

**AN ANALYSIS OF THE IMPACT OF IPO ON CHINESE AUTOMOTIVE DEALER
GROUPS' PERFORMANCE**

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ABSTRACT

There are some substantial disparities among organizations in performance after going public in the Chinese automotive dealer industry. This dissertation analyzes the prospectus, organizational annual report, and other public data available for the public firms in the automotive dealer industry. The dissertation conducts a longitudinal analysis of firms with continuous development and firms with operating problems. Multiple regression models are used to test various hypotheses. The results indicate that firms that are backed by venture capital experience perform worse after the IPO. Ownership Structure is positively correlated with the change in firm performance around the IPO. The change in Venture Capital ownership around the IPO is negatively correlated with the change in firm performance. Moreover, the increase in Venture Capitalist age around the IPO is negatively correlated with firm performance. Since IPOs are associated with performance decline, recommendations are provided to mitigate their impact.

Key Words: Automotive Dealer Industry, IPO, Organizational Performance,

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CHAPTER 1

INTRODUCTION

1.1 Research Motivation

Background

Financial capability is critical for organizations to maintain long-term sustainability in the modern business environment. Organizations that operate in the market have several options in terms of financing decisions. According to Donaldson (1961) who proposed the Pecking order theory that was modified by Myers (1984), there are three financing options for modern firms: retained earnings, loans from Development Financial Institutions (DFIs), loans from banks, or other debt instruments, and issuing stocks via going public. These financing methods have their own advantages and limitations, however, the core and most adopted method of financing the development of the organization is to issue shares with the decision to go public (Nagakura, 2020). Initial Public Offering (IPO) decision is a complex and difficult process with distinct markets for stock dispersion and regulatory issues, since this process requires substantial preparations for red herring documentation such as the prospectus, bank selection, underwriting plans, and preparations for the operative meetings. According to Javid and Malik (2016), IPO refers to the firm's decision to go public from private ownership which is regarded as an ideal method to sell the shares to small and passive investors to access financial resources for the organization. When an organization goes through the IPO process, there will be a large public amount of new and old stocks traded in the market which would change the private investors to public investors. There are many benefits from an organization's decision to IPO (Wang & Lin, 2010). According to Wang and Lin, before going public, firms need to go through strict regulations and security and exchange process which could provide clarity on firm performance to the external investors who hold suspicions on the credibility and

capability of the organizations. Secondly, the stock price of the organization is determined by the evaluation system. The IPO process makes it possible to provide more clarity and market confidence if the firm lists concrete and complete information about the firm's ongoing projects, operations, and future strategic plans in the prospectus with marketing efforts and publicity. Companies who decide to go public should use publicity, marketing efforts, and raising funds to gain the valued shareholders who could invest capital.

Financing by going public to issue shares to the general public is one of the most strategical and critical decisions for organizations. As afore mentioned, this could help firms to strengthen capital basis, diversify ownership and increase organizational prestige. Yet, it also limits the organizational management and trading, separating the ownership control of operational decision-making, which could potentially pose pressure on the short-term development. Issuing shares for the purpose of raising funds is not considered a good option based on the Pecking Order Theory. However, on the other hand, the tool to issue shares is commonly adopted by some organizations as a primary method to gain funds and capitals for long-term operations. Many researchers have explored various properties that are related to the impact of IPOs on firm performance with data on timing, initial return, prospectus, underwriting, long-term return, institutional ownership, organizational growth, company size, and other elements related to the post-IPO operational performance.

Chinese Automotive Dealer Industry Profile

With the swift development of the Chinese consumer market, as the critical participants of economy, the Chinese automotive dealer industry also experienced a quick development and expansion in the last two decades. Many of these organizations have gone public. Since Sinomach Auto (国机汽车) went through IPO on the Shanghai Stock Exchange in 2001,

there are 12 automotive dealer groups that went to public on the Shanghai, Shenzhen, and Hong Kong stock exchanges up to 2019 (See figure 1), whose businesses are mainly operated in mainland China.

Name	Code	IPO date
Sinomach Automobile Co., Ltd	SH600335	2001 Mar
Zhongsheng Group Holdings Limited	HK00881	2010 Mar
China ZhengTong Auto Services Holdings Limited	HK01728	2010 Dec
Pangda Automobile Trade Co., Ltd.	SH601258	2011 Apr
Yaxia Automobile Corporation	SZ002607	2011 Aug
Grand Baoxin Auto Group Limited	HK1293	2011 Dec
China Yongda Automobiles Services Holdings Limited	HK03669	2012 Jul
China Harmony New Energy Auto Holding Limited	HK03836	2013 Jun
China MeiDong Auto Holdings Limited	HK1268	2013 Nov
Sunfonda Group Holdings Limited	HK01771	2014 May
China Rundong Auto Group Limited	HK01365	2014 Aug
Centenary United Holdings Limited	HK1959	2019 Oct

Figure 1 IPO Automotive Dealer Organization List with IPO Date

The IPO trend is driven by the rapid development of the passenger vehicle market in China. The automobile industry is regarded as one of the major driving forces in China's economic momentum despite slowed growth, and the automobile industry is expected to continue to drive the development of the Chinese economy. China is not only one of the leading car production countries in 2019, with the production of more than 21 million passenger cars and claiming 26% of the global vehicle production volume, but it has also been one of the largest consuming markets of passenger vehicles in the last decades due to economic development and increased disposable spending of average GDP. However, according to Statista (2021), the sales of passenger vehicles in China have continually increased since 2008, and have slowly decreased since 2017 (See figure 2). With government encouragement and promotion of electronic cars and new energy vehicles, the sales of these vehicles are on the rise, although these vehicles comprise only a small percentage of annual car sales volumes.

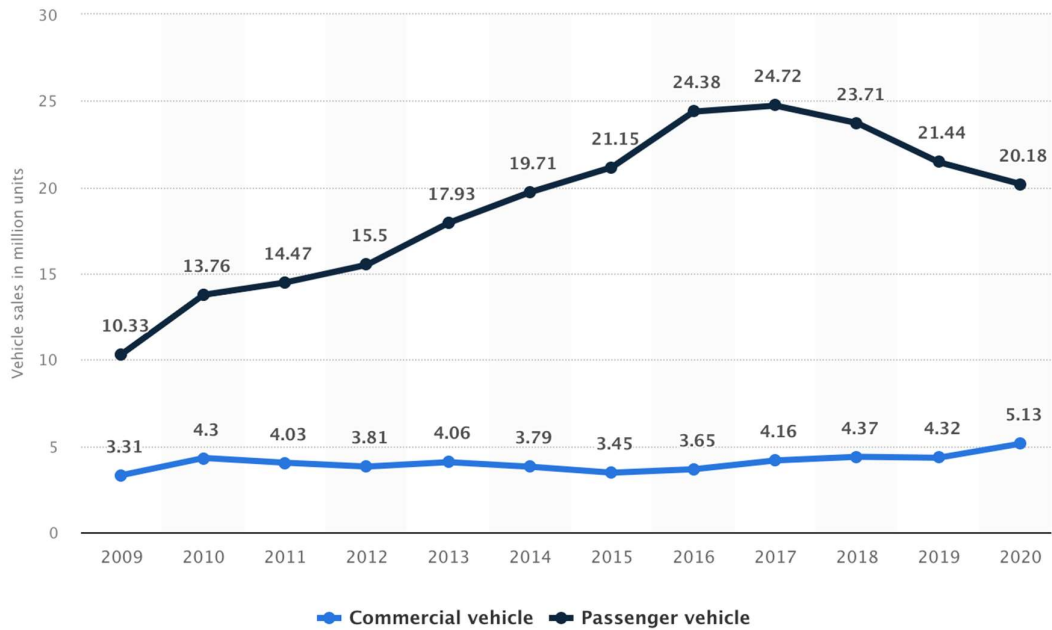


Figure 2 Passenger and Commercial Vehicle Sales in China from 2009 to 2020, from Statista

The growth reached its peak in 2017 with 24.72 million units. A company's business performance is considered as 'good' if its sales volume's growth rate is above the average growth rate of the industry. However, sales volume increase is not the only indicator of its 'good' performance. There are other indicators of organizational performance.

Depending on the brands they distribute, automotive dealers usually need to invest a substantial amount of financial resources, including land purchase or lease, construction, indoor and outdoor decoration, after-sales tools and equipment, IT systems, and other fixed assets investment. At the same time, to ensure smooth automotive dealer business operations, a significant amount of working capital must be invested in wholesale purchase of stock commercial vehicles and spare parts from automobile manufacturers for retail sale to end consumers. Therefore, the automotive dealer industry has the characteristics of a large

investment amount, long return period, and large capital demand. Therefore, to drive the development of the organization, the companies went public to access the financial resources.

