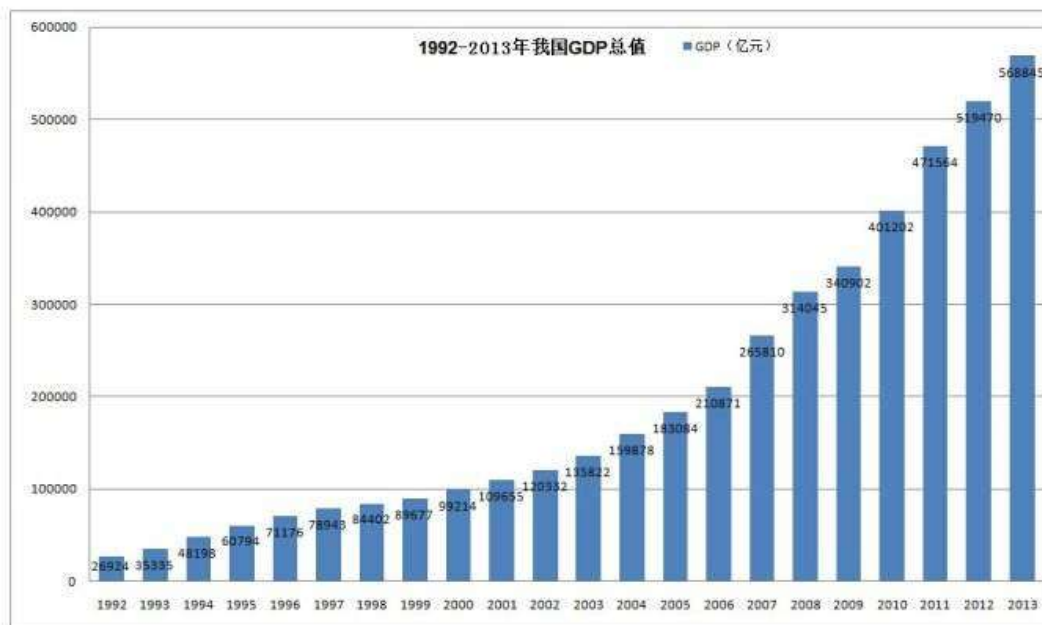
The most recent crisis was the crisis of 2015 described above. Similar to the market crash of 2008, it took seven years for this new crisis to develop. Could this be taken as a sign that volatility in the Chinese stock market is declining? This issue will be discussed in later chapters.

Figure 3: Shanghai Composite Index from 1990 to 2010



(www. sina.com)

Figure 4: Chinese GDP Growth from 1992 to 2013



(http://blog.sina.com.cn/s/blog_54a832620102v61h.html)

The Chinese stock market has two general features that make it distinct. First, the Chinese stock market highly deviates from economic reality. The fluctuations of the stock market obviously do not match the pattern of continuous growth of Chinese economy historically (table3 and table 4). This disconnect with real economic performance is why the

Chinese financial disaster of 2015 cannot be attributed to Chinese economic slowdown.

Second, trends in the Chinese stock market are characterized by sharp and frequent fluctuations.

The history of the Chinese stock market shows it to be a very immature market. Its instability has led to major financial disasters having happened eight times in past 27 years. The duration of Chinese financial crises is also very long, and the recovery process is typically slow. Throughout the recovery process, there are usually several minor market crashes. The frequency and degree of these financial crises is shocking by any standards. From a quantitative perspective, Liu et al. (2013) finds stock returns in the Chinese stock market are extremely volatile even at long-term intervals.

After the 2015 Chinese financial crisis, some commentators and scholars attribute the 2015 Chinese financial crisis to the slowdown of the Chinese economy, or to structural problems inside Chinese state-owned enterprises (Vanderklippe 2015). That is factually incorrect. The Chinese stock market is extremely volatile even when the Chinese economy is undergoing the best of times. Such an argument is not only an incorrect way of understanding the relationship between the virtual economy and real economy, but is also an inappropriate application of western financial market behavior to the Chinese market's relationship with general economic development in China. The Chinese financial system can be considered as the heaven of speculators and gamblers, and hell for long-term investors and value investors. Given the history of the Chinese stock market, the crisis of 2015 was not all that surprising. For the investors who gamble in Chinese stock markets, the 2015 Chinese financial crisis should not be shocking. It was just "another" doomsday.

Early stock markets: a comparative perspective

To further understand the degree and frequency of the Chinese stock market fluctuation, this section will place the Chinese stock market in a comparative context. However, this creates an interesting problem for research. Most stock markets have had several hundred years to develop naturally, however, the Chinese stock market is still in an early stage of development. A better comparison should be made to other stock markets in the early stages of their own development.

Founded in 1602, the Dutch East India Company represents the first financial market, the Amsterdam Stock Exchange, in world history (Braudel 1983). The early Dutch financial system had few government regulations. This early quirk of the first stock market was due not only to people having not fully realized the danger of insufficient financial regulations, but also to the government benefitting from that largely unregulated financial market. The Dutch government needed to borrow large amounts from bankers to fund state expenditures and continental wars. Although the early Dutch financial system lacked regulation, it was relatively stable due to a lack of substantial amounts of systemic information and a strongly hysteric nature of earlier financial markets. Unlike today, the investors in that age did not have indexes to keep track the market. They also lacked financial analytical tools to understand the tendency of price. The appearance of stability is actually a result of the market's slow reactions.

The history of early Netherland finance is famous for its "tulip mania", widely considered world's first economic bubble, (Garber 1990). The popularity and price of tulips started to increase in 1593, and the market collapsed in February of 1637 (Dash 1990). It took forty years for this crisis to develop from investors' irrational behavior to a large-scale crisis. Compared to

the long potent period of this crisis, the Chinese financial market created a far more active eight major crises and countless minor crises in just twenty-six years.

The London financial market was not only one of the most influential financial market in the past, but was also the place of birth for many modern financial institutions. The London exchange is a classic case of systematic financial market formation through a spontaneous process. It is not an institutional design of government. The London stock exchange was formerly a coffee house where stock brokers traded in an entirely private financial market (Barman 2012). When they found that this market was constantly generating bubbles, the market changed into the Subscription room, a stock exchange regulated by the British government. The London stock market was not volatile for a long period after its founding in 1698, experiencing its first financial crisis only in 1812 (Ouml 2013).

A third historical comparison can be made between the Chinese financial market and the New York financial market. Wall Street is not only the current center of world finance, but is also widely known for its quick rise to prominence in 19th century. The founding of the New York Stock Exchange followed a similar process as London's market, being entirely the result of private investors and financial practitioners. Twenty-four brokers signed the Buttonwood agreement to start the New York Stock Exchange (NYSE) in 1792 (Teweles et al. 1992: p. 97). After the formation of Wall Street, the United States has experienced one major economic crisis approximately every twenty years, a much more infrequent rate than China. Comparing the history of the Chinese financial market to the early histories of Wall Street can help us to understand the different level of fluctuations between two fast developing markets at initial stages with completely different political institutions. The Wall Street case will serve to further

discuss key differences between the Chinese financial system and the Western financial system.

The early history of the Chinese stock market is very different from the early histories of other stock markets. Comparing to other financial markets, the Chinese financial market is much more volatile. That is not only because the Chinese stock market was born in a different historical period, but also because the markets were created in different political process and institutional environments. Contrary to the natural growth of these early markets, the formation of the Chinese stock market is clearly an institutional design. However, there is one significant point of similarity between these early financial markets and the Chinese financial market: the crises' influence on the general outlook of economic development are very limited (French 2006). For example, the long-term and large-scale Tulip Mania did not undermine the Dutch position as the leading financial and economic power in 17th century (French 2006). It is not entirely about the small size of the financial market. A detachment between the virtual economy and real economy is a widespread character of early stage financial markets. Both the early stages of real economic development, and a lack of financial products played key role in this detachment between virtual and real economies. The development of complicated and integrated financial systems is closely tied to the industrialization process.

The soil of turmoil

At this point, it must be asked, why have the early stages of the Chinese financial market been different from other financial markets? Why does the Chinese stock market fluctuate so sharply? To further understand the fluctuations and crises of Chinese stock market, we first need to understand the history of Chinese financial market development. One major difference between Chinese financial markets and Western financial markets is the speed of

development. As previously mentioned, the Dutch financial market has developed over several hundred years. Most other mature financial markets have developed for over 100 years. However, China built a large financial market from the ground up in less than 30 years, requiring a concurrent combination of quick market expansion and rapid institution building.

The Chinese stock market officially formed in 1990, however the earliest roots of formation began in 1984 (Chen and Shi 2002). After several years of reform and opening up to the outside world, Chinese economic reforms still faced many difficulties. Because of the simultaneous increase of consumption and investment, the degree of inflation increased sharply during this period. A major debate inside that period's Chinese government was how to address those problems? Some factions inside the party believed that all these problems were caused by the economic reforms, and for that reason China should return to the age of a planned economy. Such arguments may seem odd to today's situation; however, it is not unusual for the bureaucrats who went through socialist ideology education to make such argument. At the same time, many factions and forces within the Party believed that these problems did not indicate that China should stop market reform. On the contrary, they believed increasing marketization was the exact solution to these problems.

Between the two approaches, the winner was the latter one. In 1984, the Party passed an official decision called *Decision of the Central Committee of the Communist Party of China on Economic Restructuring* (The Third Plenary Session of the 12th Central Committee of the Chinese Communist Party 1984). In this historic decision, the Party believed adding more market elements into the old planned economic institution and forming a free market to be the correct method to solve the problems. The end of this deliberation not only laid out the future direction for Chinese development, but also set the foundation for the Chinese stock market to

be born. In 1984, the first limited liability company (LLC) appeared in China (Chen and Shi 2002). In 1986, the first trading on the Chinese stock market started with China Trust. In 1987, for the first time, government-owned banks issued stocks to the public. However, a combination of several listed companies and small-scale trading activities cannot be called a true market.

The real beginning of the Chinese stock market is the founding of Shanghai stock exchange in 1990, and the founding of the Shenzhen stock exchange in 1991 (Chen and Shi 2002). At that time, the Chinese stock market remained extremely small, with only 8 stocks in the Shanghai stock exchange and 6 stocks in the Shenzhen stock exchange (Geng and Qiao 1999). The listed companies on the Chinese stock markets were all small scale state-owned companies. The government considered building a financial market an “experiment”, believing that experimenting on small state-owned companies could minimize the damage if the experiment failed.

For this nascent financial market, the government was not ready to undertake a supervisory role. At that time there were no clear rules on what the government could regulate, nor was there a clear legal framework for how the government could regulate financial markets. For that reason, the government officials often intervened in transactions when they feel it was warranted. If the preliminary phase of the Chinese stock market were a western cowboy movie, then not only were there a posse of bandits in town, but there also was an over-enthusiastic sheriff with no idea what to do. The market was filled with chaos and darkness, and the early phase of the Chinese stock market was unavoidably unstable.

The 1992 southern tour of Deng Xiaoping further established the principle of deepening market reforms (Zhao 1993). During the southern tour, Deng publicly expressed his support for

developing the Chinese financial market. By 1993, the number of Chinese stocks has increased to 235, a 17-fold increase from the previous year (Zhao 1993). Part of the reason for this sharp increase was an explosion in the number of participants in the market. At that time, many state-owned enterprises become the dominant force of the Chinese stock market. With the development of a private economy and opening-up of the economy, state-owned enterprises faced more and more unexpected adversity. Most of these enterprises continue to use management systems created under the planned economy and lacked competitiveness under the new market economy environment. Transforming management structures into a shareholding system not only improved efficiency, but it was also able to serve as way for these enterprises to get funding. From its inception, part of purpose of forming the financial system was to support development of the state-owned economy instead of purely for general economic prosperity and serving private investors' interest.

Other than the increasing size of stock market, its quick development is also characterized by developing financial laws and oversight agencies. The basic regulatory framework of the Chinese stock market was created during the period of 1992 to 2000 (Geng and Qiao 1999). In 1992, the central government issued *Opinions on Norms of Corporation Limited* (Geng and Qiao 1999). The following year, the State Council announced *Interim Provisions on the Administration of Stock Trading and Issuance*. 1994 saw the People's Congress pass *Company Law of People's Republic of China*. Besides these basic legal frameworks, the Chinese government also many detailed regulations on specific issues or fields. Some of these important regulations are *Detailed Rules for the Implementation of Information Disclosure of Publicly Traded Companies*, *Interim Provisions on the administration of stock exchanges* and *Interim Procedures for the Administration of Securities, Futures and Consultant* (Geng and

Qiao 1999). Together, these laws and regulations make up the backbone of the regulatory framework for the Chinese financial system.

As for regulatory organizations, the central government founded the Security Committee of State Council as the main securities regulatory agency in 1992. In 1998, the Chinese government created China Securities Regulatory Commission to replace Security Committee of State Council (Huang 2008). The change from Security Committee of State Council to China Securities Regulatory Commission is not merely a surface-level name change. The function and structure of the two organizations are entirely different. The Security Committee of State Council is not only a regulatory organization, but also the ultimate policy making and decision-making organization of Chinese financial system. It is a combination of financial law-making body and law enforcement organization. The director of this organization is the Prime Minister of the People's Republic of China. However, the China Securities Regulatory Commission is primarily a law enforcement agency and its director is a minister level government official (Huang 2008).

The central government has also made very clear and detailed rules regarding the scope of the CSRC's powers, as well as its functions and operation (Ma 2007, Wu 2009, Zhang 2008). The change from Security Committee of State Council to China Securities Regulatory Commission had two significant impacts. First, it signified the separation of law-making and law enforcement in the field of finance. That is one of the crucial steps in the market regulation modernization process. Second, this change indicated the Chinese government went through a process of standardization and reduction of financial regulation. After the formation of China Securities Regulatory Commission, another important development for regulatory agencies is the change of structure from a decentralized to

centralized organization. For an extended time, local financial regulatory organizations were under supervision from the Chinese government. Because of this practice, a lot of provinces and cities enforced different regulatory rules causing a lot of confusion for not only private investors, but also financial institutions. To make up for this institutional defect, since 1998 the Chinese government has spent several years gradually making financial regulatory systems separate from local government, putting them under the purview of the Securities Regulatory Commission (Yin 2004). This shift represents one of major milestones of progress for the institutionalization in the Chinese financial system.

The process of creating financial laws and regulatory organizations is not necessarily a process of adding regulations. In the context of China, many of these activities are in fact part of reducing economic regulations. For instance, the *Opinions on Norms of Corporation Limited* not only provides set rules for corporation limited operation, but also gives them legal permission to operate in a way that was not previously allowed under socialism economic system (State Commission for Restructuring 1992). After 2000, the most important financial institutional change was in non-tradable share reform. The non-tradable share institution was designed at the opening phase of state-owned enterprise reform in the beginning of the 1990s (Li 2007). After more than ten years of reform and opening, the efficiency of state-owned enterprises remained very low. The Chinese Communist Party has gradually realized the importance of forming a “modern enterprise system” in its state-owned enterprises, including building a shareholding system for state-owned enterprises.

During the 1990s, the need to form a shareholding system in state-owned enterprises and the forces aligned against such change reached a compromise. The compromise took the form of “non-tradable share institution” (Su, Kou and Chen 2006). Non-tradable share institutions

only apply to state-owned enterprises. During the Initial Public Offering (IPO) process, the shares on offer are divided into two types. The non-tradeable stocks are owned by the state and are not up for offer in the general market, and represent the original value of the state-owned enterprise prior to the establishment of the shareholding system. Only the shares that are newly issued in the IPO process are openly traded on the market (Su, Kou and Chen 2006). The shares owned by the state remain unavailable for purchase. As a result, the state can permanently remain the largest shareholder of crucial state-owned enterprises.

In the beginning, the non-tradable share institution was considered an act of relaxing regulations by allowing the state-owned enterprises to build a shareholding management structure. Although the shareholding system with part of its shares that are not tradable on the market is not complete nor sufficient, it still represents major progress for Chinese financial system. However, with the development of the Chinese economy and economic institutions, this institution gradually became an obstacle for further development of Chinese financial markets and attracting more investors. The increase in participants in financial markets also amplified the inner flaws of this anti-market and biased institution. This institution has become a point of contention that has potential impacts on political stability. By the 2000s, a very large number of Chinese people had invested in the Chinese stock market. Biased institutions and sharp fluctuations deeply harmed their interest (Su, Kou and Chen 2006).

While this institution gave investors more opportunity and motivations to participate in the Chinese financial market, it did not make the Chinese financial system become identical to the Western financial system. Even after non-tradable share reforms, the shares owned by the government and private investors' shares still operate differently. What is more, the Chinese financial system still functions differently from other financial markets in a more general sense.

Political causes of market instability still widely exist within the system. The importance and typicality of non-tradable share reform will be further discussed in chapter 4.

