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Research Proposal

China's State Enterprises Reform: The Impact of Private Shareholding on Corporate Performances

1. Introduction

This project focuses on one of China's most important ongoing economic reforms - the "mixed-ownership" reform to State-owned enterprises (SOEs) and its aggregate impact on their performances. In 2015, China released a series of policy plans that aimed to reform the SOEs, introducing "mixed ownership" to the companies' financial compositions. According to Chinese President Xi Jinping, the reform was expected to "promote strengthening, improvement, and expansion of state capital, effectively prevent [the] loss of state assets, deepen the reform of [SOEs], develop a mixed-ownership economy, and cultivate globally competitive world-class firms." (CNBC, 2017) Although the state acknowledged that SOEs should be more marketized and free market spaces to encourage competition, it remained hesitant to enforce privatization for political considerations. On the contrary, the latest round of SOE reform shows that the government has given SOE firms even greater roles as China's economic growth slowed down. In this sense, the implication of mixed-ownership reform stretches beyond enhancing SOE performances, as it had the potential to demonstrate how the Communist Party will maintain the balance between commercial interests and political will.

State-owned Enterprises: Historical Roles and the Need for Reform

State-owned enterprises (SOEs) are viewed to be the most significant yet mysterious powerhouses in China's economic miracle over recent decades. Nearly half a century ago, the country began its drastic transformation through its reform and opening up policy. However, unlike most former socialist countries, China's state-owned sector not only managed to survive from a planned economy to a market economy but now contributes to around 30% of China's industrial output. It continues to hold resources from critical strategic industries - defense, petrol, and electricity, where SOEs remain monopolistic - to more competitive sectors including automobile and shipping (Leutert, 2016). As of end-year 2022, 99 state-owned enterprises ranked in Fortune Global 500 list, holding more than $40 trillion in total assets (Global Times, 2021). While it is obvious that SOEs hold absolute dominance over the Chinese economy, the mechanism through which the country achieved an economic miracle with SOEs is unprecedented. Some scholars argue that SOEs contribute to the "China Puzzle": while the country's economic reform is characterized by constant government interventions and a lack of market and legal institutions, its economic growth ranks among the top of the world (Lin et al., 2019). SOEs in China are shown to have lower performance historically than private firms because of their production inefficiency, but by holding market entry and critical resources, they have been able to invest in longer-term and capital-intensive industries such as aviation, shipping, and infrastructure. These investments have become the backbone of the Chinese growth model, generating massive social mobility and maximizing resource allocations. Therefore, the strategic importance of SOEs explains the need for the Chinese government to revitalize them, despite their inherent defects.

The Chinese government is well aware of the SOEs' underperformance and has implemented multiple rounds of SOE reforms prior to the multi-ownership model. Before the country became a market economy, SOEs were still crucial parts of China's industrial composition, but in a very different fashion. Not only were the enterprises, most of which agricultural and industrial factories, owned and operated by the state, but the government also had full rights to make production plans, appoint personnel to lead the enterprises, and collect all products and profits that were produced. Under the planned economy, the SOEs were deprived of autonomy and acted as pure executors of state orders (Lin et al., 37). Initial rounds of SOE reforms targeted these deficiencies by first, recognizing SOEs as independent entities, and then holding individual production decisions responsible by binding them with business contracts. What turned SOEs into global conglomerates, however, was a more radical approach - consolidation. By merging regional and sub-industrial companies into centralized SOEs - also called 'yangqi' - the companies are able to gradually phase out the previously inefficient and redundant functionalities (Leutert, 88). The Chinese government soon found consolidation to be politically and economically beneficial, as the merged SOEs often gained exponential growth in assets: land, capital and human resources, all of which helped promote their competitiveness in the global market (Leutert, 88).

In the meantime, creating larger SOEs also amplifies the financial and organizational disadvantages. While merger cases provide concrete precedents of successful SOE reforms, other central and local SOEs that either remained in the public sector or lost competitiveness increasingly suffer from a lack of resources and business incentives. While its ongoing economic reform improves market conditions, these SOEs still remain closed doors to the global economy, sometimes even domestic investors. State capital tends to be most concentrated in industries that are considered to be the 'lifeblood' of the national economy (China Briefing, 2019). And consequently, more SOEs appeared to suffer from operational difficulties, including factory shutdowns and huge employee layoffs. This creates a crucial threat to the Chinese economy: as economic growth slows, structural reforms to the SOEs have become the most pressing issue for the Chinese Communist Party to alleviate severe market inefficiencies and unleash new growth opportunities.

2. Intervention

Market Failure

In response to the aforementioned economic challenges, China released a series of policy plans that aim to reform the SOEs, introducing the idea of "mixed ownership" to the companies' financial compositions. Previously, the government had promoted other reforms, which include supply-side restructuring to curtail excess capacity, but the mixed-ownership reform was the first in years to directly touch the base of company performances in the long term. Under new regulations, private investors would be given opportunities to hold SOE stakes, buy SOE-issued convertible bonds, or swap shares between the two parties.

Theory of change

First, ownership reform is an important means to integrate the advantages of state-owned capital and private capital. From the perspective of long-term development, the comprehensive integration and utilization of current resources by enterprises represent the potential for future development of enterprises. It is difficult to achieve the strategic goal of becoming bigger, better, and stronger if relying on the company's own development. Secondly, the mixed ownership reform of state-owned enterprises is an effective path to introduce social capital and enlarge the function of state-owned capital. Through the reform of the mixed ownership of state-owned enterprises, the cooperation between state-owned capital and non-state-owned capital can be realized, the positioning of state-owned enterprises in the capital market will be clearer, and state-owned capital will play a leading and guiding role in the capital market. Healthy development injects new vitality. In addition, another impetus for the reform of mixed ownership of state-owned enterprises is to improve the distribution of rights in state-owned enterprises and other issues. It can change the dominance of one company, allow more shareholders to participate in decision-making, and enable shareholders to supervise and restrict each other. It can also reduce the company's management costs and improve the company's internal supervision system.