Research Motivation

Nowadays, although IPO is widely adopted by many businesses in China as well as around the globe to gain access to the capital and hope to expand and grow, there is evidence that many companies who went public are likely to suffer from decreased long-term performance (Arik & Mutlu, 2015). After going public, there are several factors before and after IPO that will change, such as ownership structure, managerial decisions, and other factors, that will affect firm performance. The evidence demonstrated that when companies went public, their ownership was diluted and led to management issues that impacted firm performance. The decision of IPO will lead to several issues related to the separation of control and ownership. Before going public, the company is owned by fewer shareholders, who would have stronger motivation to manage the company and lead it in the right direction. After the IPO, companies need to let external investors enter, which will decrease managers' and owners' shares and power within the organization. Many companies use dual-class share structure to preserve the control power of management, e.g., ALIBABA, JD, but dual-class share structure does not apply in this study. This study excluded the companies who use dual-class share structure to preserve the management control. For firms that do not adopt this structure, the owners might lose motivation and interest in regard to the organizational management, which will affect firm performance when they lose managerial control after IPO. Nevertheless, there are some other motivation factors rather than accessing the external capital which will encourage the business owners to make IPO decisions despite the risk of decreased organizational performance post-IPO. There could be many factors that affect the performance

post-IPO, e.g., changes in public disclosures, increased motoring by the public equity market including investors, analysts, and securities regulator. Some factors increase performance whereas others decrease performance. The benefit of going public is obvious such as reduced cost of capital, external monitoring, etc. But this is only a measure of positive effect on company performance, while the long-term strategy change is the key factor that is caused by ownership structure change.

As afore mentioned, through IPO, enterprises can realize equity financing through public issuance of stocks in the capital market. Long-term equity financing is an effective method to expand the investment scale of listed companies and to solve the capital needs required for expansion and future growth. Most of China's automotive dealer groups have achieved their goal of expanding their scale after listing, and the number of new stores and new car sales has continued to grow. However, various problems have arisen in the performance of some companies after listing.

Annual passenger vehicle sales volume											unit: thousand	
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Entire Chinese Market	13,757.79	14,472.42	15,500.00	18,000.00	19,700.00	24,597.60	24,376.90	24,718.00	23,710.00	21,444.00	20,178.00	
Sinomach Automobile Co., Ltd	N/A	N/A	N/A	N/A	N/A	194.18	170.70	156.22	172.85	162.15	125.09	
Zhongsheng Group Holdings Limited	100.19	160.72	184.29	196.69	207.29	243.68	300.75	341.32	412.02	455.71	500.61	
China ZhengTong Auto Services Holdings Limited	27.14	40.11	70.49	80.07	87.89	88.46	96.88	109.02	112.57	103.22	41.39	
Pangda Automobile Trade Co., Ltd.			310.00	480.00	450.00	420.00	500.00	480.00	250.00	120.00	140.00	
Yaxia Automobile Corporation		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Grand Baoxin Auto Group Limited		29.50	43.25	69.85	72.71	61.77	72.32	103.64	112.64	111.05	101.51	
China Yongda Automobiles Services Holdings Limited			69.88	81.88	103.60	116.44	147.26	171.84	176.92	197.38	204.60	
China Harmony New Energy Auto Holding Limited				N/A	N/A	N/A	N/A	25.92	27.00	32.80	36.57	
China MeiDong Auto Holdings Limited				16.97	17.75	21.41	26.63	28.71	37.90	49.36	57.20	
Sunfonda Group Holdings Limited				-	17.01	20.06	22.69	22.66	26.68	29.34	32.18	
China Rundong Auto Group Limited					56.63	60.62	70.67	74.89	49.58	31.34	NA	
Centenary United Holdings Limited										17.05	14.52	

Figure 3 Annual Passenger Vehicle Sales Volume of the Public Chinese Automotive Dealers

Indeed, there are some substantial disparities in these firms' performance after going public. Some organizations in this automotive dealer industry, taking Grand Automobile Dealer Group for example, have marched forward and kept developing, while some organizations such as Yaxia Automobile have experienced difficulties in their operations, and

had to sell their assets and change their names and product lines to the education sector to survive. SZ002607 Yaxia Automobile changed its name to Zhonggong Education on February 21, 2019, and its business no longer focuses on the car dealership. Meanwhile, after reaching the peak of sales volume in 2017, Rundong Automobile Dealer Group also saw its sales decrease year by year.

As sales agents and after-sales service providers, automotive dealers do not own the brand of the auto products they sell. At the same time, they have the characteristics of large investment, low gross profit margin, and a high proportion of financial expenses. Therefore, in the actual operation process, the company's operational refinement requirements are demanding. The author argues that only a dealer group that has a long-term development strategy, truly uses the IPO as equity financing, and uses the funds raised from the listing to expand its scale, while improving operational efficiency and refinement, can develop healthily and sustainably. on the contrary, some dealers have only short-term goals, and regard the listing as the endpoint of enterprise development. The dealer groups whose founders cash out and leave the market are usually not optimistic about their business performance after listing.

This dissertation analyzes the prospectus, annual report, and other public data already available for public organizations in the Chinese automotive dealer industry, to study the overall development of the Chinese industry market, and to conduct a longitudinal analysis of the organizations with continuous development and organizations with operating problems. This study could reveal the risks and challenges for the organizations after going public, and in which areas the organization could be supported to mitigate these risks and challenges.

1.2 Research Objectives and Questions

This research aims to bridge previous research gaps. To start with, the long-term organizational performance of the selected organizations are studied, as their ownership structure changed after IPOs. The organizations could, indeed, raise substantial capital via IPO, yet many organizations suffer from declined post-IPO performances due to reasons such as changes in ownership structure, increased cost, and regulatory restraints. Thus, this study explores the impacts of IPO on firm performances. Furthermore, the key aim of this research is to identify the influences of the performance indicators of the organizations, and the elements including sales growth, ownership structure, company size, and other control variables explore the impact of IPO on the organizational performance in the Chinese automotive dealer industry. In order to achieve the research aims, the following research questions are formulated.

The overarching research question is: what are the impacts of IPO on Chinese automotive dealer organizational performances?

Q1: What are the changes in the ownership structure and capital investment pre-and post-IPO as these changes could lead to changes in organizational performance?

Q2: How do these factors change before vs. after IPO and what is their impact on organizational performance?

Q3: What are the effects of IPO on organizational performance after IPO?

The overall objective of this research is to examine and measure the impacts of IPO on the performance of the organizations selected. The factors selected to measure the organizational performance are return on assets (ROA), return on sales (ROS), and return on equity (ROE). The changing factors, such as venture capital age (VCA), venture capital equity (VCE), and ownership structures (OS), are used to predict organizational performance changes from before to after IPO.

1.3 Key Findings

The following findings are summarized.

1) After listing, the efficiency of these companies gradually declines. Average return on asset had a sharp decline. This is a significant drop in the following year since the first public listing.

2) Changes in the ownership structure have a negative effect on ROE, but the impact on ROA and ROS is not significant in the regression analysis.

3) Non-IPO auto dealers performed better than IPO auto dealers in the period of 2019-2021 examined in regard to revenue growth. This is because non-IPO organizations accessed private financing alternatives and enjoyed the ownership structure advantages.

CHAPTER 2

LITERATURE REVIEW

2.1 The Definition and Characteristics of the Chinese Automotive Dealer Industry

A car dealership or dealership group is a business that sells new cars or has a transaction agreement with an automaker or other business unit. It can also repair cars, store and sell car parts by hiring mechanics and selling insurance. Only dealers are allowed to sell new cars for franchise brands. The manufacturer must accept the order of the assembled vehicle and pay for delivery and access to the seller's designated sales area and provide help including financial support or sponsorship (Knobbe & Proff, 2020). As one of the pillar industries of the Chinese economy, the automobile dealership industry involves many sub-sectors, the supply and marketing industry chain is relatively complex, and the financing modes of each main body in the industry chain are also relatively diverse. The auto dealer industry, as an intermediary connecting upstream manufacturers and end customers in the auto industry, has higher requirements on capital turnover and utilization.

As of 2020, the transaction volume of second-hand cars in China reached 14.35 million units, a year-on-year decrease of 3.9%; before May 1, 2020, the value-added tax on second-hand car transactions of Chinese enterprises was 2% (the actual tax rate), while no value-added tax is levied on personal transactions, so in the process of second-hand car transactions, dealers play more of an intermediary role, and the second-hand car business is a brokerage business for dealers, not a distribution business. Auto dealers mainly charge commissions on transactions in the used car business. Although the domestic second-hand car trading volume is relatively large and shows a general steady upward trend, it is not the main business of large car dealership groups at present because its contribution to revenue and gross profit is relatively small. 56% of the price range is below 50,000 yuan, 29% is between 50,000 and 120,000 yuan,

4% is between 120,000 and 150,000 yuan, and 11% are 150,000 yuan or more. The COVID-19 broke out in 2019, and the auto market experienced ups and downs throughout the year. In the first half of the year, the auto market was in a state of negative growth. Manufacturers launched timely assistance policies for dealers, alleviating the survival pressure brought about by the epidemic. In the second half of the year, the auto market recovered rapidly, the living conditions of auto dealers improved significantly throughout the year, and the loss ratio decreased compared with the previous year.