Another important institutional change after 2000 is formation of the Growth Enterprise Market Board (a second-board market) in the year of 2004 (Wu 2011). The process of creating this second-board market started in the late 1990s and it took several years for it to fully form (Wu 2011). Part of the reason is the market crash of NASDAQ, which weakened the government's confidence in the effectiveness and performance of second-board markets (Johansen 2000: p.319). The formation of this institution signified that the Chinese government has no intention of following the historical paths of other countries.

These legal and institutional frameworks provide the institutional foundations for the Chinese stock market. However, these regulations are not simply a product of politically neutral efforts to improve financial systems, and creating a healthy investment environment. Because of state-owned enterprises' deep involvement in financial market, the Chinese government is never a neutral oversight force of financial market. The performance of these titanic enterprises is significant for the Chinese government for several reasons. First, they are crucial for the income of the central government (Wu 2014). Second, since the senior executives of state-owned enterprises are government officials, the performance of these enterprises is tied to their own political careers (Li 2014). Third, due to the number and size of these enterprises, the performance of these enterprises is deeply connected to the general Chinese economic development (Duan 2013). The central government will always pay attention to whether the fluctuations of stock market can impact political stability. These biased institutions become fertile soil for the seed of turmoil. In the following chapters, the biased institutional framework

will be analyzed as a key force behind the large scale and frequent fluctuations of Chinese stock market.

A research question

The frequency and degree of shocks, crises and disruptions in the Chinese financial market is very shocking. The financial disaster of 2015 is not an isolated incident. It is not even an outlier compared to other previous financial crises. On the contrary, it is very similar to other financial crises in the past twenty years. They are all characterized with a quick crash, massive loss of market value and slow recovery. The 2015 crisis received greater attention from media than previous crises because of Chinese economic development and the sheer size of Chinese investment. But realistically, the 2015 financial crisis is just a continuation of a market tendency that has lasted for over 25 years. From a comparative angle, the initial stages of the Chinese financial market have very different characteristics from other markets in terms of formation, duration and frequency of crises. For the above analysis, the real question regarding the 2015 Chinese financial crises is not why it happened. The real questions are why does the Chinese stock market fluctuate so frequently and sharply? How do we explain the unique tendencies of Chinese stock market fluctuations? What role do political factors play in such fluctuation? These are the questions this work will seek to address. The history of Chinese financial markets indicates that the seeds of turmoil has been planted into the financial system throughout the process of its development. The financial system of China not only developed much faster than other countries' markets at their initial phases, but it is also more heavily political oriented. Numerous studies have discussed political factor's role in the Chinese financial system, yet have they sufficiently studied these questions? If they are not sufficient, what they are missing? The next chapter will seek to address these issues.

CHAPTER 2: A LITERATURE REVIEW

At the beginning of the 1990s, studies on the Chinese financial market were very limited. However, in recent years the Chinese financial market has become a hot research topic both in the field of finance and Chinese studies. Three reasons come together to explain this rapid growth of study. First, China's economic influence on the world economy was still very limited during the 1990s. With the development of the Chinese economy over the past thirty years, the influence of the Chinese financial system also increased. The Chinese stock market is becoming an increasingly crucial factor in the world market. The Chinese financial market is becoming more heavily interconnected to international financial market, no longer existing as an isolated market. (Wei, 2017) Currently, the Chinese financial market is seeking to make itself into a truly international financial market, in the vein of like Wall Street. This deliberate shift in scope further increases the worldwide influence of the Chinese financial market, as well as increasing the academic value of this topic.

Second, with the development of Chinese financial institutions, its difference with other financial markets start to become more obvious. Just like other fields, outlier cases usually have significant academic value and attract a good deal of scholarly attention. Researchers seek to study the unique characteristics and institutions of the Chinese financial market. For financial researchers, the case of the Chinese financial market provides a unique chance to test whether the general financial theories are even applicable to this unique case.

Most of the literature tell us which economic theories are still effective in the context of China and what theories are not valid. For example, Xu (2006) and Bai (2007) study whether and how the classic western financial analytical model VaR (Value at Risk) applies to the context of China. For China scholars, financial markets provide a unique angle to understand

not only the domain of Chinese political and economic systems, but also Chinese society. The behavior of Chinese financial investors reflects Chinese society and the relationship between the political system and society.

What's more, the Chinese financial system is not only going through several fluctuations, but is simultaneously undergoing drastic change and reform. Pragmatically, both scholars and the Chinese government are interested in exploring the directions of Chinese financial institutional change and how to improve this unique financial system. The purpose of this literature review is not only to summarize the relevant literature on fluctuations of financial markets and in particular the Chinese stock market, but also to identify and illuminate gaps in the research about why previous literature cannot sufficiently explain the market fluctuations of the Chinese financial market.

How were market fluctuations explained in the past?

The Chinese financial market literature is built on general financial theory. This section will briefly explain the general literature on Chinese financial market development. Researchers began the study of political behaviors from the beginnings of financial studies as its own discipline. In the countless studies on this topic, there are two approaches to explain the fluctuations of behavior in the financial sector: the traditional model and the paradigm of behavioral finance. The traditional financial model is characterized by the rational choice approach of formal model building processes and quantitative economic modeling. One of the most important paradigms of the traditional financial model is Eugene Fama's efficient market hypothesis (Bergen 2004). Over the long run, the efficient market hypothesis has become the foundation for most financial models. It is a significant model in the history of financial scholarship. This model believes an asset's prices fully reflect all available information (Fama

and French 2012). For that reason, it is impossible for investors to beat the market consistently on a risk-adjusted basis, since market prices should only react to new information or changes in discount rates (Bergen 2004).

Under this paradigm, changes in information are the key motivator behind market fluctuations, and all changes in stock price are rational. That means stocks should trade at their fair value, making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices (Fama and French 2012). This model also implies investors cannot outperform the overall market through expertise on choosing their investment or trading financial products at correct market timing. The only way an investor can possibly obtain higher returns is by chance or by purchasing riskier investments. Like most social science frameworks, this hypothesis obviously does not entirely reflect the actual situation of financial systems. However, this paradigm provides a useful framework to develop parsimonious financial models, like the “hypothesis of the rational man”.

The traditional financial models characterized by statistical and mathematical methods dominated the field of finance for several decades until the rise of behavioral finance in 1980s. (Schiller 2003). The unit of analysis for traditional financial models and behavior finance are very different. Traditional models analyze monetary policy and listed companies. For the paradigm of behavioral finance, the most basic unit is the individual. Behavioral finance seeks to explain a variety of phenomenon in financial market through the investors' behavior (Li 2014). There are three key points under the paradigm of behavior finance (Li 2014): first, it criticizes Farma's efficient market hypothesis. Second, it explains investors' behavior through psychological mechanism instead of rational choice. And third, it is an application of Hebert Simon's bounded rationality behaviorism in the field of finance

One of most prominent works of behavioral finance is Robert Schiller's *Irrational Exuberance* (2000). Differing from traditional financial models, Shiller focuses on non-information factors of financial bubbles and crises. In this book, Shiller (2000) argues that efficient market hypotheses and rational choice frameworks in many instances cannot fully explain the price changes in financial markets. And these price changes cannot be explained by traditional financial models that are not "random walk", anomaly or outlier cases. They are driven by systematic non-market and non-rational factors, like culture, investor's psychology, amplification mechanisms and news media (Schiller 2000).

During the 1980s, behavioral finance was still a small non-mainstream division of financial literature, but after 30 years of development, behavioral finance has already become very mature and considered mainstream by most scholars. Other than *Irrational Exuberance*, there are other famous explanations of market fluctuations under the paradigm of behaviorism finance.

First, Daniel et al. (1998, 2001), Barberis et al. (1998), and Hong and Stein (1999) incorporate overconfidence in market fluctuations. One result of overconfidence on individual's judgment is investors' systematic overreaction (Daniel et al. 1998, 2001, Barberis et al. 1998, Hong and Stein 1999). For example, Hong and Stein (1999) find overconfidence causes investors to overreact to past information and make their judgments based on the history of markets.

Second, behavioral finance literature also believes the investor's moods play a key role in the formation of market fluctuations (Saunders 1993, Hirshleifer and Shumway 2003, Goetzmann and Zhu 2005). For instance, through empirical tests, Saunders (1993) finds stocks on the NYSE have higher returns on sunny days and lower returns on cloudy days.

Third, the scholars of behavior finance find a rational reason for irrational investing behavior: namely, irrational investors have a bigger chance to succeed and survive (DeLong et al. 1991, Kyle 1997, Hirshleifer et al. 2006). The only way to act fully rationally in financial markets is to calculate all the factors and returns of all the products. It is impossible for any investors to act fully on rational choice alone. The so-called rational investors are not really rational investors, they are just actors attempting to be rational. These investors usually adopt risk-aversion strategies. The “irrational investors” tend to adopt risk-seeking strategies (DeLong et al. 1991). DeLong et al. 1991 also finds that, risk-seeking strategies on average perform better than risk-averse strategies over the long-term. This situation leads to larger scale market fluctuation. In the next section, two different paradigms will be explored in the context of analysis of the Chinese financial market as well as current gaps in the literature.

The development of literature on Chinese financial system

Before getting into the specific literature and different types of explanations for Chinese financial bubbles, a general outline on how Chinese financial literature has developed in past thirty years will be laid out. The literature of Chinese financial systems is divided into two general categories: the study by Chinese scholars and Western studies which follow divergent paths. Chinese scholar’s work on Chinese financial market follows the path from broadly non-scientific to scientific. There are three phases in this category of literature: ideological debate, direction imitation and methodological imitation. Western academia’s study on Chinese financial markets develops from neglecting Chinese financial system to direct focus on this research topic. The phases of categories for Western literature are the neglection phase, the minor academic topic phase, and the significant research agenda phase.

A brief note about some of the Chinese literature appearing in the Western category: some articles written by Chinese scholars are placed in the category of Western due to their publication in Western academic journals, finishing at Western academic institutions and utilization of Western methodologies. They are, generally speaking, not significantly different from the articles written by Westerners in nature. The general tendency for the literature's development not only can help us understand the limitations of previous research, but also provides guidelines for this dissertation's theory building.

Chinese scholars research on China's financial system

As previously stated, among Chinese scholars there are main three phases of research on Chinese financial system: ideological debate, result imitation and methodological imitation.

Ideological Debate: Contrary to the general thought, the study of Chinese financial market started before the founding of Chinese financial market. In the 1980s, many scholars started to study the necessity and possibility for China to have its own financial market (Xia 1986, Chen 1986, Li and Luo 1986, Jing 1987, Sheng 1987 and Tan 1988). In the early age of Reform and Opening-up, many still had doubts about whether China should have its own financial market due to long-term communist propaganda (Jing 1986, Wang 1986). At that time, there were still a lot people who believed that capitalism could be potentially dangerous to socialist institutions (Bai 1987). Some believed that a financial market would undermine socialism and state-owned economy. Others held that forming a financial market would promote the development of overall economy and attract investment. Such debates lasted from the 1980s through the early 1990s. These studies do not disappear after the formation of Chinese financial market in 1990. In the early 1990s, there are still articles published exploring

the degree of freedom that the Chinese government should give the financial market, or how to make sure the financial system does not hurt socialist institutions (Zhan 1990, Xia 1991).

Most of studies on these topics are normative and there is no systematic methodological or scientific approach in these studies. China was largely isolated from outside world for thirty years from 1949 to 1979. For that reason, in early 1980s, most Chinese social scientists had not have learned of the paradigm changes and methodological development in Western society. Even for the small portion of researchers who were aware of these shifts in thinking, they fail to incorporate these changes in their research. Most Chinese social scientists do not value approach and methodology enough in their work at that time. In a lot of instances, they cannot clearly distinguish between propaganda and scientific research. Many social science works do not have clear assumptions, hypotheses and empirical evidences. For example, Dai and Jin (1985) simply use the normative description of economic development to justify the necessity of building a Chinese financial market. Most studies of this era can barely be called academic work, let alone “theory building”.

Direct Imitation: With the opening-up of China, the field of social science was also opened during 1990s. With the introduce of foreign academic journals and return of visiting scholars and international students, Chinese scholars started to adopt the paradigm and methodology of the Western scholars. This first step was to directly apply mature foreign financial models and conclusions of studies to the Chinese context. Both traditional financial models and behavioral finance were imitated by Chinese scholars. Traditional financial models that were widely imitated by Chinese scholars in the environment of Chinese financial system includes real business cycle model (RBC) (Du and Gong 2005), Hicks-Hansen model (IS-LM) (Zhang 2010), fixed-income attribution function (Nelson-Seigel) (Shi 2014) and value at risk

model (VaR), (Wang et al 2000). This category of study shares a common limitation: they assume financial models also work for Chinese financial markets and then directly apply these models to analyze financial phenomena like return of investment and formation of financial bubbles. However, they do not sufficiently test whether these models really apply to Chinese financial system, nor do they consider the unique Chinese political system and culture context.

Other than the direct imitation of quantitative financial models, there are also a very large number of direct imitation studies from behavioral finance. Most of this research uses widespread explanatory factors from behavioral finance, like overconfidence, herding effects and overreaction (Shi 2014, Wu 2004, Yang and Wang 2006, Xu and Yao 2010 and Tang 2006).

Methodological Imitation: In recent years, Chinese scholars have begun to develop Chinese financial theories that only apply to the environment of China. Chinese scholars started to be actively involved in the building of new theories to explain the parts of the Chinese financial system that cannot be explained by general financial theories. Although compared to the direct imitation literature the number of this type study is still very small, it is important progress for Chinese scholars who study the fluctuations of Chinese financial market. This evolution indicates the literature on Chinese financial markets is gradually becoming mature. For example, many studies have used analytical methods, like the Data Envelopment Analysis model (DEA) (Zhang 2003), and generalized autoregressive conditional heteroscedasticity modeling method (GARCH) (Wei and Zhang 2004) to develop Chinese financial models. Although Chinese scholars have tried to develop China's own financial studies, these attempts are only partially successful. That is due to Chinese scholars having almost has no meaningful contribution to methodological change and paradigm development.

They are still using the mature Western analytical tools and methodologies. The future development of Chinese financial literature should pay more attention to creating new perspectives and new methodologies instead of imitating existing models or methodologies.

The three phases of literature development are clearly distinguished by degree of maturity instead of by specific date. The appearance of second phase literature did not mean the disappearance of first phase literature. When some scholars had started the third phase studies, some other scholars were still doing the second phase style of research. Today, the three types of studies still coexist in Chinese financial research, although the first phase research is very rare. Normative and descriptive literature on Chinese financial history is also an important part of this category of literature. There are many articles and studies concerning the development of Chinese financial markets from the historical perspective (Hao 2014, Jiang 2002, Li 2005, Pi 2009). Most of these studies focus on institutional history. This type of literature is very closely related to politics of financial market.

Most of Chinese financial history works are concerned with wider viewpoints than the specific history of the Chinese stock market (Jiang 2002, Li 2005 and, Pi 2009). They include individual financial activities before 1990 and the preparation process for Shanghai Stock Exchange and Shenzhen Stock Exchange as part of their studies. Some of them even extended their studies to financial history before the founding of the PRC (Hao 2014). The main limitation of this type of literature is a lack of in-depth analysis. Most of these studies are focused on summarizing facts and are characterized by very simple and direct reasoning. Although some of these studies argued politics is the key force behind irregular stock market fluctuations in China, they do not pay enough attention the interaction of the political forces behind these institutions, nor do they analyze patterns of institutional change.

Western literature on Chinese financial systems

If the development of Chinese financial literature on the Chinese financial system is the development from low academic quality to high academic quality, then Western scholar's studies on Chinese financial system went through a process from neglect to becoming an important research agenda. The reason for this shift has been discussed previously in this chapter. During the 1990s, there were few foreign studies on the Chinese financial system because only a few Western scholars deigned to pay attention to this small scale, closed and insignificant financial market. Today, social scientists pay close attention to the Chinese financial system for its high academic value. The development of Western scholar's study on Chinese financial system can also be divided into three phases: the neglection phase, the minor academic topic phase and the significant research agenda phase.

Before the mid-1990s, the western social science community paid little attention to the Chinese financial system, producing only a few articles on this topic. There is almost no famous scholarship published on the topic of Chinese finance during this period, and there are also barely any widely known scholars on this topic. What is more, the several studies on the Chinese financial system during this period are not systematic or theory building studies.

Bailey (1994) is one of early Western studies on the Chinese stock market. This study determined that there are two different stock in China: A shares and B shares. A shares are for domestic investors and B shares are for foreign investors. This study finds that although B shares are open to the world, their expected return has little to do with expected world stock market returns. It further proves the Chinese financial system is very isolated during this era. Liu and Song (1997) test whether the Chinese financial market is efficient, and the result indicates both Shanghai stock exchange and Shenzhen stock exchange are efficient markets.

The second phase of Western study on Chinese financial system occurred in the late 1990s and early 2000s. During this period, systematic studies on Chinese markets started to appear in the Western social science community. Groenewold (2004) is a comprehensive study Chinese stock market. By using both historical analysis and quantitative modeling, this work systematically studies efficiency, predictability and profitability in the Chinese stock market. Even in the 2000s, Groenewold admits that Western academia knew very little about Chinese financial systems.