Relevance

In addition to judging the effect of this ownership reform in China, the conclusions of this study can also reveal to a certain extent the sensitivity of different industries and enterprises of different natures to the ownership reform. Through cluster analysis or some visualization, we can try to discover the relationship and change trend between short-term benefits and long-term benefits of different industries and ownership reforms. The research conclusions of China's ownership reform can be used as a reference for all economies that use a planned economy or state-owned enterprises to account for the main body of the economy. The industry characteristics and changing trends can be specifically applied to the economic transformation of those industries and the reconstruction of the organizational framework. For example, to achieve the goal of carbon neutrality, the governments of various countries need to redirect the development of their own heavy industry enterprises, and the effect of this part of the ownership reform (the effect of the free market guidance) can be regarded as an early reference.

3. Measurement

Design:

This study analyzes the effects of China's 2013 SOE/ownership reforms. Our research plans to use Difference in Difference (DID) to conduct research. The basic idea is to construct a double difference statistic reflecting the effect of the policy by comparing the difference between the control group and the treatment group before and after the implementation of the policy.

The control group and treatment group will be classified according to whether the target enterprises have implemented the ownership reform after 2013. To this end, we designed a corresponding reform index. This index is equal to the proportion of the company's state ownership in the total top 10 ownership in that year divided by the status in 2013. The index has been updated annually since 2013. As of 2022, when a company's reform index exceeds the threshold in any year, it will be assigned to the treatment group. The design of the threshold needs to be set in combination with specific data, such as 50%. No matter what the current ownership structure is, if a company has made efforts to deepen reforms in the process, it will be reflected in the reform index, so it will be regarded as a sample that has undergone reforms.

The absolute cumulative abnormal return (ACAR) of each enterprise in units of years will be selected as the dependent variable as the standard to measure the actual effect of the reform. The cumulative abnormal return of stocks is the CAR value used to judge whether the company has changed in the event study method. Research scholars in the financial field often use the analysis framework of Event Study to study the impact of a specific event on a company's stock price or yield, and to test the financial market's response to new information disclosure. The short-term event research method relies on three basic assumptions: first, according to the efficient market hypothesis, the financial market is efficient; second, the event under study is not expected by the market; third, there is no mixed effect of other events during the window period of event occurrence. Some other stock market indicators will be added to the model as control variables, including firm size, book-to-market ratio, debt-to-asset ratio, loss indicator, and sales growth. After performing correlation regression analysis using Stata and doing tests and adjustments such as dealing with heteroscedasticity and multicollinearity, we also plan to use a placebo to test the robustness of the model.

Data:

The data of this research comes from the CSMAR database, which contains the stock data of all companies listed on the Shanghai Stock Exchange and the Shenzhen Stock Exchange.All collected data (all required variables in the model) will form panel data spanning from 2004 to 2022. The data range includes all companies successfully listed on the two major stock exchanges, which will ensure that we have a large enough sample set to support our final conclusions. In order to prevent endogenous problems caused by the lack of necessary control variables in the DID model, we can perform cluster analysis based on variables outside the model when selecting sample companies, and select the companies in our research according to the clustering results. This ensures that the firms in the study have no significant sample differences other than the reform index to interfere with the study's results. Since the DID model is used, we only need to pay attention to the coefficient of the interaction term in the model to get the desired net effect of the policy under the DID model.

It is worth noting that ACAR is not data that can be queried directly. To calculate ACAR, we first calculate the expected return of the stock through the Capital Asset Pricing Model (CAPM). We need to use a benchmark or market index as a proxy for the overall market and calculate the return of the benchmark or market index for that period (usually a few days before and after the event that is being analyzed). Next, we need to calculate the actual return of the stock. Then, we could subtract the expected return from the actual return to get the abnormal return. Finally, summing the abnormal returns over the period we are interested in and taking the absolute value is the ACAR we need.

Complications.

There are several potential problems in this research: The first is the complexity of data processing. The huge amount of data determines that we need to process the data of different time periods in parts and then merge them. At the same time, the speed of data processing will also encounter great challenges. In addition, some variable data that cannot be directly obtained need to be manually determined by external tools (Excel VBA, etc.), such as the screening of the treatment group and control group. We need to pay attention to avoid making mistakes in these steps and resulting in deviations in the results. The second is the analysis of regression results. It is difficult for us to improve the external validity of the results because of the large sample size. Perhaps cluster analysis would be a good solution, but this requires further judgment and thinking.

References

https://www.cnbc.com/amp/2017/10/18/xi-jinping-makes-big-promises-for-chinas-economic-future.html

https://www.reuters.com/article/china-economy-reforms-statefirms/china-issues-state-firm-reform-plans-expects-results-by-2020-idUKKCN0RD08O20150913

https://www.china-briefing.com/news/economic-reform-china-opening-up-future-prospects/

https://www.china-briefing.com/news/chinas-soe-reform-process

Challenges Ahead in China's Reform of State-Owned Enterprises. Brookings

https://www.scmp.com/business/banking-finance/article/2110873/too-big-fail-soes-are-holding-back-chinas-financial-reform?module=perpetual_scroll_0&pgtype=article&campaign=2110873