The typical contract also stipulates that the seller is required to maintain the manufacturer-approved standards. In 1990, China caught the attention of the world's largest companies. As a result of easy national control of passenger cars and rapid growth of new businesses, the passenger car market in China is growing rapidly. This prompted auto and parts manufacturers to set up large companies in China. However, it does not limit the work of local firms. Many Chinese state-owned companies are improving the performance of their cars, and in the early 2000s, China sold the world's largest number of cars.

From the perspective of the seven major auto dealers in China, the network layout strategies are differentiated. Some companies have increased the number of outlets year-on-year, while others have reduced them. Relative to the whole network, the number of outlets of luxury brands has increased more, which is closely related to the high prosperity of the luxury car market. The overall network layout is mainly in first tier and second-tier cities (such as Beijing, Shanghai, Shenzhen and Guangzhou and some other provincial capital cities). In addition to the acquisition of storefronts, some companies have upgraded and transformed existing stores into high-end and luxury brands to optimize the brand structure and increase the proportion of luxury brands. In terms of capital expenditure, in addition to the acquisition of stores, some companies have reduced capital expenditures and accelerated the pace of normal operations by upgrading existing stores. Domestic dealers' new car business revenue accounts

for more than 80%, which is much higher than that of about 50% in the United States. Used cars are developing rapidly but the baseline is very low currently. After-sales business revenue accounts for between 8% and 15%, and accounts for 30% to 70% of the gross profit. Compared with the United States market, the domestic second-hand car trading volume is huge. Judging from the ratio of used car transactions to new car sales, this indicator in the United States is 2.3, while China is currently only 0.55. In the future, China's second-hand car market will have huge growth potential, and dealers, acting as important players, will fully benefit from this business potentials. The preferential purchase tax policy for small-displacement vehicles (less than or equal to 1.6L) will stop on January 1, 2018; in addition, passenger vehicles will implement the National VI emission standard from July 1, 2019, and dealers will go to Q2 in 2019. Large inventory discounts also affected dealer group's profit margins. The spread of the COVID-19 epidemic in the first half of 2020 also had a great impact on the demand for mid-to-high-end brand vehicles, resulting in a greater impact on the new car and after-sales business of dealer groups.

Unlike domestic car model dealers, emerging automobile dealers are introducing branded models and sales channels, and transforming the dealer model into a network of direct-drive vehicles or partnering with an authorized dealer. The direct sales model addresses common shortcomings in resale models, such as vague pricing and poor user experience. It provides a completely different user lifecycle and branding experience, but this model has drawbacks such as high investment and complicated operating procedures. However, this is not right for all new energy car manufacturers. While 4S stores continue to use the reseller model, the service structure and profitability of the dealership will continue to change.

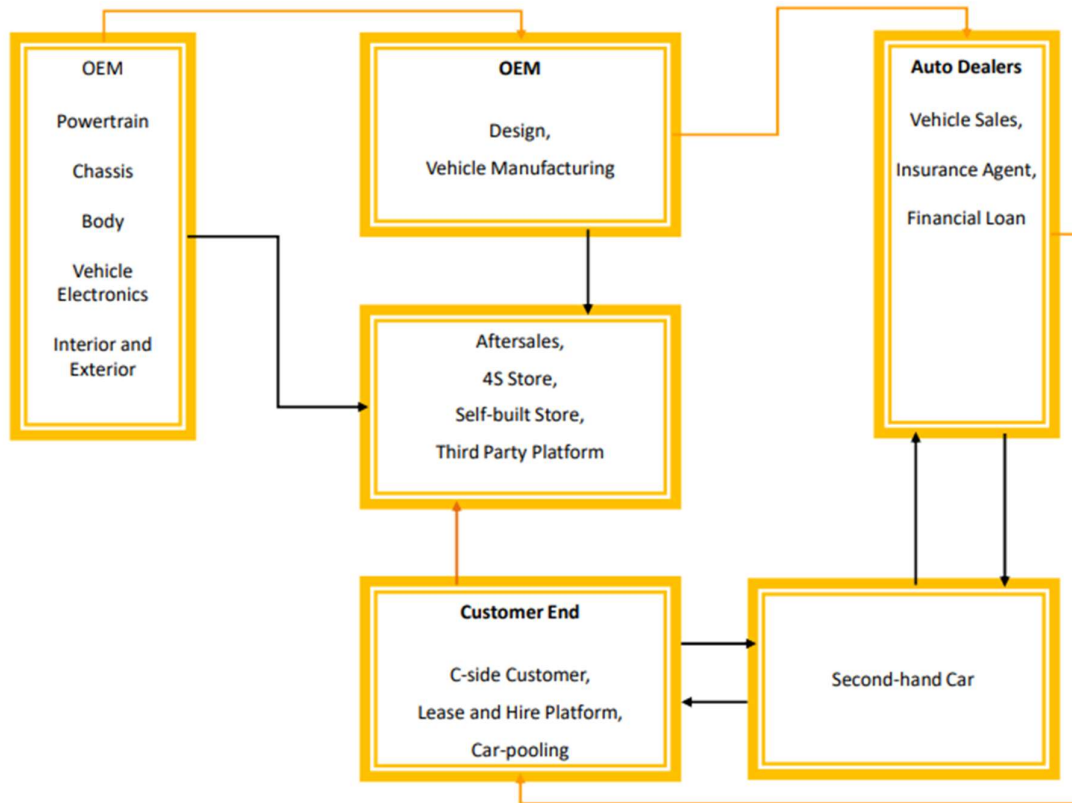


Figure 4 Chinese Auto Dealer Industry Map

2.2 The Driving Force of IPO

The pecking order theory indicated that the managers prefer to issue shares until earnings are maintained and repayment capacity is exhausted. The premise of this theory is that a company needs more capital. Another reason to issue stocks is to exceed credit limits. The organization continues to engage in the diversification of banking portfolios that investors see in relation to managing stock market liquidity. Changes in management and stock market conditions will make other bank loans available to companies. This helps companies overcome the restrictions on securities lending. As previously mentioned (Jong, Huijgen, Marra & Roosenboom, 2012), participation in the stock market and dissemination of information to an

increasing number of investors creates external competition with lenders and lowers the cost of borrowing, so that organizations could better access credit on both. This resulted in a strong negotiating position with the banks. The decision to issue shares has consequences for the liquidity of the company's shares. In fact, these shares are listed and traded on the exchange as soon as they are listed. Existing owners may also invest in other assets. This is an advantage of differentiated investing. Shareholders can also discipline management through hostile takeover risks if management decisions are assessed poorly by the stock market. Trading on major exchanges can be beneficial because the listing is a business advertisement. Issuance of public shares can be used by existing shareholders as a strategy to avoid being acquired. This suggests that a change in control may be the cause. The last reason is opportunity. As Latham and Braun (2010) point out, the firm realizes that when its stock and other companies are overvalued, they should be encouraged to go public. Yet, managers can use corporate accounts that mislead investors.

Chemmanur and Fulghieri (1999) argue that IPOs expand a company's ownership base. In the research of Ellul and Pagano (2006), according to the Market Microstructure Report, it was found that improving the liquidity of publicly traded stocks delivers value for IPO professionals. Bodnaruk, Kandel, Time, and Simonovs (2008) suggested that different personal interests and preferences found empirical support for this model. Companies with less ownership diversity are more common after IPO.

Maksimovich and Pichler (2001) examined the business model that implements an IPO to generate first-mover profit, and it increases the demand and the reputation of the company. IPO ideas can shake up the business world. Moreover, Demers and Joos (2006) argue that insuring a low interest rate can be beneficial for the company, so a guarantee can be a strategic decision. A stock exchange listing can grab investors' attention, but a listing on a major exchange can impress portfolio managers. Graham and Harvey (2001) question whether stock

issuance affects investors' futures rather than IPOs. Later, Aggarwal, Krigman, and Womack (2002) claim that IPOs attract media attention and are advertised in deals at a very low price. This logic assumes that an improvement in the company name or reputation will affect the organization's listing.