Due to dividing financial markets into A shares and B shares, the Chinese markets attracted a lot of attention from Western Academia. Fernald and Rogers (2002) is one of the earliest studies on pricing mechanism within the Chinese stock market. By comparing A shares and B shares, this work finds that foreigners pay relative lower price than domestic residents for the same amounts of shares. Jiang et al. (2002) studies the correlation between A shares and B shares. Through detrended fluctuation analysis modeling (DFA) and calculating correlation coefficients, the result indicates the two shares are highly correlated with each other.

The third phase of Western scholar's study on Chinese financial system is from late the 2000s to after 2010. For the reasons discussed at the beginning of this chapter, the numbers of studies on Chinese financial system grew geometrically. During this period, Western studies on the Chinese financial system have become increasingly similar to studies on Western financial market. Various Western financial models and methodologies are employed to study the Chinese markets. Just like phases one and two, Western scholars have much larger interest in studying the differences between A shares and B shares, as well as differences between the Shanghai and Shenzhen stock markets. For example, Bohl et al. (2015) study

index futures trading and Western financial systems are applied to China. Different from Chinese scholars who use Western approaches, this approach pays more attention to the comparative view. For instance, Nguyen (2017) compares the contagion effect of Vietnam, China and U.S. stock markets. Goh (2013) studies whether U.S. economic variables can predict the price of Chinese financial products. This model shows the U.S. economy's impact on Chinese financial system is statistically significant. Unlike the first phase and second phase of scholarship, the scope of studies expands from stock market to all kinds of financial organizations and financial products, inclusive of futures, government bonds and other securities (Chen et al. 2011, Fan et al. 2017, Fong 2002, Jing 2012, Yan and Reed 2014).

Studies on Chinese financial fluctuations

In the last section, the discussion focused on the development of a general literature concerning the Chinese financial system. Because the focus of this work is stock market fluctuations, this section will review the literature on the formation of Chinese financial bubbles and drastic market fluctuations. Based on the general theories of market fluctuations and the previous studies of the Chinese financial system, the studies on Chinese stock market fluctuations are divided into three categories: traditional financial model explanations of Chinese stock market fluctuations, behavioral financial research on Chinese stock market fluctuations, and other explanations of Chinese financial fluctuations.

Using traditional financial models to explain Chinese stock market fluctuations

Many scholars test whether Western economic methodology and financial models are applicable to the environment of the Chinese financial market, and whether they can explain the formation of Chinese financial bubbles. In this type of study, political factors typically become part of the background. Much of this research studies believes that due to China's

unique political environment, many mature Western financial models need to be re-tested in a Chinese context. Based on the different models they test, they have reached different conclusions. An example is Lu et al. (2016), where the collected work includes a series of articles studying the Chinese stock market fluctuations from 2015 to 2016 with multiple statistic models, including motif statistics, dual motif statistics, and cut distances. Just like Lu et al. (2016), a common characteristic of this type literature is combining multiple models in a single study (Tong 2006, Wei 2007 and Zhu and Xie 2011).

Even financial scholars whose primary focus is the impact of economic forces have argued that financial models cannot explain all the fluctuations of Chinese financial system. Ehsan et al. (2006) studied the formation of nonlinear bubbles in Chinese stock markets. Through a very large database that covers the entire 1990s and value at risk model (VaR), this article not only confirms the high volatility and exorbitance of nonlinear bubbles in the Shanghai Stock Exchange, but also pointed out the Chinese political system contributes to the formation of Chinese financial bubble. However, this article does not go further to analyze how the Chinese political system promotes the formation of financial bubble. The main purpose of this work is to continue study of this political influence.

Behavioral finance on fluctuations of the Chinese financial market

Many economists find that the Chinese stock market's frequent fluctuations and high-level deviation from economic reality cannot be effectively explained by traditional financial models. They seek to answer this question through the approach of behavioral finance (Feng 2004, Li 2008, Wen 2010, Li 2014).

These studies argue that a series of irrational behaviors in Chinese investors make the capital market unstable. Such irrational behavior is a result of investors' cognitive bias. The

causal relationship between investors' psychology and stock market performance has been proved by many previous studies. Hui and Li (2014) finds investors' sentiment is closely related to Chinese stock market returns by using a series of proxy variables. Zhang et al. (2016) proves a similar argument by using the data of TV audience ratings. The data of mutual fund flow also demonstrates this point (Chi et al. 2012).

Generally speaking, previous studies focus on three types of cognitive bias. First, Chinese investors' high-level of overreaction causes the instability of Chinese stock market (Feng 2004). Economists realized a long time ago that investors around the world overreact to events, news, and policy changes to a certain degree (Feng 2004, Rezvanian et al. 2011). What is unique about Chinese investors is that the tendency to overreact is particularly high (Wen 2010). Through a series of surveys, previous research finds Chinese investors are highly over-optimistic when something good happens in the market and highly over-pessimistic when there is bad news. This overreaction contributes to the stock market fluctuating more than it would otherwise. (Wen 2010, Feng 2004). Chen and Zhu (2005) further prove this point by using the data of Shanghai Composite Index from 1997 to 2005.

Second, Chinese investors' "herd effect" is very strong (Li 2008, Yao et al. 2014). "Herd effect" means individual investors like to imitate the behaviors of other investors (Li 2008, Yao et al. 2014). Financial institutions tend to mimic the behavior of other financial institutions as well. The herd effect is part of the reason behind the chain reactions we often observe in the stock market (Li 2008). Although scholars of behavioral finance found the herd effect to be widespread in the worldwide financial markets, its impact on Chinese stock market is particularly significant (Li 2008, Yao et al. 2014). Inside Chinese stock markets, herding effects are stronger in the A-share market than the B-share market (Yao et al. 2014).

Third, Chinese stock investors often over-speculate (Li 2014). It is common knowledge that buying and selling too quickly in the stock market is not a satisfactory answer to this question. Many Chinese financial scholars argue that Chinese investors are very irrational because they have extremely low-levels of financial knowledge and information (Xu 2016). Previous studies have repeatedly proven that information is a very significant factor for the stock market and investors, and such information includes accounting information, corporate governance information, information diffusion, etc. (Alizadeh and Muradoglu 2014, Chen et al. 2001 and Haß 2014). Many Chinese individual investors are ordinary working people and "outsiders" who know very little about finance and possess little market information. Wang et al. (2006) proves this hypothesis through a 42-item questionnaire.

However, due to a lack of a comparative perspective, these scholars do not realize that other countries' ordinary individual investors also have very low-levels of financial knowledge (Dodonova and Khoroshilov 2013). In fact, most common investors do not have sufficient financial knowledge and market information regardless of their nationality. Although it is almost impossible for people of different countries to have the exact same level of financial knowledge, such differences are not relevant since common investors around the world generally possess significantly low-levels of financial knowledge. In terms of institutional investors, the financial knowledge of the Chinese professional financial practitioners is also not very different from professional financial practitioners from other countries. Like other countries, employees of Chinese financial institutions are usually college educated and have relevant working experience (Davis and Steil 2001). For the above reasons, financial knowledge theory does not give a satisfying answer to our research question.

Second, the Chinese stock market's fluctuations are not a result of its immaturity. Wen (2010) and several other scholars argue that the irrational behaviors of Chinese stock market investors are merely a result of the market's immaturity and such a situation would improve with time. The Chinese stock market is still at its beginning phase considering it has only 26 years history, but Chinese market investors' high-level irrationality is not a result of immaturity. During the past 20 years, significant improvement can be observed in the Chinese stock market and its regulatory institutions. Individual investors also have become more mature over the past 20 years. If the market's immaturity is a valid explanation for investors' behavior, we should observe a decline in irrationality in the Chinese stock market. That also means Chinese stock markets should become more and more stable over time. However, that is not what has been observed. In the past two decades, not only has the magnitude of fluctuations not reduced, but the duration of crises has also not decreased.

Gaps in past research

Based on previous studies, the literature on the Chinese financial markets fails to sufficiently explain the unusual fluctuations of the Chinese stock market. The traditional financial models' analysis of the Chinese stock market has found that financial models cannot explain all fluctuations of the Chinese financial system. The scholars of behavioral finance attribute the Chinese stock market's fluctuations to investor's irrational behavior, but do not explain why the behaviors of Chinese stock market investors seems more irrational than other countries' investors. As stated above, the other explanations, like political knowledge and immature market arguments also cannot sufficient explain the fluctuations within the Chinese financial market

A common character of previous literature is that they do not account for the systematic political process and political mechanisms in their explanations. This work argues that not having a political theory is the key factor in why the previous literature cannot sufficiently explain Chinese financial market fluctuations. However, that does not mean that they do not include political factors in their explanation. On the contrary, most previous studies on Chinese finance mentioned political factors in their study. A very large number of studies argue that differences in political environments is the reason we need to retest whether Western financial models apply to the Chinese market. Such analysis is essentially still traditional financial model analysis. What is more, just like previously discussed, there is a large amount of normative research focused on the institutional change in the Chinese financial market and the development of the Chinese financial system. However, these studies do not systematically analyze the interaction of political forces and use politics to meaningfully explain market phenomena. These studies are essentially financial history work, not works of political science. Previous literature does not give us a real political science explanation for Chinese financial market fluctuation.

One cannot sufficiently explain Chinese financial bubbles without a political science explanation. Studying economic phenomenon through a political view is embedded in the discipline of economics. Contrary to the belief of a lot of laymen, the modern term “economics” actually came from the term “political economy” (Marshall 1890). In the late 19th century, the term “economics” came to replace “political economy”, coinciding with the publication of an influential textbook by Alfred Marshall in 1890. Politics and economics are embedded within each other since the beginning. Finance is simply a sub field of economics and the methodology is very similar. However, different from most fields of economics, the importance

politics in the field of finance is de-emphasized (pro-market 2017). During an interview, University of Chicago Booth School of Business Professor and Stigler Center Director Luigi Zingales stated that he believes that relationship between politics and finance has been underestimated in the field of political economy for many years (pro-market 2017). Part of that reason is that regulations in Western financial market is to a very large degree non-political. Although there are some significant political issues regarding finance in Western countries, like Dodd-Frank Wall Street Reform and Consumer Protection Act (Acharya et al. 2011), the connection between politics and finance alone is not strong enough for scholars to develop a new approach or an entire new view on the financial system.

If not paying enough attention to the connection between politics and finance is just a minor insufficiency for financial literature on the Western systems, it is a major one in literature on Chinese financial system. The relationship between finance and politics is entirely different in the context of an authoritative regime, like China. Previous literature on Chinese finance did not sufficiently taking this point into consideration. Both Chinese and Western scholars apply not only traditional financial models, but also economic approaches and traditional financial outlooks in the Chinese context. Although they note the importance of politics in Chinese financial systems, they do not sufficiently incorporate politics in their analysis of Chinese financial system, from methodology to the theory building process. A financial model with political factors is not political theory of finance. For that reason, a political theory of financial market means a truly political view, political analysis and political approach. A political theory of financial markets should pay attention to interaction of political forces and behaviors of political actors. A political theory of Chinese financial market belongs to the field of political science instead of economics. It explores how politics, instead of simply market environments,

results in the formation of financial bubbles and market fluctuations. Just like financial theories, a political theory of the Chinese financial market does not seek to explain every factor of Chinese financial bubbles. It only seeks to explain the part of financial fluctuations that cannot be explained by market force or traditional financial models.

Forming a political explanation fits the development path of both Western study and the Chinese academia's research on the Chinese financial system. The path of Western study on Chinese financial systems demonstrates that this subject is becoming more and more important and developing a meaningful research agenda. Through the development of Chinese scholars' study on Chinese financial market, we know that future Chinese financial systems study should focus on theory building and methodological innovation. Forming a political theory develops current literature on both tracks by providing a new angle to understand the Chinese financial system.

CHAPTER 3: POLITICS VERSUS MARKETS

In the second chapter, the previous literature on Chinese financial markets fails to sufficiently explain the unusual fluctuations of the Chinese stock market. These studies do not include political processes and mechanisms in their explanations. This chapter explores the politics behind the sharp Chinese stock market fluctuations and establishes the relationship between financial crises and institutional changes in China, across six parts. First, the relationship between politics and financial markets in United States and their impact on financial fluctuations is explored. The purpose of this section is not only to provide a comparison between the Chinese financial system and Western financial systems, but also to lay out a framework to analyze the Chinese stock market. The second section explores the formation of the Chinese stock market and its inherent flaw. The third part discusses the political processes behind Chinese stock market regulatory institutions and why this process is closely related to recurring Chinese financial crises. Part four discusses the political process of institutional change to cope with Chinese financial crises. The fifth section focuses on general tendencies within political institutional change. The sixth part briefly introduces the three cases of this work's case study, focusing on the significance and variations of these cases. The following chapters of this work will study these cases in greater detail.

Formation of crises and the political mechanisms of Western financial markets

This section discusses the political processes of Western financial markets and explains how such political processes can help us understand the politics of the Chinese stock market. Since finance is a very crucial part of the economy, we begin the discussion of financial market's politics by talking about the relationship between politics and economics. Economics and politics have been embedded in each other since the beginning; until about one hundred

years ago, economics was called “political economy” (Ursher 2003). The name changed with the development of economics as a separate discipline, and political economy became a sub-field. Although politics has never left the study of economics, Adam Smith’s “invisible hand” argument was the mainstream economic philosophy in the field for a very long time. Adam Smith founded classic economics on the basic idea that the market could regulate and ensure maximum efficiency (Thornton 2009). With the continuing development of the market economy and capitalism in modern times, repeated economic crises, and drastic changes in unemployment rates in free markets forced economists to rethink the relationship between politics and economics. Eventually, John Maynard Keynes revised the classical economic theories and emphasized the importance of government actions in the market (Klein 1947). In practice, the accepted role of government in economic activities also went through a change, from that of a “night watchman” to providing comprehensive oversight over the economy as a whole (Long and Machan 2008).

In most Western countries, the relationship between the government and capital markets underwent a similar development. Equity markets transformed from an unregulated anarchy to a structured market with a complicated multi-level regulation system. In most instances, such developments were not a process of active design and adopting preventive measures: rather, the government took actions in response to financial crises and existing market disfunctions. The crises and existing problems not only helped the government to identify the flaws and limitations of contemporary financial institutions, but also provided motives for different branches of government and legislators to come to a consensus for political action.

A particularly relevant case is that of the United States’ development of a fiscal regulatory regime. Today, the capital market system of United States includes a dozen federal agencies,

hundreds of state agencies, and many professional associations (Komai and Richardson 2011). Financial laws today are even more complicated than ever before, and are generally beyond the comprehension of non-professionals. Yet today's complex financial regulatory system was formed via a long evolutionary process. Throughout this process, financial crises and numerous waves of market fluctuations played key roles.

After the War of Independence, the Founding Fathers even had a serious debate among themselves about whether the right to regulate finance should belong to the federal government, or to the various state governments (Komai and Richardson 2011).

In the early days of the United States, financial crises repeatedly occurred due to a lack of sufficient state regulation (Komai and Richardson 2011). In the late 19th century, however, financial oversight started to evolve rapidly. A fiscal crisis originated in 1890 with the U.K.'s Baring Bank's bankruptcy, which deeply impacted the U.S. economy (Mitchener and Weidenmier 2007). The financial panic of 1890 provided the key motive for introducing the Bankruptcy Act of 1898, which allowed the federal government's to permanently regulate bankruptcy, and created modern institutions for the treatment of debtors (Tabb 1995).

In 1907, a financial crisis began with United Copper Company and caused the collapse of the Knickerbocker Trust Company, at the time the third-largest trust institution of New York City (Braunstein 2009). This crisis caused a widespread loss of confidence among depositors and nothing short of the intervention of J.P. Morgan eventually saved the market from collapse (Bruner and Carr 2007). After the crisis, congress started a commission to study the causes of the of crisis. The commission's report inspired the creation of Federal Reserve System.

The Great Depression demonstrated how much damage the financial system could do both to the macro-economy as well as peoples' lives (Garraty 1987). Part of the reason that the Great Depression caused such ruin is that commercial banks used too much depositors' money in their financial investments. When that gamble failed, the depositors could not withdraw their money from the banks, causing a massive a loss of confidence in the banking system among the public. Numerous measures had been taken by the federal government to adjust financial regulations during the age of the New Deal (Leuchtenburg 2009). Two of these measures have profound consequences for our present concern. The first is the Glass-Steagall Act of 1933, which created a firewall between commercial banking and investment banking and established the Federal Deposit Insurance Cooperation (FDIC) (Friedman and Schwartz 1963). The second is the creation of the Securities and Exchange Commission (SEC) to comprehensively regulate securities, especially equities and debt instruments (Komai and Richardson 2011).