Despite the advantages of IPO, there are disadvantages of IPO found in previous research including unwanted decisions and moral pitfalls, financial loss due to increased cost, and confidentiality issues. The disadvantage of an unwanted opportunity is that investors do not know much about the fair value of a listed company as a producer. The negative choice problem described here is another example of the problem described by George Akerlof in his 1970 work *The Market for Lemons: Quality Uncertainty and Market Mechanisms*. Data imbalances have a negative effect on quality. The average company is looking for new offers and prices to sell stock (Leland & Pyle, 1977). This determines the fair value of the post-list price increase, as investors must take control of the vulnerable company (Rock, 1986). In addition to the low entry price, there are serious drawbacks in terms of after-sales costs. Furthermore, there are many direct costs: premiums, registration fees, etc. In addition to the registration fee, an annual assessment takes place. The last drawback is the loss of familiarity. Stock market regulators require companies to disclose confidential information related to their competitive advantages and information related to current R&D work for future marketing strategies.

The second reason is over-evaluation. If the public and private sectors are overvalued (Barry et al., 1990), it could be a good reason to raise funds via IPO, but the companies cannot let the public know that. Obviously, the latter is more a friction. For example, the public market generally has a higher rating than the private market. Bessler and Thies (2007) found that companies are more open to the public when investors have a high degree of trust. This suggests

that overvaluation is an important factor in disclosure. The financial knowledge shows that this is more important than capital needs, like future investments.

The third possible reason could be capital restructuring, though this can be done through public and private exchange programs in equity market (Chemmanur et al., 2018). The fourth reason is the owner's need for cash and liquidity. As soon as a transaction is published, owners, individuals and venture capitalists can complete the transaction. The issuance (partial or full) results in very low transaction costs. The liquidity allocation allows owners to buy or sell shares at any time after the lockup period expired (Cherrak, 2012). This goal can only be achieved through publicly accessible channels, as selling securities to private companies is very expensive. This discussion of liquidity can be over evaluated if the investment company owns shares in the company (Gomes, 2000). This is because the investment must be made within a certain timeframe (of course, this can be done through an IPO or the acquisition of another company). Chemmanur, He and Nandi (2009) use industry datasets to make estimates. Larger and more successful companies are more likely to make the decision to IPO.

Another possible reason for issuing stock is diversification in ownership. IPOs allow existing owners to diversify their investments and increase liquidity by selling shares in the secondary market, whether the minority shares can be traded in the private equity market (This will at least help distinguish ownership between public and private markets). Data structures and portfolio details include: (1) Stock market, which has few majority shareholders and tends to be a public minority, sells more shares, (2) Diversity of resource allocation is the owner of a private equity fund, which also adds a new dimension to diversification IPOs that claim to be interested in differentiating and using others. The difference of China stock market compared to others is that regulators required the major shareholders to hold their shares at least 36 months after IPO before they cash out.

IPO provides additional business benefits in the form of authentication and reduces uncertainty. IPO certification (Karpenko, 2017) gives more attention and enthusiasm to business analysts. Executives and other investors believe this builds trust in the company and demonstrates its value. By reducing the risk of entering the market and increasing transparency, service providers and consumers gain confidence in their value and well-being. This affects the cost of working with a supplier, as well as debt and revenue costs (Levis, 2006). These estimates reduce uncertainty and lead to an overestimate for good or bad reasons. Many managers do not want to be controlled by market players and the scrutiny of the public. In any case, it's hard to imagine how it would be done in a private equity market. At the same time, the transparency could also delay the organization in making strategic decisions. This is because, the transparency will involve multiple stakeholders with various interests, and it will prolong the decision-making time.

2.3 Indicators of Organizational Performance

Successful organizations are important players in emerging economies because they play an important role in our daily life. This is the reason why many economists consider the system as an important part of developing countries. As a result, six Nobel Prizes have been awarded to researchers who have been involved in organizational and institutional analysis over the past 22 years. Stability in performance is the foundation of any organization because it is the only resource that can grow and evolve. Organizational performances include strategic planning, operations, finance, legal and organizational development. All employees have a good understanding of the roles and responsibilities of the organization. Organizations can achieve this goal. Continuous communication between leadership, management, and

employees is essential in setting performance expectations, implementing plans, and achieving good results (Katou, 2008).

The efficiency of the organization can be measured. It can be defined as any activity related to the existence of a global organization. Success is how an organization achieves its goals (Flapper, Fortuin & Stoop, 1996). This means that the success and development of an organization (Kaplan & Norton, 1996; Hillman & Keim, 2001) is more than a financial goal for a performance measurement system. This includes a wide range of competitive strategies, including clear leadership and an understanding of an organization's strengths and weaknesses, tactics, strategies, and capabilities. Therefore, successful organizational performance measures must include all areas in the organization instead of limiting to financial performance.

As noted in the literature review, traditionally, most administrative performance goals have been based on financial performance goals (Mishra and Mohanty, 2014). The performance of a company is called "Return on Assets" (ROA), the profitability of capital, and profitability of sales (Mishra and Mohanty, 2014). Financial performance and performance metrics are correlated (Khatoon et. al, 2017) – “Organizational performance should reflect better financial performance in the medium and through increases in productivity”, according to the theory and organization of management strategy (Richter et al., 2017,).

2.4 The Relationship Between IPO and Organizational Performance

The publication of organizational performance provides the available market information and the results of a public tender, i.e., the publication processes, where it also builds relationships between investors and companies. Accurate data is therefore important for company performance and market performance. Miller (1977) states that the firms should accurately list results and forecast associated discrepancies with "significant differences". Liu

and Wu (2021) examined the relationship between post-IPO and pre-IPO outcomes. Coverage of 162 different industries, age, multinational corporations, and declining corporate ownership suggest that performance indicators did not significantly impact post-IPO performance, ATO, and ROA. An indirect correlation was found between company size and stock market listing. A negative correlation with ROA was also found.

Alanazi, Liu and Forster (2011) analyzed 21 private companies and IPOs in Saudi Arabia via using financial indicators ROA and ROS. Kim and Weisbach (2005) examined the relationship between certain factors and the capital requirements of the firm. The public offering is then based on factors such as the sale of the bonds and the initial investment. Gleason, Jain and Rosenthal (2006) argue that companies that use alternative processes and methods to select a public offering are not as profitable as smaller companies that do IPOs with the same three-digit SIC, but that these companies have no problem in this significant progress after two years of restarting, companies have increased their liabilities, reduced their efficiency and reduced their liquidity. SF Ho et al. (2011) conducted market research in Malaysia from 2000 to 2004. Company size and age are pre-registration factors and ROA, ROS and ATO are post-listing success indicators. Research has shown that revenue and company size are important components of market valuation that help investors invest in new stocks.

Mello and Parsons (1998) explain that goodwill depends on the structure and performance of the property. Various stock trading strategies to generate valuable assets and increase profits are also described. Loughran and Ritter (1995) provide further evidence of the poor long-term performance of SOE and IPO companies. The strategy is currently associated with the highest market value in the company. Markets may have higher scores due to market confidence in supply in general, supply in particular, or both. Therefore, terms such as ROA and ROS were used to rate the item. Most researchers use relationship analysis to measure the financial status of marketing firms (Agiemang & Agaleg, 2014).

In their study, Economic figures presented by Choi, Lee and Meginson (2010) show that the renowned Fama and French (1993) model uses economic indicators for unusual performance estimates. Also, it should be noted that the result is not effective in determining GDP growth, but is consistent with predictions (Wang, 2013). ROAs were then incorporated into the FFM with better results than before. Cheng and Renucci (2013) also studied FFM using a regression method to examine long-term effects. Indicators are effective tools for managing financial indicators such as ROA, ROS, and DES, where ROA and DES are derived from the Donaldson Brown-DuPont model of analysis proposed in 1914 (Ahsan, 2012). Organizations also use DuPont analytics before investing in a business.

2.5 Influence Factors of Organizational Performance

Rashid and Islam (2011) argue that several cognitive and emotional factors affect organizational performance, such as investor, employee confidence as well as customer. The self-confidence of a successful person has a positive effect on the work of the organization. The absence of failure avoids losing faith during failures. Motivation plays a key role in determining an employee's skills, as activity and motivation promote success rather than failure (Rashid & Islam, 2011). The same goes for other factors, such as the resources that employees have to do their jobs. Success comes from failure, which could be done by using a suitable motivator. Therefore, employee motivation plays a key role in achieving this goal (Sinambela, 2020). Fontalvo-Herrera et al. (2017) generally believes that improving the work environment can increase productivity. All the numerical proofs in this text are concise and simple. Performance is affected by many factors. The cost of building a workforce, such as confidentiality, communication, social relations, organization of the office system, administration, and environmental issues, far exceeds the cost of maintaining and servicing the

building. Therefore, spending money to improve the work environment is the most effective way to increase productivity.

China's listing process is different from that of developed countries. Prices are set by the China Securities and Exchange Commission, not the stock market. Guo and Liu (2020) also believe that CSEC members should focus on operational efficiency. Its main criteria focus on sales, profitability and growth opportunities. Therefore, IPO candidates should focus on growing their core business and meeting the core business registration requirements. However, after listing, they entered a new phase of development and were able to raise more foreign capital and production resources. These IPOs offer many opportunities to further strengthen a company's growth in light of new growth opportunities in the stock market (Zhou et al., 2021). These companies have different consumption strategies depending on the situation before and after the listing. In addition, unlike private companies, public companies are managed by the Commission for Securities Regulation and public investors demand transparency in corporate governance. Mitchell and Stafford (2000) propose that information inequality between listed companies and investors is reduced by strict rules and registration requirements. This conclusion is consistent with Choi and Kim (2020) who noted a positive correlation, but Titman et al. (2004) found a negative correlation between them. However, each company has its own spending strategy to differentiate itself from the others.

On the other hand, unfair costs and unprofitable IPOs can negatively impact a company's performance through the sale of intellectual property. The purpose of listing is to maximize the market value of the company, selling high-yield stocks for continued growth. Similarly, Ang and Brau (2003) believe that some entrepreneurs want to offer their shares publicly to raise capital as quickly as possible. Sahlman (1990) argues that some companies list their shares at the wrong time because of the pressure from the first investors to withdraw from the project. This has a negative impact on the company's business. Smith (2009) also

noted that some managers are not able to effectively manage large amounts of capital in the stock market. Therefore, if there is no clear plan to further improve the operation of the company, they will invest and spend money. For example, Kim et al. (2017) The more resources raised through IPOs, the more companies they produce. This phenomenon has already occurred. This is evident in the Chinese stock market, where many exchanges raise more money than expected (Wu & Kwok, 2007). Some Chinese IPOs ignored the IPOs' requirements and, following the announcement, the capital was diverted to other territories.

Several studies have looked at the impact of private equity on IPOs in Finland. Megginson and Weiss (1991) examined the role of venture capital investments by comparing venture capital and undrawn venture capital stock with 1983 industry forecasts and volumes in the United States. There was a negative correlation between the number of retail investors who invested in Tsegba and Achua (2011) intellectual property companies and a decreased share in the public offering of Bravo and Gompers (1997). With this example, you can invest in stocks and offer shares to the public. It turned out that the public registration of the consortium was made by an unregistered joint stock company. Because the long-term effects of the IPO are influenced by the reputation of a joint venture, Zhao et al., (2017) view the transaction as a general mechanism for reducing information asymmetries between suppliers and companies. This is why companies encourage post-listing markets because they specialize in skills and acquisitions such as outsourcing, which are often used by start-ups.

2.6 Changes after IPO

First, as discussed in previous literature review, IPO investors are not only motivated to improve the liquidity, but also want to increase their stock earnings. While some companies' owners want to sell the stocks holdings immediately after a public announcement, companies

often list IPOs to improve performance. In situations like this, the companies often talk about the need to reinforce solvency. The demand for financial investments is simpler and creates more opportunities for future acquisitions. Secondly, investment banks and others can account for profit margin management. Such smooth support has benefited the company's operations. Carter, Dark and Singh (1998) found that improving the credibility of investment firms is not just about cutting costs. Third, the IPO represents a number of players who deal with new investors (such as investment analysts and investors). This new team monitors the performance of the business. To meet the needs of this new group, companies can find ways to improve (financial) data quality and speed up internal data storage. Finally, regarding investor relations, Woo and Choi (2020) urges the company to adopt the brand and sign an exchange agreement. In particular, material (financial) information should be disclosed fairly to all investors and such information should not be disclosed to third parties. This means companies need to review their public relations policies and materials. However, not all changes have increased productivity. During the day of the IPO, parties can view disclosed information in real time, and they might not be sure if this option is "correct". But over time, investors will find out which companies have adapted to the new investment environment. Although the listings could be improved, these companies prefer smaller ones. This simple idea can include two things. First, this approach is partly related to Welch (1989, 1996), who assumes that investors know the true nature of a company's product in its early years, which shows the irreplaceable value of an IPO in an asymmetric and volatile corporate data environment. In his statement, good companies can create added value for investors when public investment costs are too low for themselves. The author also believes that the quality is not yet established in our system, but the registration process could be improved for the reasons mentioned above. But what about the positive changes signaled by the IPO, and how do these changes explain the long-term benefits? The second is that registration-related changes may not occur with timely registration.

However, whether these changes are improvements that will create long-term profitability for investors will only be assessed afterwards.

2.7 Long-term Decreased Organizational Performance

The efficient markets hypothesis suggested that when stocks are traded on the stock exchange, the stock price should reflect its intrinsic value and not follow predictable patterns. This problem is called underperformance for long term. Knight said one of the first investigations into the 1991 scandal was a long-term reassessment of the IPO. According to a study by Ibbotson (1975), “results generally confirm that stock markets do not differ from bond performance” (p. 265). Ritter (1991) conducted a study with a sample of 1,526 U.S. IPOs from 1975 to 1984 and shows that average earnings “improved” three years after IPO by 34.47%, comparing with the average yield for non-industry samples of 61.68% during this period.

Inefficient public registers are economically and statistically important in calculating unit returns based on various criteria. Ritter (1991) found a pattern that shows that poor quality stocks are concentrated in new and start-up companies. New equity is issued when investors are overly optimistic about the future of the industry. If one needs the same amount five years after inception, the investors will have to invest more in producers than in an uninsured business. This could also be found by Loughran & Ritter (1995) that 44% investors follow this direction. The authors claim that the decline in productivity is due to companies taking advantage of opportunities that arise when companies in the sector believe they are too expensive. The long-term weaknesses in these price results are reflected in the European market. Berk and Peterle (2015) examined 172 companies listed in emerging markets in Central and Eastern Europe in the 21st century and found that their performance deteriorated

significantly. They also found that after listing in 2016, companies performed well in emerging markets. Companies that entered the mainstream market three years later also often performed poorly after informing SMEs. This is consistent with the findings of Knights (1991).

The literature acknowledges that one of the main reasons for poor performance in IPO companies is that investors tend to appear on listings when they are overly optimistic about the future of the industry. This is an area that is undermining investor confidence and rising above absolute prices.

2.8 Summary and Research Gap

All the researchers who examined the company's performance after the listing showed a steady decline in performance after the listing. Mickelson, Rev and Shah (1997) and Jane and Keene (1994 and 1995) created a collection of Models. All the above studies show that the operating margin after starting the business is lower than the operating margin before implementation. So far, two basic explanations for declined organizational performance have been developed. For example, according to Jensen and Meckling (1976), agency costs are high due to reduced enforcement powers after IPO. Focus on projects that do not add as much value as possible. The second interpretation uses behavioral factors such as time in the marketplace to explain inefficiency. For example, private companies can use the market time to stimulate investor thinking. The management of these companies will list them, knowing that the perceived value of the company by investors will change in the near future. This is consistent with the probability theory of Ritter (1995) and the capital structure of Baker and Wurgler (2002). There are differences between inside and outside of the organization. Another similar article is that of Teoh, Welch and Wong (1998). They point out that the new pricing and

notification plans will help reduce the charge, including approval which the processing speed after IPO is very slow, this is similarly add cost to the managerial decisions.

The above literature review also examined research which focused on the changes after IPO -- these changes including the expenditure strategies, management strategies and motivations could lead to changes in organizational performance. Also, multiple research which focused on underperformance after IPO have been examined. The reasons varied, but there is a consistence in the attitudes of the owners of the organization being too optimistic. Despite the richness of the research on the impacts of the IPO on organizational performance, the research in the Chinese automobile dealer industry is few. Therefore, this study is conducted to fill this gap. Furthermore, most of the researchers focused on the European and the US IPO market. There are significant differences in regard to the IPO regulations and policies in Chinese IPO systems.

This research could provide applicable insights for the Chinese organizations specialized in automobile dealership.

CHAPTER 3

HYPOTHESIS DEVELOPMENT & EMPIRICAL METHODOLOGY

3.1 Research Method

This research contains both qualitative and quantitative research. For analyzing the financial indicators, the following phases are included. Firstly, the author investigates whether and how the IPO money was spent in the business operations. To achieve this goal, the study analyzes the annual report data to explore where and how the IPO money was spend and how it impacted organizational performance. As mentioned before, the literature showed that one of the reasons is that the IPO is aiming to raise financial resources for the future development and growth of the organization, and improve organizational performance (Bancel & Mittoo, 2009; Ragozzino et al., 2017). While other researchers argued that the operating performance of the IPO organizations with significant amount of capital raised will decrease, this is because the companies do not use this capital wisely and waste it for other purpose. Secondly, the author analyzes how the organization spent the financial capitals before IPO in order to compare the post and pre-IPO operating performance with different spending features. Meanwhile, the expenditure strategies of the non-IPO companies will also be examined to conduct a horizontal analysis with the IPO organizations. The reason is that, as suggested by Levelsque et al. (2012), the capabilities of managing the capital of the organization will impact on the organizational performance. Thirdly, the author will examine how the investment returns from the supplementary business differ from the main business. For instance, if the IPO companies spend the capital for business investment other than its core business, it will generate higher revenue, otherwise, the companies would not spend money on these projects. Lastly, the author will conduct investigation on if the investment in these companies increase value by evaluating the ROI of the companies, as suggested by Brau et al. (2003), that the public companies could

benefit from IPO to maximize the organizational value. Thus, these analyses could demonstrate if the companies allocate its financial resources appropriately and how it impacts on the firm performance regarding ROI. The author will conduct vertical analysis between the performance before and after IPO of the selected companies.