Another example of a financial crisis providing an important opportunity and motive for the development of financial regulation is the 2008 financial crisis. Without this global financial crisis, there would not have been the Dodd-Frank Wall Street Reform and Consumer Protection Act (commonly called Dodd-Frank) in 2010 (Mayntz 2012). The purpose of this law is to create a "new foundation" for the capital market. Dodd-Frank includes the following key points:

- (1) forming a new oversight council to evaluate systemic risk
- (2) increasing transparency in derivatives
- (3) adopting new consumer protection measures, including the founding of the Consumer Protection Agency and creating uniform standards for "plain vanilla" products
- (4) increasing the existing Federal Deposit Insurance Corporation (FDIC) authority to allow for orderly winding down of bankrupt firms, and including a proposal that the Federal Reserve receive authorization from the Treasury for extensions of credit in "unusual or exigent circumstances"

(5) increasing international standards and cooperation on improving accounting and tightening regulation of credit rating agencies (Department of Treasure 2010).

The history of the United States' financial market illustrates how most of the crises and problems in markets are caused by a lack of regulation. These crises and problems are also the main driving force behind adding and adjusting regulations of the capital market. Admittedly, there are many instances of deregulating financial markets. For example, Glass-Steagall Act was repealed in 1999 (Clinton 1999). However, the general pattern of the relationship between politics and capital markets is that of extracting power from the market and giving it to the political system. The American financial system transformed from having few regulations to more regulation, from fewer oversight agencies to more oversight agencies, and from less regulatory authority of the federal government to more regulatory power.

The case of the United States also reflects the general pattern of stock market politics in Western countries. This chapter uses this framework to analyze the politics of the Chinese stock market. Under this framework, there are four key questions regarding the politics of the Chinese stock market. First, what is the relationship between the government and the equity market from its inception? Second, why do the drastic fluctuations described in chapter one form? Third, what are all the players' roles and interactions in the process of managing crises? Finally, how does coping with crises and the problems of the market change the relationship between the government and the capital market?

The birth and “latent genetic disease” of the Chinese financial system

The formation of the Chinese capital market differs fundamentally from American financial market formation. A milestone event that signifies the formation of a systematic American capital market is the signing of Buttonwood Agreement in 1792 (Teweles et al. 1992). This agreement established an organization called the New York Stock & Exchange Board. Later,

this organization became the New York Stock Exchange. 24 stock brokers signed the Buttonwood Agreement, with the government playing no role in the process. Private professionals created the American capital market instead of the government; and in the early days of the equity market, the level of regulation was very low.

For China, the birth of financial markets was very different. During the government nationalization drive in the 1950s, China dismantled the existing market economy established under the government of the Nationalist Party (KMT) (Li 2006). Subsequently, China did not have a market economy for the next thirty years. A planned economy and state-owned companies were the main characteristics of the Chinese economy during that time. The People's Commune and the Great Leap Forward crippled the national economy (Peng1987, Dikotter 2010,). The chaos of the Cultural Revolution shattered not only the social order, but also further harmed the Chinese economy. Because there was no market economy, there was no capital market during this period.

With Chinese economic reforms in late 1970s, the government began to foster a market economy. Yet, a capital market did not immediately form. Although there was no equity market at the beginning of these economic reforms, the debate regarding the building of an equity market was very intense at this period (Lin 2005). Some scholars and policy makers believed that China should not form a capital market (Lin 2005). Their argument was twofold. First, many people, including many government officials, had doubts about private capital and market economies. After thirty years of propaganda that attempted to convince every Chinese that capitalism is evil, many people wondered whether a socialist economy should even have a capital market. Second, because a vast majority of people lived in poverty during that period, they had very little money to invest in a capital market (Tan 1987). According to the

Chinese National Bureau of Statistics, per capita income in cities in 1980 was only around 50 dollars.

At the same time, another group of policy makers and scholars believed that China should have a stock market. Their argument was also twofold. First, they believed that a capital market is an inalienable part of a market economy and a market economy is not complete without a capital market (Zhao 1986). The thinking was that the Chinese economy could not develop quickly without an effective financial system. Second, a group of policy makers and experts viewed the building of a financial market as an avenue to provide urgently needed funding for state-owned enterprises (Tu 2012). During the end of the 1980s and the beginning of the 1990s, the reform of state-owned companies encountered severe difficulties due to lack of sufficient funding. The government believed that creating a stock market would alleviate this problem. The result of this debate was a compromise between the two camps.

The Chinese stock market was formed in 1990 with the founding of the Shanghai stock exchange and Shenzhen stock exchange, but these stock markets were closely controlled by the government (Groenewold 2004). The central government to this day has absolute authority over institutional design and the rule-making process in the fiscal sector. Because the government created the market with a clear goal of financing state-owned companies instead of a more general goal of economic development and economic well-being, the institutions of Chinese financial markets have been biased in favor of the public sector from the beginning.

Most listed companies at the start of the stock markets were state-owned and with little private capital in the system. Although there were already many Chinese private businesses

after more than ten years of economic reform, most of them did not become listed companies in the Chinese stock market for two principal reasons. First, many private companies were still small businesses and they did not meet the requirements for an IPO. Second, many people had doubts about the continuation of the government's policy. At that time, the intentions of the government remained unclear. Investors were afraid that someday the government might ban private capital again and then all their investments would be lost.

From the above comparison, we know the historical background of the American equity market's founding is vastly divergent from the Chinese experience. If the capital markets of Western countries are the children of a market economy and private capital, then the Chinese stock market is a child of the government alone. Due to the circumstances of birth for the two financial markets, both have a "latent genetic disease". The "latent genetic disease" of the American financial market is too little governmental regulation. This lack of appropriate regulation is the crucial reason the American equity market has experienced failures so many times in its history. On the other hand, the "latent genetic disease" of the Chinese capital market is too much governmental regulation.

In the United States, because the stock market was very small and relatively simple at the beginning of the 19th century, too little regulation did not cause many market failures and thus did not immediately attract much attention. When the scale and complexity of the equity market increased with time, however, this disease became more serious and triggered many crises. As described in the first part of this chapter, when these crises occurred, the federal government adopted new institutions to fix an acute problem of the market. However, each institutional change was not enough to solve the entire problem of insufficient regulation. Each crisis could only fix the symptoms instead of curing the disease.

The “latent genetic disease” of the Chinese stock market is too much governmental regulation, or rather, the market itself is too political. The Chinese government involves itself in the financial stock market in the following two ways. First, unlike the Western governments in which only a few public-owned companies participate in stock markets, the Chinese government is itself the largest participant of the Chinese stock market. State-owned enterprises gain a very significant amount of funding from owning quoted companies. The state-owned enterprises are usually too big to float on the stock market as whole entities. Rather, they choose to form several smaller subsidiaries and then let these smaller companies float on the Chinese stock market. For example, the Chinese government's major investment company, the Development & Investment Corporation (SDIC) has total assets of \$25.7 billion (Bloomberg 2017). This is much too large to float as a single entity. For that reason, SDIC formed five quoted subsidiary companies. Another example is the huge power company China Guodian Corporation which controls four quoted subsidiaries (Hkex News 2011).

The government indirectly owns a very large proportion of Chinese institutional investors through making state-owned companies their shareholders (Cao 2016). These Chinese institutional investors are indirectly owned by the state. For example, as one of the largest institutional investors, The second largest investment firm Haitong Securities' five largest shareholders are all state-owned companies (Haitong Securities 2017). Through this method, the Chinese government has become the most important participant in their stock market. Its interest in this stock market is worth trillions of dollars.

Second, the Chinese government is not only the main participant in the Chinese stock market, but it is also the main oversight body of the Chinese stock market. Unlike most

countries which give regulatory power to one of a few government agencies or commissions, the Chinese government has a variety of organizations. These government agencies include the China Securities Regulatory Committee, the State-Owned Assets Supervision and Administration Commission, the People's Bank, the China Banking Regulatory Committee and the China Insurance Regulatory Committee (Su 2007, Zhang 2010, Lian and Chen 2011). The China Securities Financial Corporation is a very unique entity. As a colossal state-owned financial institution, it is a non-profit organization. Its shareholders are the stock exchanges and the futures exchanges themselves. From this perspective, it is more a regulatory agency than a traditional financial institution. Other than these agencies, there are many government controlled associations and financial institutions involved in financial regulation. In many instances, these institutions have overlapping functions and provide excessive and unnecessary regulations.

Too much political regulation can be described as a “latent genetic disease” because it is one of the most important driving forces behind Chinese equity market crises. Even when the stock markets function well, the potential for crises still exists. And so, the question remains, how does the “latent genetic disease” cause the formation of financial crises in the Chinese stock market?

Political markets and market fluctuations

“Too politically oriented” does not simply mean that the number of political rules is high. Instead, the term “too politically oriented” implies three layers of meanings. First, there are indeed too many rules. Second, many of the existing rules are biased. Finally, the design process of new institutions is itself biased. Among the three meanings, what is significant is not the first one, but rather the latter two. This section will analyze the formation of financial

crises based on the second and third meanings of “too politically oriented”. Alongside the development of markets, the inner flaw of being “too politically oriented” also develops rapidly.

The existing financial institutions within China are politically biased, not only because the Chinese equity market is a child of politics, but also because the process of creating these financial institutions was itself politically biased. In the context of Chinese equity markets, the word “biased” also has two layers of meanings. First, between the public and private sectors, the institutions are biased toward the public sector. Second, between individual investors and listed companies, the rules are biased toward listed companies (Pan 2006).

In the market creation process there are three different actors capable of influencing the central decision-making mechanism for designing new financial institutions, each with different preferences. State-owned enterprises favor heavy control of the market so they can keep their unfair advantage (the unfair advantage of the state-owned enterprises). Second, private investors favor fairness (reducing regulations that give state-owned companies their unfair advantage). Third, regulatory organizations’ bureaucrats prefer protecting and advancing their own careers (Theodoro 2011).

During the design phase of financial institutions, state-owned enterprises and financial institutions actively input their interest. However, once the process of going to the market begins, private investors cannot input their preferences. There is no democratic process or public hearings during the institutional design process. Second, private individuals and institutions cannot express their opinion through investing because the institution has not yet been installed.

During this phase, the regulatory agencies often ally with state-owned companies because these companies exert significant political influence over the entire system. High-

level managers of state-owned companies are essentially government officials themselves. It is not unusual for a CEO or chairman of a state-owned company to become a mayor, governor, or even a state-level minister. Many senior party leaders used to work in state-owned companies. Some heads of state-owned companies even possess higher ranks than the director of a financial regulatory agency (Deng and Liu 2014, Qiu 2014). Because these companies are part of the government, they can very effectively channel their interests into institutional design and the decision-making process. The bureaucrats of these agencies ally with state-owned companies at this phase because it benefits them politically as well.

A political process for private investors and financial institutions to input their requirements from the beginning of the design process is absent. In China this process is entirely under the purview of government bureaucrats. For that reason, initial institutional designs usually heavily favor the public sector. However, lacking democratic institutions does not mean private investors' voices and interests are not important. They have the most powerful interest input mechanism: the market. Scholars of political institutions believe that institutions and behaviors are closely related (Vannicelli 1995). The same logic applies to financial regulatory institutions and investors. Biased financial institutions have significant consequences. Chinese investors often behave differently from other investors (Chiang et al. 2010). It is from these different behaviors that financial crises and fluctuations happen.

One serious consequence of giving unfair advantages to the public sector is that many Chinese companies seek IPOs on the American stock market (Jin 2010). Even the largest Chinese e-commerce company, the Alibaba Group, sought an IPO in New York Stock Exchange (Reuters 2013). The problem with this phenomenon is that it causes an insufficient supply of stocks (Jin 2010). Due to an increase in GDP and household incomes, many

potential investors are seeking to enter the market. This imbalance between supply and demand causes overvaluation of stock prices. Before the non-tradeable share reform, state-owned companies were not allowed to sell their shares. This action served to further imbalance supply and demand in the financial market.

The second consequence of biased regulation is causing people to have overconfidence in the performance of state-owned companies (Chen 2014). Because of the long-term experience of living in an environment of a centrally planned economy, many Chinese people have a false impression of “public-owned” equating to “trustworthy.” Many state-owned companies have sufficient funds and monopoly status; however, state-owned companies’ performance is not always reliable due to management issues, bureaucratic relationships, rising competition and policy changes (Chen 2001, Liou 2009). Because consumer confidence surpasses real performance, bubbles form. Biased institutions reduce the private sector’s participation, making the overvalued state-owned companies’ relative position in the market very high. That increases the size of the bubble and creates the latent danger of financial crises.

The third biased consequence involves the reduction in the quality of private listed companies. Between the individual investors and private companies, Chinese institutions heavily favor companies over investors. In China, the IPO process is much easier than in most Western countries. It took the United States two hundred years for the total numbers of stocks on the market to reach 3600 listings (Tu 2012). However, in China it only took 21 years to reach 2500 listings. Such loose IPO regulations boost economic performance in the short term, but create constant potential dangers over the long haul. The low-quality of listed companies often becomes the key component of a Chinese financial bubble.

These factors come together to create biased institutions that change the behavior of individual investors in the market, distorting their own interests and rational choices. The collection of investors' behavioral changes causes unusual frequent fluctuations within the Chinese financial market. Financial crises in the Chinese stock market are primarily political crises and cause distinct institutional changes.

Coping with crises and adjusting financial institutions

Because Chinese financial crises are a result of inner flaws of the financial system and biased political regulations, the solution to Chinese financial crises is also an institutional one. When economic crises occur, the government faces pressure to solve these crises and to set the financial market back on the right track. Economic and political stability are constant concerns of the Chinese government, as the Chinese political system's legitimacy is highly dependent on performance (Yang and Zhao 2015). The Chinese government fears that economic chaos could potentially become political chaos. Previous studies have found that the government is not only very responsive and highly sensitive to economic issues, but also makes policy changes when previous policies had negative effects (Yang and Zhao 2015).

Under pressure to cope with crisis, the party adjusts policies in the direction of fairness to solve problems in the market. This often takes the shape of adjusting regulations in the direction of making the market less political and more fair. During this process, the interests of private investors and the market order surpass the interests of state-owned companies because the government perceives general economic performance and stability to be more important than the interest of state-owned characters. In response to crisis, regulatory agencies typically ally with market actors to adjust financial institutions for the promotion of

stability and the development of market, which can in turn help the bureaucrats protect their careers.

When a policy goes wrong or a scandal breaks, the Chinese government often scapegoats lower-ranking officials and often forces government agencies to take responsibility for the central government's decisions. For example, after the financial crisis of 2015, the central government arrested many of the bureaucrats in charge of financial supervision on charges of corruption and insider trading (Legal Daily 2015). For that reason, once financial crisis occurs, the primary concern of bureaucrats of supervisory agencies are their own careers, instead of the political influence of state-owned companies. In times of financial crisis, regulatory agencies and bureaucrats usually support policy changes that can help stabilize the financial market. In most occasions, that means adjusting institutions to make them fairer for private sectors and individual investors.

“All roads lead to Rome”

The process described above repeats itself time and time throughout the history of the Chinese stock market. As the result of such processes, trends in the Chinese stock market are the reverse of the U.S. stock market. The U.S. stock market went through a process that began with a completely free stock market to that of a government-regulated, but still essentially free, market. When the free market failed, the U.S. added more regulations. When the markets failed again, once again the U.S. adjusted regulations. Political regulation grew from being immature to mature. In China, the story runs in the opposite direction. China's transition started out as a very highly politicized stock market to becoming a less strictly regulated one. Because of the government's overly tight regulations, the market failed. Only then did the government partially change its oversight model. But the market failed again, and

the government reduced regulation once more. The economic side of the Chinese stock market grew from being immature to mature. In short, the American equity market went through a process of developing political regulations while the Chinese stock market has a history of reducing political regulations.

The compromise and balance between the free market and political regulation is not unique to equity markets. In Western countries, the development of economic thought from classical economics to the Keynesian Revolution reflects such a tendency in macro-economics. Over the past forty years, the Chinese macro-economy has changed from a centralized and planned economy to a mixed economy. Such a process is not unique to China. Vietnam and other formerly socialist countries went through a similar process during their own periods of economic reform (Barrett 2014). The Great Depression of 1929 and the great Chinese famine in the 1960s demonstrate how a purely free market and a purely planned economy can both lead to severe economic crises in their own form (Garraty 1986, Peng 1987). The same logic applies to stock markets. Institutions with either too much regulation or too little regulation are both ineffective and prohibit development. Excessive regulations give investors and financial institutions little incentive to participate in the financial market, while an absence of necessary regulations also leads to market failure or monopoly.

Although the Chinese and the American capital markets have opposite experiences in terms of how politics shape the stock market, they both (whether intentionally or unintentionally) are on a path towards reaching a reasonable compromise and balance between the free market and government regulation. Throughout this process, market fluctuations and financial crises provide incentives and opportunities for the governments to adjust the regulations. Although the imbalance of “free market” and “political regulations” is

not the only reason behind financial crises, it is certainly one major cause of a market crashes. Admittedly, absolute balance is almost impossible to reach. There is no such thing as “a right amount of political regulation”. First, due to the complexity of the stock market, humans are incapable of understanding every aspect of that market, and they are also unable to accurately predict the consequences of regulation perfectly. Second, because of continuous financial innovations, the variety of financial concepts and instruments tends to constantly increase. It takes time to understand the impact of financial innovations on markets and develop appropriate regulations. Third, each financial crisis can only reveal a portion of the flaws and limitations of the current market. After each financial crisis, policy makers usually focus on overcoming the problem underlying the immediate crisis and tend to ignore other defects that may exist. Although there is no possible perfect harmonious relationship between a free financial market and political regulations, states continue to improve their financial regulation systems. Market stability and economic development provide states with strong motives to do so. From this perspective, Chinese and Western countries’ equity markets may have different beginnings, but have very similar destinations.

Case study methodology

To further illustrate and test the political mechanism of the Chinese stock market, critical case studies will be employed. Case study is a popular methodology that has been widely used by political science and economics. Many scholars have repeatedly established the case study to be an important method in social science (Mills et al. 2010). In terms of case study methodology, there are two schools. Yin (2009) argues that a case should be chosen only because it is representative and typical. Thomas (2011) disagrees with this argument and believes that such cases cannot help us to draw anything important or meaningful. Instead,

he believes that researchers should choose three types of cases: a local knowledge case, a key case, and an outlier case. Local knowledge cases are significant because researchers can provide intimate knowledge and in-depth analysis. Key cases are the ones that are themselves inherently interesting. An outlier case is the deviant case that has the “capacity to exemplify the analytical object of the inquiry” (Thomas 2011).

This work will employ three different case studies. The three cases are the non-tradeable share reform; the circuit-break mechanism; and the failed international board building. The first case is a macro-case study focused on the fundamental institutional arrangements of the Chinese financial system, and the forces behind long-term fluctuations. The second case is micro-case of rapid institutional change and short-term fluctuations. The third case is a classic outlier case of biased institutions not triggering market fluctuations nor lasting for an extended duration.

The third chapter of this work discusses non-tradeable share reform. Non-tradeable share reform is one of the most significant institutional changes in the history of the Chinese financial market. From this perspective, it is a key case. It clearly reflects the political process described in this chapter, and as such is also a representative case. The fourth chapter focuses on the short-lived circuit-break mechanism. This institution only existed for one week, and as such provides an interesting and unique perspective because it is one of the most short-lived institutions in the history of Chinese finance. The analysis focuses on why this institution was so short-lived and the political story behind the quick making and unmaking of this rule. This case further illustrates the “all roads lead to Rome” idea that giving certain power back to the market and reaching a reasonable compromise between politics and market is inevitable historical tendency. The fifth chapter concerns the unique institutions that

does not allow foreign companies to float on the Chinese stock market. This case represents a very interesting outlier case. Although this institution is unhealthy for the development of the market, it has never been changed by the government. An in-depth exploration as to why this unique institution does not fit the political mechanisms described above can further illustrate the marketization process of the Chinese financial market.

CHAPTER 4: NON-TRADEABLE SHARES AND REFORM: A CLASSIC MACRO-CASE OF POLITICAL MARKET CRASH AND LONG-TERM INSITUIONAL CHANGE

Non-tradable share reform is one of the most significant changes in the history of the Chinese stock market (Yu 2007). As discussed in chapter 3, Chinese financial crises typically have institutional origins. The Non-tradable share rule is not only one of the most significant institutional arrangements of the Chinese financial system, but is also one of the most tenured financial institutions. This chapter illustrates how the political explanation for Chinese financial fluctuations works over the long-term and how non-tradeable shares impact the general performance of the Chinese financial system.

As discussed in chapter 3, the general tendency of Chinese financial development is to reach a reasonable compromise between political and market forces. Non-tradable share reforms prove that market forces matter in the context of China's financial system. Chinese financial fluctuations serve as the primary avenue for private investors to input their interest into the political system. During the process of non-tradable share reforms, the Chinese government went through a transition, from having a financial institution designed to advance the interest of the Chinese state-owned enterprises (SOE) to making concession to the market. Over an extended time period, the Chinese government realized that making concessions to the interests of private investors was the correct way to mitigate Chinese stock market fluctuations. That is because Chinese financial bubbles are inherently political bubbles. This chapter first discusses the relationship between the non-tradable share institution and long-term financial fluctuations. A discussion of the process of the non-tradable share reform will follow.

Biased non-tradable share institutions and the formation of political financial cses

The non-tradable share institution was designed at the inception of state-owned enterprises' reform and the founding of the Chinese stock market in the early 1990s (Li 2007). This institution has been embedded in the Chinese financial system since the beginning. After the Chinese government underwent "reform and opening up" for more than a decade, the efficiency of state-owned enterprises remained very low. This inefficiency of state-owned enterprises can be attributed to a mismatch in design. state-owned enterprises are designed for the planned economy and accordingly underperform in the market economy (Li 2007). With the rise of the private sector, state-owned enterprise performance became increasingly dissatisfying for both investors and the state. Additionally, lack of funding was a widespread phenomenon during this period.

According to findings discussed in chapter 3, the interests of state-owned enterprises are not only closely related to the income of the central government, but are also closely related to the career trajectories of government officials working in state-owned enterprises. As part of the political system, these officials can effectively channel their interest into the political system. To fulfill the interests of state-owned enterprises, the Chinese government designed the "non-tradable share institution" when they decided to float state-owned enterprises on the capital market (Su, Kou and Chen 2006).

During the IPO process, the newly issued shares would be divided into two types: the shares owned by the state and the shares available for public purchase (Song 2008). This institution does not allow the shares owned by the state to be traded on the market. This block of shares represents the original value of the state-owned enterprise before the establishment of the shareholding system. Only the newly issued shares from the IPO process are openly

traded on the market (Su, Kou and Chen 2006). The shares owned by the state are not available for purchase. As a result of this institution, the state can permanently be the largest shareholder of crucial state-owned enterprises. Through this dual-tiered institution, state-owned enterprises can fulfill three key interests at the same time. They can first absorb more investment from the capital market. Second, they can increase the market value of state-owned enterprises, which helps provide an image that the performance of these companies is improving (Chen and Huang 2016). Finally, they can ensure the central government permanently remains the largest shareholder of state-owned enterprises, allowing the managers and heads of these companies to remain government officials instead of common business executives.

As an institution biased toward state-owned companies, non-tradable shares harm the interests of individual investors. Wu et al. (2005) argue that one of the most detrimental impacts of this institution is seriously damaging the pricing mechanism and contributing to informational asymmetry in the Chinese capital market. Under the non-tradable share mechanism, the distribution of interest between state-owned enterprises and private investors is significantly biased toward the state. The state acquires non-tradable shares at a very low price while the private investor must purchase their shares at a much higher price (Huang 2005). Common sense dictates that the price of stocks typically increases very sharply after the IPO.

After building the shareholding system inside state-owned enterprises, the State Asset Supervision and Administration Commission gains the state shares in these companies prior to the IPO. Private investors can only purchase stocks after the IPO procedures are finished. Accordingly, private investors usually purchase state-owned enterprises' shares at a price that

is several times higher than the state investors spend on their purchase. This imbalance leads to the value of the state's shares increasing many times over after the IPO.

Because the non-tradeable share rule is a result of a political process instead of an objective institutional design aimed at stabilizing the financial market and improving the Chinese financial system, it is biased and harms the interests of private investors from the beginning. This bias also leads to the formation of financial bubbles and frequent economic crises. Yet this problem was not significant during the early phases of financial market formation in the 1990s. Because of the small size of the Chinese stock market and low numbers of individual investors in the market, the political and social influence of both on the financial market was highly insignificant. What is more, in the early stages of implementing this institution, the inner flaws of this institutional design were not immediately apparent. On the contrary, in the initial phases of implementing the non-tradable share institution, it actually had some very positive influences. First, it successfully appeased the anti-market forces inside the Communist Party and state-owned enterprises. Second, it provided a relatively smooth transition for state-owned enterprises towards building a management structure that fit with the market economy. Finally, it bridged the funding gap for many state-owned enterprises. Under the non-tradable share institution, the price of a tradable share is much higher than the non-tradable ones (Ge 2005). Because of the price difference, state-owned enterprises can attract more investment with smaller capital.

It took time for this institution's impact on individual investors' behavior to accumulate and become a major institutional cause for long-term Chinese stock market fluctuations. The benefits of this institution were immediately recognizable. Perhaps most importantly, the anti-market forces inside the government and state-owned enterprises were appeased by this

institution. State-owned enterprises received the funds they urgently needed. For that reason, the Chinese government did not attempt to change this institution until fifteen years later.

As the size and importance of the Chinese stock market increased, building a stable financial market became an increasingly urgent and crucial endeavor. The financial market rapidly became an issue that could potentially impact political stability. By the 2000s, a very large number of Chinese people had invested in the Chinese stock market. From 1990 to the 2000s, the non-tradable share institution became one of the most important reasons for the frequent financial crises of China (Wu 2005). This biased institution caused investors' behavior to change, and such changes are a key force behind the unusual and drastic fluctuations of the Chinese stock market. Due this biased institution, the behaviors of individuals investors diverge from other financial markets globally. The formation of financial bubbles is essentially the process through which private investors and the market unconsciously input their interest into the political system, via their investing behavior.

Non-tradable share rules make private investors overreact to the government's economic policy (Song 2008). Under the non-tradable share institution, economic policy is closely tied to state-owned enterprises' and the central government's interests. Most private investors believe the government's will protect state-owned enterprises through policy actions. The best way to invest should be to follow public policies on state-owned enterprises. However, investors overestimate and overreact to the government's actual capacity to set the direction of the market. Although government's policy is crucial for the market's behavior, it is still limited considering the size of the Chinese market and its interaction with international trade and the global economic situation.

Economists realized long ago that investors around the world overreact to news, events, and policy changes (Feng 2004, Rezvanian et al. 2011). Previous literature has repeatedly studied the relationship between investors' high-level overreactions and the instability of Chinese stock market (Feng 2004). Wen (2010) found that Chinese investors' tendency to overreact is particularly high in a global context. Through a series of surveys, previous research finds Chinese investors are highly optimistic when something good happens in the market and highly pessimistic when there is bad news. These fluctuations in reaction to world events causes the stock market to fluctuate more than would be expected (Wen 2010, Feng 2004). Chen and Zhu (2005) further prove this point by using data from the Shanghai Composite Index from 1997 to 2005.

Second, because of the non-tradable share institution, the "herding effect" is also very strong (Li 2008, Yao et al. 2014). The "herd effect" means that individual investors tend to imitate the behaviors of other investors (Li 2008, Yao et al. 2014). Financial institutions also tend to mimic the behavior of other financial institutions. In the context of the non-tradable share institution, the central government is the largest shareholder in State-Owned Enterprises and its investing behavior is evident. It is only natural for investors to observe and imitate the investing behavior of the Chinese government. The "herd effect" is part of the reason behind the chain reactions often observed in the stock market (Li 2008). Although scholars of behavioral finance found herd effects to be widespread in worldwide financial markets, its impact on the Chinese stock market is particularly significant (Li 2008, Yao et al. 2014). Inside the Chinese stock market, the herding effect is stronger in the A-share market than the B-share market (Yao et al. 2014).

Third, Chinese stock investors often over-speculate in the context of the non-tradable share institution (Li 2014). It is common knowledge that buying and selling too quickly in the stock market is not profitable. Other countries' investors also have the problem of over-speculation. However, Li (2014) argues that Chinese investors sell and buy much faster than the investors in other financial markets. They make quick decisions based on rumors and sudden policy changes without careful deliberation, and such decisions are usually made with high frequency and in very short time. The non-tradable share institution plays a key role in the formation of such unusual investing behavior.

Investors' behavioral change is the market's unique way to say no to inappropriate institutions. Biased institutions change the natural rules of the market. Without biased institutions, these three types of unusual behaviors of Chinese investors would most likely not occur. The non-tradable share rule is diametrically opposed to the basic idea of a shareholding system that an investor's ownership in the company is symmetric to the total amount of investment. The non-tradable share institution also changes the relationship between investment and ownership by distorting the relationship between investors and owners. Private investors include individuals and institutional investors, yet they cannot supervise state-owned enterprises through a large amount of investment (Liu 2017).

The State Asset Supervision and Administration Commission has total control over state-owned enterprises with relatively little investment (Liu 2017). The consequences of this practice reach beyond short-term market fluctuations. Because of the imbalance between investment and ownership, private investors ceased to treat state-owned enterprises' stock as an investment. To Chinese private investors, especially small investors, state-owned enterprises' shares become simply a form of speculation and financial gambling since they

cannot claim ownership or supervise the companies at all. For that reason, private investors have stronger incentives to engage in short-term and high-frequency trading actions and less motivation to do long-term investing.

Beyond changing investors' behaviors, the non-tradable share institution also has increased internal conflicts between the state and private investors along two avenues (Wu et al. 2005). Because of the mechanism described above, the most efficient way for state-owned enterprises to generate income is not increasing performance, but is instead issuing new shares. Also, due to a lack of oversight, many state-owned enterprises' employees can benefit themselves in the financial market from insider information. The non-tradable share rule has a series of negative consequences on the stability of the financial market. Put differently, this mechanism "robs" money from private investors. Both state-owned enterprises' irresponsible increase in the number of shares and inside trading deeply undermine the market's stability.

Non-tradable share reform

Reform in the non-tradable shares market was an active decision for the Chinese government. However, it was also the Chinese government's reaction to market forces and private investor's behavior. This reform illustrates the process of the Chinese government making institutional changes as described in chapter 3. Non-tradable share reform was undertaken to stabilize the market and grant concessions to market forces. However, because the non-tradable share institution is one of most basic financial frameworks in China, the reform process was not simple or quick.

The non-tradable share reform of 2005 is not the first time that the Chinese government tried to change the non-tradable share institution (Wei 2005). Attempts to make such changes started in the early 2000s. On June 2, 2001, the Chinese government wanted to loosen non-

tradable shares by reducing the percentage of State-Owned Enterprises shares owned by the state (Xu 2007). The method to reduce the percentage of shares was to issue newly tradable shares. However, such attempts were not very successful for two reasons. The Chinese government did not sufficiently prepare for the market impacts brought on by this policy change. Stock prices fell sharply due to a sudden increase of share numbers (Xu 2007). These efforts also harmed the interests of current private shareholders due to the price of newly issued shares being much lower than the price of shares already on the market. This policy did not make any significant changes regarding the institution itself, merely reducing the percentage of shares held by the state. Such policy changes created an impression that the government was making a concession to the market by the reducing the shares held by the state.

Another attempt to change this policy was the government's 2002 plan to sell shares of some large state-owned companies to large private investors (Xu 2007). Similar to the 2001 action, this scheme also reduced the percentage of shares owned by the state. However, this policy caused more controversy, as many private investors gained a vast amount of illegitimate interest in the system through cronyism and corruption. Both measures in 2001 and 2002 did not solve the major defects of the non-tradable share practice (Xu 2007). For that reason, they triggered higher levels of dissatisfaction among private investors and played a major part in a series of market fluctuations.

The final, and successful, reform started in 2005 and lasted for several years (Yao 2007). One reason for that was uncertainty in the Chinese government about how to change this institution without severely damaging the interest of state-owned enterprises or causing short-term market shocks. Without previous experience to call upon, the Chinese government was

forced to “wade across the stream by feeling the way,” as the Chinese saying goes. The government conducted its reform in a very slow and deliberate way to check the effects of each step of the reform, and adjusted the direction of reform when mistakes were made. Another reason for the long duration of reform was the internal struggle and negotiation process inside the Party. This institution is not only related to market stability and SOE’s performance but is also related to the interest of a variety of bureaucrats and factions within the government. The interests of state-owned enterprises and their employees, financial supervisory officials’ careers and the interests of banking and insurance systems would all be impacted by reform.

The reform process started on February 2, 2004, when the state council issued a document called “Some Opinions of the State Council on Promoting the Reform, Opening and Steady Growth of Capital Markets (Yao 2007).” This document emphasizes that the reform process must respect the market. The purpose of reform was to promote stability of the capital market and to protect the interest of investors. On April 29, 2005, the government issued the document “Notice on the Trial Implementation of Measures on Full Circulation Reform for Listed Companies and Related Questions.” This document indicates that the non-tradable share reform had progressed from the design phase to the implementation phase.