When discussing about the IPO impact on the organizations, it would be also valuable to compare IPO firms' and non-IPO firms' performance within Chinese automotive dealer companies. In the following chapter, to gain comparative data about the impacts of the IPO on organizational performance, the case companies of non-IPO Chinese automotive dealers will be selected to conduct a vertical analysis and horizontal analysis with the IPO organizations to gain insights into how IPO changed the organizational behaviors and then lead to the performance changes.

3.2 Hypothesis Development

This research is expanded and based on previous financial research. From 1990 to 2020, corporate performance and IPOs were key issues in the financial research domain. Many new theories have been developed and tested during this period. There is substantial research in this area that has been studied which laid the academic foundation for this research. As a result, there is a lot of research being done on IPO and organizational performance. This theoretical framework covers the following topics: IPO stimulation, IPO market development, and feasibility studies for post-IPO corporate decision-making. Businesses can be registered for IPO for a variety of reasons. These reasons apply to this article. It can provide valuable insights into the impact of inputs on business decisions. The most common reason companies seek out the market is to raise funds for their investment. Therefore, the conceptual framework

employed in this study includes the motivation of IPO, the waves of IPO, and organizational performance.

To examine the impacts of IPO on the organizational performance and fill the research gap, this research conducts horizontal and vertical analysis between IPO companies and non-IPO companies. Meanwhile, as the organizational performance, according to the literature review, it consists of both financial and non-financial indicators. Thus, the non-financial indicators of performance are explored and compared before and after IPO. Therefore, according to the literature review and the research questions, the following hypothesis are developed:

Hypothesis 1:

There are differences between the post-IPO companies and pre-IPO companies, and the ownership structure change led to positive organizational performance.

Hypothesis 2:

The IPO could impact on the organizational performance positively demonstrated with increased financial performance indicators, due to Venture Capitalist Equity change.

Hypothesis 3:

The IPO impact on the organizational performance positively demonstrated with increased financial performance indicators, due to changes of Venture Capitalist Age.

3.3 Research Contribution

The first contribution of this research is capturing the impact factors of IPO on organizational performance. Moreover, as indicated by the research gap, there are few types of

research focused on the Chinese automotive dealer industry in terms of the impact of IPO on organizational performance. Thus, this research could contribute to enriching the literature in this area. Furthermore, this research is aiming to identify the issues and challenges, and issues that hindered the organizational performances in order to provide insights to the business owner and manager to develop strategies to mitigate these issues. The main challenge in realizing the afore-mentioned contribution is the research viability and reliability and the researcher's own subjective bias in the process of interpretation. Therefore, to ensure the research's reliability, the research viability should be examined during the research process.

This study contributed to the literature in the following ways. The author examines why investors become customers soon after the company announcement of IPO in the first place. The reason is that business diversification after the IPO can make the problem worse. The gap between shareholders and managers can frustrate any decision. Moreover, the role of venture capital in the stock market is important in the financial world and is controversial for companies in terms of long-term profits.

The main contribution to the study is the idea of the short-term and long-term return of the company's performance. It is used to monitor companies, prices and market characteristics. The results of the control variable give an idea of the effect of these variables on the initial and cumulative abnormal returns. There are some interesting differences in the introduction of companies that back private equity firms. Based on the experimental assumptions, a detailed analysis of the main low-cost, low-productivity literature is performed. The data collection and management process are discussed in the next section. Thus, the method identifies the most common methods and variables used to test hypotheses. The results are summarized in the following sections. Finally, we summarized and discussed the limitations of the study and other research recommendations.

Secondly, the author will discuss how the IPO impacts the organizational performance in terms of the changes in ownership structure and other impact factors. Selicuro et al. (2010) show that IPOs could issue public stocks that can be used for acquisitions. Thirdly, the author also investigated non-IPO organizations where the previous research has not reached. This horizontal analysis could provide insights into how IPO companies perform differently in regard to the changes after IPO. It could also help the author to identify the changes between pre- and post-IPO and see how these changing factors impact on organizational performance.

3.4 Measurement

This study adopts statistics for the organization level variables including ROA as the main indicator of measurement of profitability. Slightly fewer ROAs were observed compared to other variables because detailed information from the profit and loss account and the balance sheet of the company is necessary for the calculations. The balance sheet is not included in the profit and loss account. Growth wealth is an important investment indicator as well. Indeed, the cost of capital is rarely disclosed. Sales and business expansion are measured by the number of divisions each company has and the country in which the industry is located. In addition to the financing, the researchers also looked at some of the long-term implications of organizational performance. Patents represent the number of patent applications that were ultimately approved. Acquisitions represent the number of companies acquired. The market ratio and the target value are deduced from the annual report. The researchers also used various industrial and Chinese national market characteristics in regard to the automotive dealer industry.

The following detailed measures are explained for the analysis of firms before and after IPO.

Independent Variables

Two major independent variables are identified and selected in this study, which are venture capital equity and ownership structure, as these two variables are the two major changes after IPO as the literature suggested.

Ownership Structure (OS) is calculated by the ratio between the shares owned by the top five largest shareholders and the shares owned by external shareholders. These data can be found in both company's annual report and on the organization's website. As the researcher suggested, the top five largest shareholders will choose to manage the organization themselves or gain control rights over the managerial activities to create value for their stocks.

$$\text{OS} = \frac{\text{Fraction of Share Owned by the Top Five Shareholders}}{\text{Fraction of Share Owned by External Shareholders}}$$

If the results of OS calculated is bigger than 1.0, then it indicated that the companies' share is owned by internal shareholders rather than the external shareholders. This means that the internal shareholders have larger control over the company.

Venture capitalist equity (VCE) indicated the venture capitalist idea of the IPO raising performance. Specifically, the more the capitalist equity invested, the more will impact how to invest in the initial public offering process. Furthermore, VCE in this research also refers to the shares (in percentage) owned by the venture capitalist. These data and information can be obtained from the disclosure news and organizational reports. The venture capitalists' age (VCA) refers to how many years the venture capitalist participated in the IPO market. This information can be obtained from the company's organizational website in regard to its history. Thus, the formulas are stated below:

VCE = Percentage of Shares Owned by Venture Capital

VCA = Number of Years of Venture Capital Involved in the Market

Dependent Variable

The dependent variables in this research are the indicators of the organizational performance of IPO. These dependent variables will be measured post and pre-IPO in order to analyze the performance change with the profitability indicator ratios such as return on assets (ROA) and Return on Equity (ROE). As suggested by the literature review above, profitability ratios are widely accepted as the financial indicators for organizational performance. These two ratios are frequently used in regard to compare organizational performance with historical periods and competitors. In this research, the two measurements are used to compare IPO companies' performance pre and after IPO. These data can be obtained from the financial reports of the company. The formulas are stated below:

$$\text{ROA} = \text{Net Income} / \text{Total Asset}$$

In the formula of ROA, the net income is the total income deducted from all the expenses, taxes and expenses in the organizational financial report, specifically the income statement. Total assets refer to the company's current assets and non-current assets combination. This information can be obtained from the organization's balance sheet in the annual report. ROA is an effective measurement to see if the company effectively manage the company and generate a return from its investment in its assets. That is to say, ROA shows how efficiently the company transfers its capitals spending on the assets to income and profits. The higher ROA means more effective in this regard which is more favorable for the investors both internally and externally.

$$\text{ROE} = \text{Net Income} / \text{Total Shareholder's Equity}$$

In the formula of ROE, the net income is the total income deducted all the expenses, taxes and expensed in the organizational financial report. While the total shareholder's equity includes the organization's share capital and the retained earnings. This information can be obtained from the balance sheet in the annual report of the company. ROE is a measurement to see how effectively the company spent the shareholder's money to improve profits and the company's development and growth. This measurement shows the profitability from the investor angle. The higher the results, the more effectively the company spent investor's money, which is more favorable for the investors.

$$\text{ROS} = \text{EBIT} / \text{Net Sales Revenue}$$

Return on sales is another measurement to see how effective the company generate profit from its products. This measure can show that if the company is improving its core products to generate revenue. To calculate the return on sales, the ratio between earnings before tax and interests (EBIT) and the net sales revenue is calculated. The non-operating factors and activities such as financial structure and income taxes are not considered in this ratio.

Treatment Variable

As this research involve treatment variables pre-IPO and post-IPO to categorize the case into two different groups to compare the organizational performance, the dichotomous variable is adopted via labelling pre-IPO as period 0, and post IPO as period 1.

3.5 Data Analysis Method

In this research, the analysis is conducted by comparative and regression approach via the document and data collected from the secondary resources.

Descriptive Statistic Analysis

In order to achieve the research objective, the descriptive statistics are adopted to compare and analyze the performance before and after IPO in the selected organizations by obtaining secondary data from the organizational annual report, publications and newsletters. The basic descriptive statistics including minimum, mean, standard deviation, maximum are used to demonstrate the trends. This analysis will focus on pre-IPO and post-IPO organizational performance to show what and how IPO impact on their performance.

Multiple Regression Analysis

As there are more than one independent variables in this study, the multiple regression analysis is conducted to help the researcher to achieve the research goals about how the IPO impacted on the organizational performance regarding the change in ownership structure and venture capitalist roles of pre and post IPO.

$$ROA = a + b1 * OS + b2 * VCE + b3 * VCA + b4 * Period + e$$

$$ROE = a + b1 * OS + b2 * VCE + b3 * VCA + b4 * Period + e$$

$$ROS = a + b1 * OS + b2 * VCE + b3 * VCA + b4 * Period + e$$

Where:

*ROA=return of assets

*ROE=return of equity

*ROS=return of sales

* a=constant

*b1=coefficient

*b2=coefficient

*b3=coefficient

*b4=coefficient

*OS=ownership structure

*VCE=venture capitalist equity

*VCA=venture capitalist age, refers to the period of the capitalist

*e=error range

* Period = IPO was noted as period 0 and period 1 to category pre-IPO and post-IPO

Before regression analysis, other residuals have been analyzed to see if there are any factors that could significantly impact on the analysis. The Cook's distance (COOKSD) and DFITS will be used to determine the reason for this efficiency. Not all outliers can influence the analysis, so usually all COOKSD and DFFITS values are set above the threshold by the basic rules excluded from the analysis. Then run an analysis to see if the model has improved. In this case, the general rule is sufficient. Therefore, these values can be excluded from the analysis. If not, visually check the criteria used for COOKSD and DFITS. Then make sure the model is restored. The main reason for this is the process of trial and error.

CHAPTER 4

EMPIRICAL ANALYSIS & RESULT

In this chapter, the hypotheses developed in chapter 3 are tested via the discussion and analysis of the outcomes of the regression analysis. Before diving into the regression results, the descriptive analysis is presented in order to gain the first impression of these values.

4.1 Sample Selection

This study is conducted by both quantitative and qualitative analysis where the organizational performance indicators include both quantitative (financial performance indicators), and qualitative data. This study is going to investigate the IPO and its impact on the organizational performance of 11 of those 12 listed companies (not including Sunfonda) in China from 2001 to 2019, see following Table 1. These listed organizations will represent the major samples of the automotive dealer industry. For every listed organization, their respective IPO date and sample collected data period can be also seen from Table 1.

Table 1 IPO Chinese Auto Dealers Companies List

Company Name	Code	IPO Date	Data Period
Sinomach Automobile Co. Ltd.	SH600335	2001 Mar	2007-2021
Zhongsheng Group Holding Ltd.	HK00881	2010 Mar	2007-2021
China ZhengTong Auto Service Holding Limited	HK01728	2010 Dec	2007-2021
Pangda Automobile Trade Co. Ltd.	SH601258	2011 Apr	2007-2021
Yaxia Automobile Corporation	SZ002607	2011 Aug	2008-2021
Grand Baoxin Auto Group Ltd.	HK1293	2011 Dec	2009-2021
China Yongda Automobile Service	HK03669	2012 Jul	2010-2021
China Harmony New Energy Auto Holding Limited	HK03836	2013 Jun	2010-2021
China Meidong Auto Holding Limited	HK1268	2013 Nov	2011-2021
China Rundong Auto Group	HK01365	2014 Aug	2011-2021
Centenary United Holding	HK1959	2019 Oct	2016-2021
Sunfonda Group Holdings Limited	HK01771	2014 May	

The raw data come from prospectus and annual report from listed firms (most of them are listed in Hong Kong), including OS, VCE, VCA and ROS, ROE, ROA. There are 135 unit-year data available in total, of those 30 unit-year Pre-IPO and 105 unit-year Post-IPO.

As for non-IPO companies to perform a horizontal analysis with IPO organization, the samples are selected based on their performances and data availability. These 18 companies are top performers in China Auto Dealer Industry, they are picked from the China Top 100 Dealer Group Rank List issued by CADA (China Automotive Dealer Association) in July 2022. They have disclosed their performances in Qichacha (A Chinese Business Registration Check System) for recent 3 years (See table 2). Meanwhile, complementary data are added from news release from the websites of these organizations. They include the database of the prospectus and annual report.

Table 2 Non-IPO Chinese Auto Dealers Companies List

Rank	Company Name
1	Jiling Changjiu Industrial Group
2	Guangwu Auto Trading Ltd.
3	Guizhou Tongyuan Group
4	Shenzhen Dongfeng Southern Industry Group
5	Litai Group Ltd.
6	Guangqi Trading Ltd.
7	Zhejiang Baolide Ltd.
8	Sichuan Huaxing Auto Group
9	Shandong Yuantong Auto Trading Ltd.
10	Renfu Auto Trading Ltd.
11	Runhua Group Ltd.
12	Sennamei Auto Industry Co., Ltd.
13	China Hexie Auto Holdings Limited
14	Beijing Aojitong Investment Ltd.
15	Hunan Yongtong Group
16	Shanghai Lanhai Auto Development Ltd.
17	Zhejiang Guangcheng Auto Group Ltd.
18	Greenland Auto Service Group

4.2 Descriptive Analysis

The descriptive analysis would be separated into two parts based on selected samples. Firstly, the overall descriptive statistics on the IPO company data will be carried out from table 3 to table 7. Moreover, the horizontal analysis for between IPO and non-IPO companies will be illustrated as following.

IPO Companies Descriptive Analysis

Table 3 Descriptive Analysis: Variables of Interest

VARIABLES	N	Mean	S.D.	Min	Max	Quantile		
						p25	p50	p75
ROS	135	0.105	0.064	0.006	0.259	0.049	0.094	0.162
ROE	135	0.11	0.053	-0.058	0.247	0.022	0.042	0.088
ROA	135	0.015	0.078	-0.789	0.122	0.007	0.019	0.032
OS	135	1.842	1.443	0.26	7.33	0.88	1.28	2.44
VCA	135	6.403	4.719	0	17	2	6	10
VCE	135	0.185	0.156	0	0.563	0.077	0.205	0.286

Table 3 presented the overall descriptive analysis of the six variables for IPO firms. As shown in the table, the mean of ROS is 10.5%, standard variation is 6.4%. Minimum is 0.6%, and the maximum is 25.9%, the quantile of p25, p50 and p75 are 4.9%, 9.4% and 16.2% respectively. The mean of ROE is 11%, standard variation is 5.3%. Minimum is -5.8% and the maximum is 24.7%, the quantile of p25, p50 and p75 are 2.2%, 4.2% and 8.8% respectively. The mean of ROA is 1.5%, standard variation is 7.8%. The minimum is -78.9%, and the maximum is 12.2%, the quantile of p25, p50 and p75 are 0.7%, 1.9% and 3.2% respectively. The mean of OS is 1.842., standard variation is 1.443, minimum is 0.26. and the maximum is 7.33, the quantile of p25, p50 and p75 are 0.88, 1.28 and 2.44 respectively. The mean of VCA is 6.403, standard variation is 4.719, minimum is 0 and maximum is 17, the quantile of p25, p50 and p75 are 2, 6 and 10 respectively. The mean of VCE is 18.5%, standard variation is

15.6%, minimum is 0 and maximum is 56.3%, the quantile of p25, p50 and p75 are 7.7%, 20.5% and 28.6% respectively.

Table 4 Descriptive Analysis: Variable Mean of Pre IPO and Post IPO

PERIOD	ROS	ROE	ROA	OS	VCA	VCE
Pre IPO (n=30)	0.11	0.057	0.03	2.89	2.06	0.11
Post IPO (n=105)	0.1	0.060	0.01	1.5	7.81	0.21
Total (n=135)	0.105	0.059	0.015	1.842	6.403	0.185
T-test t-statistic	0.43	1.669	1.084	5.324***	-7.233***	-3.149***

*** p < 0.001

Table 4 presented the mean values of the six variables Pre IPO and Post IPO and the corresponding T-test results. Pre IPO data is only available for three years before IPO from the prospectus, and the Post IPO data comes from enterprises' annual report. It can be seen from the table that there are significant differences among these variables OS, VCA, and VCE between Pre IPO and Post IPO, at 5% significance level. The reason why VCE increased after IPO rather than decrease as in other markets is because of Chinese regulatory, which required investor to keep their share at least 36 months before they cash out.