After the reform, the state followed the same rules as private investors. That made the State Asset Supervision and Administration Commission transition from a political controller of state-owned enterprises to the largest investor in state-owned enterprises (Ding 2012). This caused the Chinese government to face a dilemma: how could they let state-owned enterprises go through the non-tradable share process yet at the same time keep these large companies state-owned. To solve this problem, on June 17, 2005, the Chinese government

announced a crucial document called “Opinions on the Reform of Share Holding Reform of State-owned Listed Companies (Wu 2005).” This document is one of the most significant documents in the entire reform process, ensuring the Chinese government can still maintain control of important state-owned enterprises after the reform by acting as the largest shareholder. It also required the State Asset Supervision and Administration Commission to hold a certain percentage of shares in state-owned enterprises. In other words, for the state-owned enterprises’ shares owned by the states, only the minimum required amount would be available for trade. However, after the reform, SOE shares owned by the State Asset Supervision and Administration Commission must follow the same rules and pricing mechanism as private investors. Non-tradable share reform in state-owned enterprises was not about trading state-owned enterprises shares on the market, its purpose was to put the public sector and private sector on a level playing field. Under the new rules, large private investors, especially institutional investors, can participate in the decision making and supervision process of state-owned enterprises, and information must be available to private investors (Yao 2007).

In 2005, the Chinese government issued a variety of other policy statements to promote a steady non-tradable share reform. First, to further increase the fluidity of the financial market during and after the reform, the Ministry of Finance and the State Administration of Taxation announced the “Notice on the Issue Concerning the Tax Policies Relating to the Pilot Reform of Share-trading.” This document granted a large portion of trading tax immunity during and after reform. Second, the Chinese government announced a series of statements laying out specific guidelines on operational procedures, information disclosures, and oversight mechanisms. These documents are “Measures for the Administration of the Share-trading

Reform of Listed Companies,” “Operational Guidelines for Sponsoring of the Share-trading Reform of Listed Companies,” “Interim Provisions on Accounting Treatment concerning Share-trading Reform of Listed Companies,” “Measures for the Administration of Initial Public Offering and Listing of Stocks”.

The Chinese government did not apply this reform to all state-owned enterprises simultaneously. In the beginning, the Chinese government chooses four companies as experimental cases to test reform (Yang 2005). It was later expanded to 46 companies to further test the result of such reform (Huang 2011). The Chinese government’s measures were quite successful regarding promotion of the interests of individual investors and stabilizing the market. The duration and results of these experimental cases also give the government time and evidence to change. Very quickly, the reform extended to more than 1000 companies (Huang 2011). By the end of 2006, most state-owned enterprises had gone through non-tradable share reform.

Scholars have reached different conclusions about the result and the degree of success of these reforms. Tang (2006) criticizes the reform for not thoroughly considering its effect on stock prices. During and immediately after the reform there was a short period of time where stock prices decreased due to an increase in the supply of tradable shares on the market. For that reason, many private investors lost money during this period, although this reform benefitted them in the long-term. Wu (2006) believes that institutional investors still cannot play a role in companies’ management that matches their investment. Zhao (2006) believes the State Asset Supervision and Administration Commission still benefits relatively more than private investors after the reform, although both of them have gained interest through this process. The data from both the Shenzhen Stock Exchange and Shanghai Stock Exchange

shows very negative influence on the relationship between the state and private investors for Chen and Wang (2008).

Despite these criticisms, the non-tradable share reform has had a very positive influence on the Chinese financial market. To begin with, it increased the capacity for large private shareholders to supervise the management and performance of state-owned enterprises (Wang et al. 2010). What is more, the non-tradable share reform created common ground between state shareholders and private shareholders. It has also given more protection to the interest of private investors. In the short term, it redistributed part of state-owned enterprises' interests resulting from unfair financial institutions to private investors. In the long term, this reform improved state-owned enterprises' management structures and increased their performance by making them face more pressure from market competition and giving stronger oversight to both private investors and institutional investors.

Comparing before and after reform, the market fluctuates at a much less frequent rate and fluctuations have a shorter duration after the reform (Liu and Wang 2006). As described in the first chapter, major financial fluctuations have occurred six times during the first fifteen years of Chinese financial history. However, major financial shocks have only happened twice in the ten years after this reform: the financial crises of 2008 and 2015. During the only two financial crises after the reform, the one of 2008 is largely a result of international financial crises. The domestic causes of financial shock have been weakened. Through a series of models, Liu (2010) concludes that the ability of market factors to explain profitability in private investment portfolios increased since the implementation of non-tradable share reforms. That means the reform reduced the political orientation of the Chinese stock market. The behavior of the market has become a more important explanatory factor in the financial tendencies of

the Chinese market, and the non-tradable share reform has reduced the role of politics in the Chinese financial system.

However, the non-tradable share reform cannot cure the “genetic disease” of the Chinese stock market on its own. First, the non-tradable share system is only one small part of the “latent genetic disease”. Not only are many existing institutions biased toward the public sector, but new unfair institutions have been designed during the process of Chinese financial market development. Furthermore, when the financial institutions have changed to market-oriented systems during this process, some flaws of the Western financial system started to be incorporated. One result of the non-tradable share reform is that large shareholders become larger and gain more control over companies through purchasing shares (Zhang and Guo 2008). One negative result of such a change is that large shareholders can take advantage of small investors by falsely increasing the value of shares. The main reason behind this phenomenon is asymmetry of information between large shareholders and small shareholders. Another reason is the limitations of current Chinese financial supervisory institutions. For example, after Chinese non-tradable share reforms started, many large shareholders undermined the interests of small shareholders by “tunneling” (Johnson 2000, Holderness 2003, Dyck and Zingales 2004). “Tunneling” means large shareholders intentionally sell assets or subsidiaries to other companies or organization owned by themselves at a low price.

Perfect balance and compromise between market and politics has proven impossible to achieve. However, the market has forced the Chinese Communist Party to abandon its political advantage and make compromises with private investors. Keynes and many other economic scholars have established its crucial for a government to adjust its interventions to the market. The experience of the Chinese financial markets tells us that market forces can also adjust

political interventions. In other words, political power does not have the ability to adjust the market in whatever direction it wants. Some believe that the political power of the authoritative state is superior to that of the market. That is not entirely true. Financial market, just like other markets, follow its own rules. The state can influence the market, but can never really control it.

CHAPTER 5: THE SHORT LIVED CIRCUIT BREAKER: A CLASSIC MICRO CASE OF POLITICAL MARKET CRASH AND DRASTIC INSTITUTIONAL CHANGE

The circuit breaker, also called the trading curb, is one of the most widely-used financial regulatory institutions to prevent market crash throughout Western financial systems (Goldstein and Kavajecz 2004). The Chinese circuit breaker institution was adopted at the beginning of 2016 in direct response to a long-term bear market through much of 2015 (Sheng 2016). However, it was only in operation for about one week from January 1 to 8 (Cai 2016). It is one of the most short-lived financial institution in the history of the Chinese financial market.

This institution did not serve to stabilize the market. On the contrary, it triggered extreme financial fluctuations in the Chinese stock market. This chapter intends to further illustrate the political mechanisms behind the formation of Chinese stock market fluctuations and institutional changes in the Chinese financial system. The circuit breaker case study differs from non-tradable shares studied in chapter 4, exploring a case of rapid institutional change and short-term market fluctuations

This chapter focuses on four questions concerning market fluctuation formation:

- (1) What is the circuit breaker mechanism?
- (2) How was the circuit breaker institution implemented in China?
- (3) Why did the adoption of this institution lead to extreme market fluctuations?
- (4) Why was this institution removed only one week after its adoption?

What is the circuit break mechanism?

Circuit breaker institutions are not an innovation of the Chinese financial system. They are employed widely in financial institutions across the Western financial system. In the United States, the circuit breaker is one of the most mature and reliable institutions designed by the Security Exchange Commission (SEC) (Miles 1990). Its purpose is to suppress panic selling

and prevent excessive volatility in the market. This institution halts the trade of entire markets or individual securities when the price hits a certain point. Yet it is not intended to weaken the functioning of the market. On the contrary, this institution is only meant to impact fluctuations caused by investors' psychological reasoning and insufficient information (Investopedia 2017). In the past, the institution has been based on the Dow Jones Industrial Average (DJIA) (Investopedia 2017).

Western countries have widely adopted the circuit breaker institution. In the United States, there are currently two different circuit breakers: the Mid-Wide Circuit Breaker and the Single-Stock Circuit Breaker (Miles 1990). Mid-Wide Circuit Breakers affect the entire stock market while single stock circuit breakers temporarily halts the trading of single stocks. Before these rules were in place, the Dow Jones Industrial Average (DJIA) was the benchmark for the circuit breaker (Satoni and Liu 1993). According to the old rules, thresholds for level 1, level 2 and level 3 circuit breakers were 10% , 20% and 30% .The SEC started to enforce the new Mid-Wide Circuit Breaker rules in 2013 (NYSE market guide 2013).

According to the new rule, Market-Wide circuit breakers are based on single-day declines in the S&P 500 Index. Level 1 is enacted when the S&P 500 falls to 7% below its previous close. Level 2 is triggered by a 13% drop in the S&P500 index. For Level 1 or 2 circuit breakers, trading is paused on all exchanges for 15 minutes, if it is triggered before 3:25pm. If the circuit breaker is trigger after 3:25 pm, then trading continues. Because the market closes at 4:00pm, triggering level 1 and level 2 circuit breakers are not effective after 3:25pm on trading days. Level 3 is a 20% drop in S&P 500, and when triggered trading will halt for the remainder of the trading day instead of a short period of time. Different from level 1 and level 2 circuit breakers, Level 3 circuit breakers can be triggered at any time during the day. That is

because when the entire S&P500 drops enough to trigger level 3, such a drop is very serious, requiring the circuit breaker to be triggered immediately (Investopedia 2017).

While Mid-Wide circuit breakers can only be triggered when the price of stocks decline, single-stock circuit breakers can prevent stocks from both going too high or too low (NYSE market guide 2012). The single-stock circuit breaker does not have a common standard for all securities. According to the new rule of 2013, limit-up-limit-down mechanisms exist to determine the thresholds for acceptable trading (NYSE market guide 2013). Extreme increases or decreases in stock prices trigger halts outside of a certain trading range. The security's price and listing determines the range. The Single-stock circuit breaker is very sensitive and accordingly the trading halt is much shorter than the Mid-Wide Circuit Breaker. The fluctuation band to trigger Single-stock Circuit Breaker is based on the trading of previous 5 minutes (NYSE market guide 2013). In the opening periods and closing periods, the band is twice as wide compared to the other times during the trading day. That means the SEC does not want to the circuit breaker to be trigger at the beginning and ending of trading days to give private investors more freedom to make their own financial decisions. If the stock is trading outside of the calculated band for 15 seconds, trading will be paused for five minutes (NYSE market guide 2013). For single securities, the maximum pause is merely 10 minutes.

Circuit breaker institution in China

Many differences between the US and Chinese circuit breaker mechanisms are clear. Firstly, unlike in the United States, which has a circuit breaker for both individual stocks and the entire stock market, the Chinese Circuit Breaker institution only works for the entire stock market (Liu 2016). Second, the triggering point for the circuit breaker in China is a 5% price decrease and a 7% price increase (Cai 2016). Third, the Chinese circuit breaker works for the

entire stock market and can be triggered for both excessive price increases and excessive price decreases. The United States Mid-Wide Circuit Breaker can only be triggered by a price slump (Kavajecz and Kenneth 2004). Fourth, from its institutional design, it is apparent that the United States circuit breaker institution is well-rounded and mature. The Chinese circuit breaker institution was very slipshod. Finally, the two circuit break institutions are designed and enforced in different political environments. In the following sections, this difference in different political enforcement environments will be discussed in further depth.

Before the adoption of the circuit breaker institution, China had an alternative institution: “daily fluctuation limits” (Wang 2008). This was a vastly different type of institution. Since December 16, 1996, the Chinese stock market has had this institution in place (Wang 2008). A given stock’s price can have a daily fluctuation that must not exceed 10%. Several differences between these mechanisms are apparent. First, the Circuit Breaker mechanism applies to both entire stock markets and individual stocks (Wang 2008). The “daily fluctuation” limit only applies to individual stocks. Second, the circuit breaker mechanism halts trading for a defined period. The “daily fluctuation limit” does not stop trading. Instead, the stocks still can be traded at an up-limited or down-limited price.

These facts point out the ineffectiveness of the Chinese circuit breaker. This institution triggered dramatic market reactions from the entire Chinese financial market. A-share markets, during the four days of this institution’s official adoption triggered the circuit breaker four times (Yang 2016). This was unprecedented in global financial history. In other countries, circuit breakers are only triggered one or two times every few years (Investopedia 2017). On January 7th, 2016, the circuit breaker was triggered within 13 minutes of the market opening (Liu 2016). For people familiar with financial history, such frequency is unimaginable. In the crazy week of

the operational circuit breaking mechanism, the value of A-share markets reduced from 52.9 trillion yuan to 46.1trillion yuan, losing 6.8 trillion yuan of value in a single week. (Yang 2016: 65).

Why was this institution adopted?

From its inception, the adoption of circuit breaking mechanisms was a direct response to the drastic financial crisis of 2015 (Liu 2016). In the aftermath of the market crash of 2015, the Chinese stock was stuck in a long-term depression (Cai 2016). Six months after the crash, the Chinese stock market was still very unstable and large-scale slumps appeared very frequently. This financial crisis lasted much longer than experts predicted. The true purpose of this institution was to boost the value of the stock market. On December 4, 2015, the Chinese government finished the design process of this institution (Yang 2016: 65).

The market realities of the Chinese financial system require a policy or institutional response. However, this specific institution is not purely an expert designed institution to solve acute problems faced within the market. The previous section describes the consequences of this institution as completely the opposite to designers' original purpose. If we evaluate the circuit breaker institution based on the standard of institutional engineering, it is a complete failure, so why was this institution created in the first place? (Satori 1994)

Through a political explanation of the Chinese stock market, the formation of circuit breaker mechanisms can be understood as an interaction between different political forces. During the designing phase of the circuit breaker institutions, state-owned enterprises and financial institutions input their interests. In fact, the interests of state owned-enterprises played a key role in the formation of the Chinese circuit breaker institution. The economic development of China throughout 2015 was not satisfying by any standard (Cai 2016). Not only did the growth

rate of GDP shrink drastically, but so did the rate of exports. Foreign exchange reserves and domestic demands also fell (Cai 2016). With tax cuts for the population and increased government spending, the profits of state-owned enterprises were very central for the central government's balance sheet (Wu 2015). The drastic stock market crash of 2015 caused state-owned enterprises to lose a large portion of their value (Liu et al 2016). The urgent need for state-owned enterprises at that moment was to prevent further value losses. Past studies have demonstrated that the performance of state-owned enterprises is closely related to the careers of government officials (Chen et al. 2016). The performance of local state-owned enterprise's leaders is crucial for both these enterprises' bureaucrats and local government officials in terms of local government income and advancing their own future promotions (Chen et al. 2016).

These enterprises have several mechanisms to channel their interest into the political system. First, state-owned enterprises are directly part of the political system (Rohrlich 2010). They have access to the National People's Congress, the Chinese People's Political Consultative Conference, the State Council and the Central Committee of the Communist Party as well as other political organizations. Many officials of state-owned enterprises are also member of these political organizations.

Secondly, the leaders of these state-owned enterprises have strong personal connections in the political system (Rohrlich 2010). In the Chinese political system, high-level managers of state-owned companies are essentially government officials themselves. Many CEOs or chairmen of state-owned companies become mayors, governors or even ministers. SOE's leaders were often previously officials of local government and regulatory agencies. Many senior party leaders, like the chief of Central Discipline Inspection Commission Wang Qishan,

and Party Chief of Shanghai Han Zheng, used to be the head of state-owned companies (Chinese Government Officials' Data Base 2017). Some heads of large state-owned companies possess higher ranks than the directors of a financial regulatory agency. Because these companies are part of the government, they can very effectively channel their interests in the institution design and decision-making process through connections with colleagues, friends, and factions. Through personal networks, the other officials understand the need to increase state-owned enterprise' stock values. Through these channels, both the decision-makers of the central government and regulatory agencies not only understand the need for the state-owned enterprises to protect the values of their stocks, but also generally value their leader's opinions.

During the design process of the circuit breaker institution, the regulatory agencies agreed to adopt a biased institution to protect the interest of these state-owned enterprises. That is not only because these companies exert significant political influence, but also that the central government has internalized the interest of these state-owned companies through various channels. For the sake of following the central government's will and advancing their own careers, the bureaucrats of financial regulatory designed the Chinese version of the circuit breaker.

As discussed in chapter 3, private investors cannot input their preferences at this phase of the design process. There is no democratic process or public hearings during the institutional design process. Before the implementation of the circuit breaker institution, private individuals and institutions could not express their opinion through economic behavior. The biased circuit breaker deeply harmed the interests of private investors, especially individual investors.

Biased institutions and extreme stock market fluctuations

Like most of institutional designs and institutional changes in Chinese financial history, the formation of the circuit breaker institution is a result of interaction between state-owned enterprises, private investors, and regulatory agencies. For that reason, the circuit breaker institution was not a neutral financial institution that aims to stabilize the market from inception. Its creation, enforcement and dissolution were all biased. It was biased in two ways: (1) between the public and private sector, the institutions are biased toward public sectors and, (2) between individual investors and listed companies, the rules are biased toward listed companies (Pan 2006). The circuit breaker institution is not a biased or ineffective institution in the Western context. It is a long-tenured and effective financial regulatory mechanism (Greenwald and Stein 1988). However, because of the context of Chinese political institutions and the role of regulatory agencies, it became a highly biased institution and triggered extreme drastic short-term fluctuations.

First, the circuit breaker mechanism is biased in the context of the T+1 trading rule (Sheng 2016). The T+1 trading rule means the investors' stock purchase cannot be sold on the same trading day. Day trading is not allowed in China, and investors must wait at until the next trading day to sell their stocks. Most Western countries use T+0 trading rules, which means the stock can be sold on the same day. T+1 trading rules favor listed companies by constraining investors' ability to sell stock. It also limits the market's capacity to drive down the stock's price. This rule serves to artificially manipulate the stocks' price and intends to make these stocks' price higher than the market expects them to be. Listed companies benefit heavily from this rule.

The circuit breaker institution further aggravates the benefits of the biased aspect of T+1 trading rule because the circuit breaker further limits investors' ability to sell stocks and drive down prices. The purpose of the circuit breaker institution in western countries is to limit market fluctuations caused by irrational thinking and investors' psychology, but it is not mean to limit the market's natural ability to decide prices based on supply and demand (Investopedia 2017). For that reason, the T+0 trading rule matches well with circuit break mechanisms. The T+0 trading rule allows investors to make short term decisions while the circuit breaker institution limits the impact of such decisions within a reasonable range. On the contrary, T+1 trading rules and the circuit breaker mechanism are a combination of two rules that limits market's ability to discover real pricing of financial products. In the context of the T+1 trading rule, instead of limiting the irrational thinking of investor, the circuit breaker further aggravates the psychological problems of Chinese investors (Liu 2016). After the duration of a temporary trading pause caused by the circuit break mechanism, investors do not want to further purchase new stocks even if their price are already very low. Under the T+1 trading rule investors worry that they cannot sell their stocks before the circuit break institution triggers again. The consequence of this situation is that more investors want to sell stocks at a price lower than the people who want to purchase stock market. That causes the circuit breaker to be triggered repeatedly, leading to an extremely unstable market.

Second, the circuit breaker in China is not a result of a replacement for the "daily fluctuation limit" institution (Liu 2016). On the contrary, it is supplement to the "daily fluctuation limit" institution. The two institutions coexist at the same time. This dual mechanism further inhibits the choice of investors to the benefit of listed companies, including the state-owned listed companies.

Third, the circuit breaker becomes biased in the context of Chinese investor structures. The Chinese investors' structure has two main characteristics. Most Chinese investors are individual investors (Xiao 2016). 85% of traders in the Shanghai Stock Exchange and Shenzhen Stock Exchange are small investors without professional financial knowledge (Xiao 2016). Professional financial advisers and institutional investors are still an underdeveloped segment in the Chinese market. The Chinese government has some of the highest levels of trading frequency in the global market (Xiao 2016). For most individual investors, stocks and other financial products are not long-term investments, but short-term financial gambling. Even under the T+1 trading rule, the Chinese stock market has some of the highest trading frequency globally.

Because of the difference in investor structures, the circuit breaker institution is a relatively effective institution in Western countries, while it is biased and ineffective in China. The differences between unprofessional and individual investors and professionals and institutional investors are different levels of financial knowledge, as well as different capacities to calculate their financial decisions (Peng et al. 2015). Because of such differences, professional institutions not only have longer investment plans, but also have the capacity to quickly react to stock market changes. They are less worried about making financial decisions before the market hits the circuit breaker. However, for individual investors, the circuit breaker institution triggers very strong herding effects (Peng et al. 2015). The effect of the circuit breaker differs for institutional investors and individual investors. Different from the Chinese stock market's investor structure, today most important participants in Western stock markets are institutional investors. In the United States, most individuals and families participate in stock markets through professional financial institutions, instead of directly purchasing isolated stocks

themselves (Robb et al. 2012). The investors' structure of the United States effectively reduces the negative effect of the circuit breaker institutions while the Chinese investors' structure amplifies the latent negative impact of the circuit breaker institution.

The removal of circuit breaker institutions

Similar to the design process of this institution, the cancellation of this institution is also a result of political forces' interaction. Because Chinese financial crises are a result of inner flaws in the financial system and biased political regulations, the solution to Chinese financial crises is also an institutional one. As discussed in chapter 3, a political process for private investors and financial institutions to input their requirements at the beginning of the design process is absent. In China, this process is entirely at the discretion of the government and professional bureaucrats. State-owned enterprises can actively input their interest into the political system during this period, while private individuals and institutions may not.

The initial institutional design of the circuit breaker typically favors the public sector. However, lacking a democratic institution does not mean private investors' voices and interests are not important. They have the most powerful interest input mechanism: the market. Scholars of political institutions believe that institutions and behaviors are closely related (Satori1995). The same logic applies to the relationship between financial regulatory institutions and investors. As a biased financial institution, the circuit breaker mechanism had shown its severe negative consequence. Adam Smith calls the force of market the "invisible hand", but in the context of China, it is also an invisible policy input mechanism for private investors (Thornton 2009). Because of market forces and private investors' choices, Chinese investors behave differently from other investors in the context of biased institutions (Chiang et al. 2010). Contrary to expectations of regulatory agencies and conventional wisdom, a very

large proportion of private investors choose not to purchase stocks even when their prices are very low for the reasons I discussed above. Because of investors' behaviors, these extreme slumps and high-level market fluctuations occurred after the introduction of the circuit breaker mechanism.

The failure of this circuit breaker institution placed the government under very high levels of pressure. The Chinese government has believed for a very long time that the stability of the financial system is closely related to political stability (Yang and Zhao 2015). It is known that the Chinese political system's legitimacy highly depends on economic performance (Zhu 2011). Previous studies have found that the government is not only very responsive and sensitive to economic issues, but also can make policy changes when previous policies had negative effects (Yang and Zhao 2015). The failure of the circuit breaker institution had already impacted the performance of the Chinese government. Many foreign media members and economists described the Chinese circuit breaker institution as a complete failure and that undermined people's image and relationship with the Chinese government (BBC 2016, The Guardian 2016). Because of all the chaos and panic created by the circuit breaker institution, the Chinese government faced very high levels of pressure to solve these crises and to set the financial market back on the right track. The Chinese government feared that economic chaos could potentially become political chaos.

Because of market forces, the interests of private investors and the market order surpassed the need to use the market to support state-owned companies. After all, the Chinese government perceives general economic performance and stability to be more important than the interests of state-owned enterprises. Under pressure to cope with the crisis, the party adjusted policies in the direction of fairness to appease the collective force of

investors. That meant adjusting regulations in the direction of fairer institutions for private investors. In the case of the circuit breaker institution, that meant dissolving the entire institution. Although the Chinese government failed to come up with new solutions to replace the circuit breaker institution, they still canceled the institution in order to solve the immediate market instability.

In this moment, regulatory agencies and their financial experts also changed their attitude on the circuit breaker institution for the same reason that they choose to design this institution: their careers were on the line. First, they changed their attitudes from supporting the circuit breaker institution to destroying the institution to help their future career trajectories. In some occasions, actual job performance is not the most important standard for the Chinese government in giving bureaucrats promotions (Gao 2013, Chen et al. 2016). Protecting the order and stability of financial markets is the responsibility of the regulatory agencies and the most basic standard of performance evaluation. For professional bureaucrats, competence is crucial political capital (Gao 2013). Although they protected the interest of state-owned enterprises at the design phase of the Chinese circuit breaker, the result of this institution harmed the regulatory agencies' interest. They needed to quickly stabilize the market to show that they were capable of fulfilling their responsibility.

Second, the regulatory agencies' officials quickly turned against the circuit breaker because they did not want to become political scapegoats. The fact they are not the ones who make the most important financial decisions did not mean they would not be held responsible for those decisions. To protect the performance and legitimacy of the State Council and the Central Committee of the Party, it is not uncommon to scapegoat individual government officials (Yang and Zhao 2015). When a policy goes wrong or a scandal breaks, the Chinese

government often scapegoats lower-level officials for high-level officials, and often forces government agencies to take responsibility for the central government's decisions. Once a financial crisis occurs, the primary concern of bureaucrats in supervisory agencies is their own career instead of the political influence of state-owned companies. For that reason, the regulatory agencies and bureaucrats usually support policy changes that can help stabilize the financial market.

The government has arrested many bureaucrats in charge of financial supervision, like Zhiling Li, on grounds of corruption and inside trading during the 2015 stock market crash (Xinhua News Agency 2015). Financial officials especially feared becoming the scapegoat for the central government. After the failure of the circuit breaker institution, the regulatory agencies quickly changed their attitude. They became the ones who actively advised the central government to dismantle the circuit breaker institution. From the comments of these agencies' bureaucrats and financial experts, it is clear to see the root causes for this institutional change.

Conclusion

In this chapter, the design and removal of the circuit breaker institution has been discussed. As one of most short-lived institutions in global financial history, it is a classic case of the institutional financial crisis type described in chapter 3. This Chinese financial crisis is essentially a political crisis. "Too political oriented" is the genetic disease inside the Chinese financial system. Even when the stock market functions well, the potential for crises still exists. With the development of the market, the inner flaw evolves rapidly. As the circuit breaker case illustrates, the most important reason for Chinese stock market fluctuations is biased institutions. Chapter 3 argues that in the context of Chinese financial markets, "too politically

oriented” has these three key features: First, there are too many rules. Second, many existing rules are biased. Third, the design process of new institutions is itself biased. Among these three causes, the latter two are more important than the first one. The third explanation is key to understanding the unusual high level of fluctuations of the Chinese stock market. The formation of the circuit breaker institution is a demonstration of the third point. The extreme fluctuations after the adoption of the circuit breaker is a classic case of institutional crisis.

Biased institutions cause private investors to behave abnormally. The market is the most important avenue for investors to articulate their interests in a political context that lacks a democratic process and civil society groups. The nature of Chinese financial fluctuations is essentially the interest articulation process for private investors in the market. Excessive political regulation is a “latent genetic disease,” because it is one of the most important driving forces behind Chinese equity market crises.

The creation and withdrawal of the circuit breaker institution clearly demonstrates the preferences and interaction between state-owned enterprises, private investors, and regulatory agencies. The state-owned enterprises favor political oriented markets where they have an unfair advantage. For that reason, they promoted and supported the formation of a circuit breaker institution. Private investors favor a fair market environment. After the creation of the circuit breaker institution, they choose not to purchase stocks even at a price that is already very low and this in turn created extremely high-level market fluctuations for the Chinese stock market. Third, regulatory organizations’ bureaucrats prefer protecting and advancing their own careers. That lead to their active support for creating the circuit breaker institution at its inception, and their support for scrapping this institution after extreme market fluctuations. These political forces and preferences interact to create institutions that serve to further

perpetuate the instability of the Chinese financial market. By understanding the political realities of the Chinese financial system, it should become clear why China experiences such market instability.

CHAPTER 6: THE INTERNATIONAL BOARDS

In most of the world's major financial markets, the stocks of foreign companies can be traded in the same way as domestic stocks. Unlike most of other international financial markets, the Chinese financial market does not allow foreign companies to float in its stock market (Xiao and Sun1992). In fact, among the world's top stock exchanges, only China and India do not allow foreign companies to be traded on their domestic financial markets (Wang 2012). Like most financial rules in China, this prohibition on foreign stocks is based on the interest of state-owned enterprises. Like the previous two cases, this rule limits the ability of Chinese private investors to make decisions by diminishing their choices and gives state-owned enterprises an unfair advantage. Unlike the previous two cases, this biased institutional arrangement still exists after 27years. The central government does not attribute any market fluctuations to a lack of international companies in the Chinese financial system. Many experts have discussed the importance of forming an international stock board, and the central government has attempted to design an international board several times. It even issued an "international broad concept stock" in 2010. However, the central government has been unwilling to make real progress on this front for the past seven years.

As discussed in previous chapters, market fluctuations are the key force behind Chinese financial institutional development. Biased institutions that are designed to protect the interest of state-owned enterprises is the primary reason for unusually frequent fluctuations of the Chinese stock market. The government's response to market fluctuations causes financial institutional change and the institutions typically move in the direction of being fairer for private investors. Most biased Chinese financial institutions gradually improve through this process. But there are some outlier cases. Forbidding foreign companies to float on the Chinese stock

market is one of the outlier cases. This chapter analyze why this case is an outlier case, leading to a discussion of the boundary of this work's theory.

Forbidding foreign companies investment in China

Since the formation of Chinese stock market in 1990, foreign companies have been disallowed to trade on the Chinese stock market. For more than two decades, China has strictly enforced this rule. Only Chinese stock are real in the eyes of the Chinese government. At the beginning of the stock market, this prohibition caused few, if any problems. During the 1990s, only a small amount of Chinese citizens were able to invest in the stock market (Pan 1991). China had very limited domestic need for foreign products at that time. Foreign companies also did not want to float in a small, quasi-normal and isolated stock system (Han 1994). What is more, for state-owned enterprises, the stock market of twenty years ago is not as important as it is today.

With the development of the Chinese real economy and growth of the Chinese stock market, foreign companies also became increasingly interested in the Chinese financial system (Li 2014). At the same time, Chinese citizens began to search for more choices in their investment. Learning from Western markets and financial systems is an important part of Chinese financial institution development. Unlike the Western Stock market that likes to treat different types of stock equally, China divides stocks into different types of shares, including A-shares, B-shares, H-shares (Mao and Men 2014). A-shares are the stocks for domestic investors with RMB as its settlement currency. B-share are for foreign investors with dollars as its settlement currency (Yang et al. 2011). H-shares are the companies floating on the Hong Kong stock market, and are traded in the Chinese mainland stock market (Huang and Song 2005). Like the name of "A-share", "B-share" and "H-share", the Chinese government chose

the “International Board” as the name for the hypothetical foreign companies board that would choose to float on Chinese stock market. Different names require different regulatory rules and different settlement methods. This differentiation indicates that even after the international board is formed, the stocks of foreign companies will be traded under different regulatory institutions. However, the Chinese government still does not allow foreign companies to be traded in China, even if they agree to be traded under different regulatory rules.

The history of designing the International Board

Discussions regarding the formation of an international board started more than a decade ago (Deng and Hu 2011). In April 2007, the Shanghai stock exchange Innovation Laboratory published a monumental report: the “Market Quality Report”. This is the first time forming an international board was discussed in official documents (Jiang 2010). In 2009, the People’s Bank of China further discussed the possibility and potential methods to allow foreign companies to trade on Chinese domestic stock markets (Jiang 2010).

In 2011, the Shanghai Stock Exchange issued “international board concept stocks” as an experiment (Tian 2011). These “international board concept stocks” allowed a group of foreign companies to trade on the Chinese stock market as a trial for an international board (Xiang 2011). Although international board concept stocks still exist today, they did not transform into a real international board.

In 2012, the Development and Reform Commission issued a new plan for further development of the Shanghai financial center (Lin and Liu 2012). One of the key points of this plan was to attempt once again to form an international board. In 2014, the State-Council issued the Guidelines for Increasing International Corporation and Competitive Advantage. This official document further discussed the detailed procedures to build an international board (Ye 2011).

It orders all the relevant departments and regulatory agencies to prepare for the founding of an international board. In 2015 and 2016, many financial experts again discussed the importance of forming an international board (Guo 2016). However, all these discussions lead to naught.

During the designing phase of international board, two methods for formation were discussed. The first method is to allow foreign companies to directly undertake a similar IPO process as domestic companies. The second method is called Chinese Depository Receipts (CDR) (Zhang 2007). CDR means letting Chinese banks participate the IPO procedure. The Chinese banks help the stocks of foreign companies to be traded on the market with RMB as the settlement currency. Yet the history of forming an international board has been a series of empty talks. That is quite unique not only in the history of Chinese financial institutional change, but also in the entire institutional history of China. If we observe the history of Chinese political institutional development, we would find that most institutional designs that went through wide discussion and experiment are adopted by the government (Pi 2013). That is why the process of forming international board is a valuable outlier case.

Biased institutions, market fluctuations, and institutional change

The purpose of studying this case is to further study the relationship between biases institution, market fluctuations and institutional change I discussed in previous chapters. The theory of this dissertation is biased institution causes market fluctuation and market fluctuations causes institutional change. It is the process the Chinese government makes concessions to market force.

Similar to other cases of institutional change, this institution is against the interest of private investors. Not allowing foreign companies to become listed in the Chinese stock market fits the interest of state-owned enterprises. Not having an international board means that

Chinese investors will have fewer choices and will invest more in state-owned enterprises. The Chinese stock market has become one of the most important methods of funding state-owned enterprises. During the process of designing a hypothetical international board, financial experts and officials of regulatory agencies repeatedly argued about the danger of foreign companies' arbitrage behavior (Luo 2014).

Additionally, creating an international board means a series follow-up institutional change must be undertaken. After more than twenty years of institutional development, many financial institutions of the Chinese financial system are different from international financial markets (Wang 2004). The Chinese financial system needs to make more institutional changes to give foreign companies an appropriate market environment. That also means that state-owned enterprises would permanently lose more of their unfair advantage.

However, in the case of the failed attempt to initiate an international board, it did not trigger a Chinese investors' behavioral change and it is added to Chinese market instability. For that reason, the Chinese government does not have a strong incentive to change this institution. And because of the interest input of state-owned enterprises, the Chinese government does have incentive to keep this institution. Because of the interactions of political forces, it is not a surprise that China still does not have an international board after all these years discussion and experiments.

Two types of institutions

The lesson we learned from this case are that although biased institutions are the reason for market fluctuations, this does not equal to every biased institution triggering market fluctuations. To study which institutions can trigger market fluctuations and which institutions cannot, the biased institutions are divided into two types. This typology is based on a

comparison between the Chinese financial system and Western financial systems. The first type is designing a new biased institution that the Western financial systems do not have. The second type is not having an institution that exists in Western stock market to protect the interests of private investors. Not allowing foreign companies to be traded on Chinese stock market is later one.

Private investors are sensitive to the first type of institution and not sensitive to the second type of institution. The first type of institutions attracts more of private investors' attention and has a stronger capacity to change private investors' psychology and behaviors. The first type of institution usually can catch more attention of the news media, but media cannot pay attention to lacking an institution. For that reason, the first type of institution has a stronger capacity to change individual investors' behavior. For common investors who are not familiar with the Western financial system, the first type of biased institution can give private investors' strong cues for investment behavior while the second type cannot effectively cue common investors' behavior due to lack a comparative view. The first type of institution undermines natural market mechanisms, but the second type does not.

During the process of learning from Western financial institutions, there are many institutions that are intended to protect the interest of private investors that are not imitated by China (Wang 2004, Pi 2013). The second type of institution is not a sufficient prerequisite for the case of international boards to become an outlier case. Because of the interests of state-owned enterprises, a lot of second type of institutions did not get into the designing phase of institutional change. The uniqueness of the case of building an international board is that it is a second type institution that did proceed into the design process of institutional change. There are three reasons that building an international board did get into the designing phase of

institutional change despite the power of state-owned enterprises. First, allowing foreign companies to float on domestic markets is not a minor issue. The underdeveloped Chinese financial system lacks a lot of detailed regulations that only exist in mature Western financial systems (Wang 2004). Common investors and laymen do not understand or pay attention to these details. However, not allowing foreign companies to float on domestic market is not a minor issue. Even the most common investors can notice this problem. It is natural for this issue to become a discussion topic for both society and academia. Second, economic globalization and the promotion of international trade a major strategy for the Chinese government in recent years (Hua 2007). “One Belt, One Road” has been one of the main economic strategies since 2012 (Li and Li 2015). Recently, the Chinese government has made efforts on all fronts of economic globalization (Yu 2016). Internationalization of financial markets is part of this discussion (Lin 2009, Chen 2014). Third, the Chinese government wants to make progress on fairness and openness to support its performance legitimacy (Zhu 2011). Creating an international board is part of such effort.

Despite these reasons, the Chinese government still do not have enough motive for this institutional change. That lack of motivation further establishes the theory of this work. Biased institutions created for state-owned enterprises is the key reason for Chinese market fluctuations and market forces are the decisive force behind Chinese financial institutional change.

Chapter 7: CONCLUSIONS

The unique history of Chinese financial market fluctuations can aid the study of the formation of market fluctuations under authoritative regimes. The 2015 financial crisis received a lot of attention from both media and academia. Most scholars and commentators discussed the causes of this disaster as an outlier event or unusual disaster. However, for those familiar with Chinese financial history, the 2015 market crash is barely a surprise. Similar market crashes have happened eight times in twenty-seven years. For that reason, the interesting phenomenon worthy of research is not why the Chinese stock market crashed in 2015, but why the Chinese stock market fluctuates so dramatically compared with other financial markets. Because previous research cannot effectively answer this question, a political theory has been created to explain this phenomenon. This work has employed three case studies to demonstrate and examine the theory. This concluding chapter includes four parts:

- (1) A summary of the political theory of Chinese financial market fluctuations
- (2) This work's contribution to future literature development
- (3) Policy recommendations for Chinese financial institutional design
- (4) Avenues for future research

A political explanation of Chinese financial crises

The third chapter discussed the political mechanism behind the Chinese stock market's fluctuations. This political explanation for Chinese financial market fluctuations includes three key points. First, the inner flaw of Chinese stock markets is that they are "too politically oriented". Second, a significant portion of the existing institutions are biased. Finally, the process of forming new institutions is itself biased. With the development of the size,

complexity, and influence of the Chinese financial system, its inner flaw also grows. Two types of biased institutions permeate the Chinese financial system. Between the public and private sectors, the first type of institutions is biased toward the public sector. The second set of institutions are biased toward listed companies, when looking at individual investors and listed companies (Pan 2006).

The strategic interaction between three political actors in the process of forming and changing Chinese financial institutions is also a point where bias enters in to the system. In this process, three different actors contend to influence the central decision-making mechanism for designing new financial institutions. Each actor has their own distinct set of preferences in this process. State-owned enterprises prefer heavy control of the stock market to maintain their unfair advantage. Private investors favor fairer rules and a reduction in regulations that give state-owned companies an unfair advantage. Regulatory organizations' bureaucrats prefer protecting and advancing their own careers.

During the designing phase of the financial institutions, state-owned enterprises and financial institutions actively input their interest. Private investors cannot input their preferences during this phase of institutional creation. There is no democratic process or public hearings during the institutional design process. Private individuals and institutions can only express their opinion through investing because they do not have any formal political process to access the central government. The regulatory agencies often ally with state-owned companies because of these companies' political influence. Because these companies are part of the government, they can very effectively channel their interests into the institutional design and decision-making process. The bureaucrats of these agencies ally with state-owned companies at this phase because it benefits them politically.

A formal political process for private investors and financial institutions to input their requirement at the beginning of the designing process is absent. For that reason, the initial institutional designs usually heavily favor the public sector. However, lacking a democratic institution does not mean private investors' voices and interests are not important. They have the most powerful interest input mechanism available: the market. The relationship between institutions and behaviors under a new institutionalism framework also applies to financial regulatory institutions and investors. Generally, these biased financial institutions have three consequences: an imbalance between supply and demand of stocks, investor overconfidence in state-owned enterprises, and reduced participation of private investors. Such institutions cause private investors to change their behavior. Chinese investors often behave differently from other global investors (Chiang et al. 2010). From such behavior, financial crises and fluctuations emerge.

Because Chinese financial crises are a result of the financial system's inner flaw and biased political regulations, the measures that the Chinese government use to cope these crises are also institutional ones. When economic crises occur, the government faces pressure to solve these crises and to set the financial markets back on the right track. Economic and political stability are constant concerns for the Chinese government, making it very responsive and sensitive to economic issues (Yang and Zhao 2015). The party adjusts its policies in the direction of fairness to solve such problems, which are typically derived from unfair market advantages. Political input in the market system is reduced to allow the market to properly function. In the aftermath of crises, the interests of private investors and the market order surpass the interests of the state-owned companies, because the government perceives general economic performance and stability to be more important than the interest of state-

owned enterprises. Post-crisis, regulatory agencies ally with market actors to adjust financial institutions to promote stability and the development of the market. When a financial crisis happens, promoting stability and the development of the stock market is the best way for bureaucrats to protect their careers.

Contribution to the literature

How do the political explanations above develop the current literature on the Chinese financial system and promote our understanding of the formation of Chinese financial bubbles? Politics and finance have been inseparable since the beginning. Many financial studies incorporate political factors, and in the field of comparative political economics financial regulation has always been a relevant topic. In the context of Chinese financial markets, political factors are especially important. Many studies on this topic have discussed the role of regulatory agencies in the stock market. However, “having political factors in the explanation” and “a political explanation” are two different concepts. “Having political factors in the explanation” means considering the impact of politics in the theory building process, while the explanation is essentially still economic.

“A political explanation” of financial crises, properly understood, considers the formation of speculative bubbles as a result primarily of political mechanisms instead of market mechanisms. This approach is political science research instead of the study of economies. In the past twenty-six years, political explanations for the Chinese stock market have been rare despite it being a highly political market. The main goal of this work is to explore the political mechanism behind the Chinese stock market’s large scale and frequent fluctuations.

As discussed in the first chapter, the formation of the Chinese stock market was a deliberate institutional design process instead of a natural economic phenomenon or the

choice of individual financial practitioners. Since its beginning, the Chinese stock market operates and functions differently from other major financial markets. From this perspective, the fluctuations of the Chinese financial market are a both an economic and political phenomenon instead of a purely economic one. However, previous research does not develop a sufficiently political explanation for the Chinese stock market. Some previous studies treat Chinese political influence on financial market fluctuations the same as other states. These types of studies often develop economic explanations for Chinese speculative crises while treating politics as an intervening factor. (Tong 2006, Wei 2007 and Zhu and Xie 2011). What is more, Chapter 2 of this work demonstrates that a lack of financial knowledge in the Chinese stock market is an immature explanation for the behavior of the Chinese Stock market.

Some Chinese scholars have discussed the relationship between the unique Chinese political context and the stock market, however most of these studies are either historical analyses or specific case studies (Hao 2014, Jiang 2002, Li 2005, Pi 2009). These works do not discuss the political mechanisms or processes peculiar to the Chinese institutional framework that cause speculative bubbles. This work fills the gap in previous literature by offering a political process analysis and utilizes three specific cases to further explain and demonstrate the process of institutional interactions driving bubble creation.

Policy recommendations

The Chinese stock market and Western stock markets are entirely different species. Although Chinese financial regulatory institutions are becoming increasingly similar to Western institutions in recent years, they still operate in entirely different ways. For that reason, it is not plausible to suggest Chinese stock markets adopt Western regulatory systems. Not only could the government not make such change, but Western regulatory systems cannot solve the

problems of Chinese financial system. However, some institutional designs and key elements from other financial systems could inspire the Chinese government as to how it could further improve the institutional structural of the Chinese stock market. According to the previous analysis and the existing institutions of other financial systems, three recommendations for the further development of the Chinese financial system become apparent.

First, creating a relative detachment between the financial market and political system, like the relative detachment between government and state-owned enterprises would be beneficial. In terms of improving the Chinese financial system, there are two institutional designs that serve as prime examples. The first institutional design is Singapore's Temasek Holdings model (Wang 2011). Instead of direct control of state-owned capital, like China's State-owned Assets Supervision and Administration Commission, Singapore use a large-scale state-owned investment firm, Temasek Holdings, to indirectly control state-owned Asset. Temasek Holdings is essentially a "buffer" between political power and state-owned capital (Liu 2017). With this buffer, the government cannot use political power to undermine market fairness to favor state-owned asset. During the past few decades, many authoritative countries, including China, have attempted to build a buffer between the government and state-owned enterprises (Wu et al. 2014). Compared to China's state-owned enterprise reform, the institutional design of the "Temasek Holdings model" is more successful (Liu 2017).

The second institutional model is how the United States' manages government agencies (Janisch 2011). The Federal Government gives a very high degree of independence to government agencies. The White House cannot decide how professional agencies and law enforcement agencies conduct their professional work (Janisch 2011).

Learning from these two cases of institutional design, one of the ways for the Chinese government to build a relatively independent and comprehensive financial regulatory organization is to replace the current China Securities Regulatory Commission (CSRC), China Banking Regulatory Commission (CBRC), China Insurance Regulatory Commission and China Securities Finance (CSF). Unlike previous financial regulatory agencies, a new agency should serve as a buffer between the Chinese central government and the financial market, much like state-owned enterprises in the Temasek Holdings model. Similar to how the federal government of the United States manages professional government agencies, the central government should give this organization a relatively high level of independence in making professional decisions and financial policy. Putting a buffer between the government and financial markets can to a certain degree weaken state-owned enterprise's interest input process.

Second, development of private investment institutions and private banking must be a priority. In China, both private investment firms and the private banking system are under-developed. That is not only due to the Chinese government's very strict limitations on private investment firms and private banking, but also because the state-owned banking system and investment institutions hold monopoly positions in the market (Tong and Anchor 2017). It is exceedingly difficult for small investment firms and banking systems to survive in this public sector dominated environment. Not only are most large private investment institutions reliant on foreign capital, but most Chinese private banks remain small in scale. Private financial institutions can strengthen the force of private investors through privatization of state-owned financial institutions, as well as by nurturing private banks. The government can and should

strengthen the position of private capital in the interactions between state-owned enterprises, private investors, and regulatory agencies.

Third, private investors should be given more opportunities to short-sell stocks. Most countries have very tight rules for selling short (Bernal et al. 2013), however, few countries completely forbid short selling. China strictly forbade short selling since the founding of their stock market. Only recent years has the Chinese government started to allow investors to sell short (Feng and Chan 2016). Yet the Chinese government's regulations on short-selling remain stricter than most countries (Deng and Gao 2017).

Although massive short selling could lead to a bear market and undermine the stability of the Chinese financial market, numerous studies have shown short-selling to have positive influences on financial markets (Picardo 2017). First, selling short can provide liquidity in the market (Picardo 2017). Second, shorting can serve to check investors' expectations. Third, short selling is an important price discovery mechanism. Currently, the Chinese government's management of short selling is still too strict, and undermines limited short selling's positive influence on the market. Giving investors more freedom for selling short can increase long-term market stability.

The direction for future works

In this concluding section, some suggestions for future work on political analysis of Chinese financial system will be given. There are three directions for future studies: elaboration, generalization, and further policy recommendations. First, future research could further expand the empirical part of this work. Only three different institutions serve as case studies for this work. Whether and how other financial institutions reflect this political mechanism should be further explored. The three cases chosen here represent several important institutional

changes in the history of Chinese financial market development. Through analyzing the political process of these institutional changes, the relationship between Chinese political processes and financial market fluctuations is explored. Social scientists should continue to study other important institutional changes through the political explanation developed above.

Another way to further elaborate on this study is through exploring the political mechanism of Chinese financial products other than stocks. The focus of this study has been stocks. Scholars should further discuss whether the political theory of market fluctuation also applies for other financial products such as futures and government bonds. If the theory also works for other financial products, the political explanations for these financial products' fluctuations might be similar to or diverge from the story of stock market fluctuations. It is possible that all financial products' market fluctuations are the same because they are under the same political context. It is also possible the political mechanisms behind other financial products are different from stocks because these financial products follow different market mechanism (Miao et al. 2017). The issue needs further research.

Second, generalizability would explore whether the political explanation of this study applies to other non-democratic countries. Many authoritarian countries have their own financial markets. Both scholars of finance and comparative politics can discuss how to apply the political analysis of this work to other authoritative financial markets. The same political mechanism or the relationship between politics and private investors can possibly be used directly to explain fluctuations of other authoritarian countries' financial markets. China has a unique institutional and culture context, but the Chinese financial system has worldwide influence today. It should be possible to use the same political analytical method to study other authoritative financial systems. As described in chapter two, financial literature does not pay

much, if any, attention to the relationship between financial systems and politics (Pro-market 2017). What is more, the literature on financial systems under authoritarian contexts is also very limited. If the same analytical thinking can be applied to the context of other authoritative regimes, a deeper understanding of how financial markets function in political contexts can be gained.

Future studies can explore alternative political mechanisms within the Chinese financial system. Chapter three discussed two key points of this research: the Chinese financial system's natural flaws in terms of the relationship between politics and economy; and the preferences, strategies, and interactions between different political actors regarding financial regulation and institutional development. These future studies could explore whether there is an alternate strategic interaction between state-owned enterprises, regulatory agencies, and private investors. Future studies should also discuss the possibility of developing the strategic interactions into formal models through game theory. The same development process has happened in the field of behavioral finance. At the beginning of behavioral finance, most studies were normative, descriptive, and heavily borrow from psychological theories and experiments (Schiller 2000). Recently though, the field of behavioral finance has incorporated traditional financial models and formal modeling into its study and become "quantitative behavioral finance" (Zask 2014).

Third, future studies can continue to study the policy implications of this work. Several policy recommendations have already been discussed above. The Chinese financial market is going through drastic changes right now (Huotari and Heep 2016). Both the Chinese government and many scholars are interested in learning how to build a more mature financial market. Yet a more mature market does not necessarily equal a very stable market. Market

fluctuations are inevitable natural tendencies of financial markets. Mature financial markets require a reasonable compromise between political forces and economic forces, as well as the convergence of government regulations and market forces. Such a financial market should be able to distribute resources more efficiently and promote long-term economic development. The real question is what kind of institutions can promote the formation of mature financial markets? For example, the circuit breaker case discussed in chapter 5 is a failed case of institutional design. In the policy recommendation section, several methods to improve Chinese financial institutions have been proposed. Through this study, future research can provide more institutional designs that benefit the development of the Chinese financial system.

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