Table 5 Correlation coefficient matrix

	ROS	ROE	ROA	OS	VCA	VCE
ROS	1					
ROE	-0.005	1				
ROA	0.178*	0.069	1			
OS	0.135	0.121	0.092	1		
VCA	-0.393***	-0.035**	-0.15	-0.255**	1	
VCE	-0.249**	-0.129**	0.059	-0.202*	0.210*	1

* p < 0.05, ** p < 0.01, *** p < 0.001

Table 5 further reports the correlation analysis results between the six variables. It can be seen from Pearson's Coefficient that there is a significant correlation between VCA, VCE

and ROS, ROE and ROA. The correlation coefficient between VCA and ROS is -0.393, which is significant at the 5% significance level, indicating that there is a significant negative correlation between the two variables. The correlation coefficient between VCA and ROE is -0.035, which is significant at the 5% significance level, indicating that there is a significant negative correlation between the two variables. The correlation coefficient between VCA and ROA is -0.15 which is not significant, indicating that there is no significant correlation between the two variables. The correlation coefficient between VCE and ROS is -0.249, which is significant at the 5% significance level, indicating that there is a significant negative correlation between the two variables. The correlation coefficient between VCE and ROE is -0.129, which is significant at the 5% significance level, indicating that there is a significant negative correlation between the two variables. The correlation coefficient between VCE and ROA is 0.059, which is not significant, indicating that the two presented no significant correlation. Besides, there was no significant correlation found between OS and ROS, ROE, and ROA.

IPO vs. Non-IPO Companies Horizontal Analysis

According to the data presented below, the non-IPO organization overall showed a trend of growth in revenue performance with average 11% growth rate. Three out of 18 organizations showed a negative growth rate from 2019 to 2021. However, in general, the majority of the companies are growing. The above data comes from CADA (China Automotive Dealer Association) which indicated those dealer groups' revenue growth. From the report conducted by Deloitte (2021), the data indicated that the companies experienced even more growth in sales with more than 35% growth rate in 2018-2019.

Table 6 Non-IPO organization Growth Rate (2019-2021)

Unit in Billion

Rank	Company Name	Revenue 2021	Revenue 2020	Revenue 2019	Average Growth Rate
1	Jiling Changjiu Industrial Group	36.6	32.3	28.9	12%
2	Guangwu Auto Trading Ltd.	34	33.4	26.56	13.70%
3	Guizhou Tongyuan Group	33.8	29.7	26.6	12.70%
4	Shenzhen Dongfeng Southern Industry Group	31.8	32.7	28.12	6.70%
5	Litai Group Ltd.	23.4	22.8	17.6	16%
6	Guangqi Trading Ltd.	22.8	19.8	16.1	18.90%
7	Zhejiang Baolide Ltd.	22.5	22.7	18.3	11.60%
8	Sichuan Huaxing Auto Group	21.6	19.1	16.8	13.30%
9	Shandong Yuantong Auto Trading Ltd.	20.8	18.4	16.2	13%
10	Renfu Auto Trading Ltd.	19.2	19.3	20.2	-4%
11	Runhua Group Ltd.	18.6	17.9	18.1	-1.20%
12	Sennamei Auto Industry Co., Ltd.	18.2	16.2	12.8	22%
13	China Hexie Auto Holdings Limited	17.9	16.8	14.1	25%
14	Beijing Aojitong Investment Ltd.	17.1	16.9	15.2	12.70%
15	Hunan Yongtong Group	16.2	17.4	17.8	-7%
16	Shanghai Lanhai Auto Development Ltd.	15.8	15.2	15.6	2%
17	Zhejiang Guangcheng Auto Group Ltd.	12.7	11.8	10.9	3.40%
18	Greenland Auto Service Group	11.3	11.2	9.8	14%

In order to compare the difference between the non-IPO organizational performance and IPO organizational performance, the horizontal analysis is conducted to compare the two sets of organizational performance in the same period of time between 2019-2021. The growth rate in revenue is examined.

From the data presented in below table, for the IPO organizations, nearly all 12 organizations showed a trend of declining in growth, and the growth rate in 2021, half shown a negative growth. The differences between IPO organization and non-IPO organizations in revenues are evident. The revenues of IPO companies declined more sharply than non-IPO organizations during 2019-2021. There are various reason and macro environmental impacts

such as pandemic, yet the differences in 2019-2020 still suggested that non-IPO organizations generally performed better than IPO organizations.

Table 7 IPO Organizational Growth Rate

Company Name	Year 2019	Year 2020	Year 2021	Average Growth Rate
Sinomach Automobile Co. Ltd.	3.42%	4.24%	-2.18%	1.82%
Zhongsheng Group Holding Ltd.	6.42%	5.23%	2.41%	4.60%
China ZhengTong Auto Service Holding Limited	3.21%	-10.46%	-11.21%	-6.10%
Pangda Automobile Trade Co. Ltd.	3.89%	-0.49%	0.87%	1.42%
Yaxia Automobile Corporation	12.10%	11.12%	-6.78%	5.48%
Grand Baoxin Auto Group Ltd.	6.24%	4.21%	1.85%	4.10%
China Yongda Automobile Service	5.91%	2.74%	-1.09%	2.52%
China Harmony New Energy Auto Holding Limited	6.71%	2.31%	4.78%	4.60%
China Meidong Auto Holding Limited	2.64%	1.91%	-4.78%	-0.07%
China Rundong Auto Group	1.67%	2.78%	6.87%	3.70%
Centenary United Holding	7.15%	-3.20%	13.90%	5.95%

However, this research will only focus on the pre-IPO vs. post-IPO change within one company in the regression model and will not model on this IPO vs. Non-IPO comparison based on the following two reasons. On one hand, it is very difficult to conduct analyzable IPO vs. Non-IPO pair-comparison analysis among current Chinese automotive dealer companies, because of their diverse corporate financial background. On the other hand, financial data for non-IPO companies belongs to undisclosed data which makes non-IPO sample selection and pair-comparison data analysis more difficult to be implemented.

Although the pair-comparison analysis is difficult to be conducted, the revenue growth trend is clear to indicate the non-IPO firms perform better than IPO firms. The COVID

influence on macro economy keeps the same level among all organizations, whether IPO or non-IPO company, so the potential confounding COVID impact can be eased.

4.3 Regression Analysis

Combined with the above analysis results, this research now analyzed the regression relationship between ROS, ROE, ROA and OS, VCE, VCA, and Period variables. The results are shown in Table 8-10.

Table 8 Regression result: ROS

Variables	Unstandardized coefficient	Standard Error	Standardized coefficient	T-statistic	Significance Level
Period	0.042	0.015	0.278	2.93	0.004
OS	0.004	0.004	0.095	1.12	0.267
VCA	-0.006	0.001	-0.466	-5.23	0.000
VCE	-0.078	0.032	-0.195	-2.44	0.016
Constant	0.121	0.016		7.42	0.000

N=135, R=0.484, R²=0.234, adj. R²=0.211, F=9.940, p<0.05

It can be seen from the table that the regression equation is constructed with ROS as the dependent variable and OS, VCE, VCA, and Period as the independent variables. Period has a significant positive impact on ROS with impact coefficient 0.042 and t-statistic 2.93, significant at 5% level. The estimated coefficient of OS on ROS is 0.004, not significant at the 5% level (t-statistic is 1.12). VCA has a significant negative impact on ROS with impact coefficient -0.006 and t-statistic -5.23, significant at 5% level. VCE also has a significant negative impact on ROS with impact coefficient -0.078 and t-statistic -2.44, significant at 5% level. The F-statistic of the overall model is 9.940, which is significant at the 5% level, and this model explains 21.1% of the ROS variance as a whole.

Table 9 Regression result: ROE

Variables	Unstandardized coefficient	Standard Error	Standardized coefficient	T-statistic	Significance Level
Period	-0.212	0.153	-0.148	-1.390	0.168
OS	0.023	0.039	0.056	0.590	0.557
VCA	0.009	0.013	0.073	0.740	0.464
VCE	-0.375	0.337	-0.099	-1.110	0.268
Constant	0.242	0.171		1.410	0.160

N=135, R=0.200, R²=0.040, adj. R²=0.011, F=1.366, p>0.05

The regression equation was constructed with ROE as the dependent variable and OS, VCE, VCA, and Period as the independent variables. All effects of Period, OS, VCA, and VCE on ROE were not significant, at the 5% level. Period and VCE both had negative coefficients with ROE, -0.212 and -0.375 respectively, whereas OS and VCA both had positive coefficients with ROE, 0.023 and 0.009 respectively. The F-statistic of the overall model is 1.336, not significant at the 5% level, and this model explains 4% of the ROE variance as a whole.

Table 10 Regression result: ROA

Variables	Unstandardized coefficient	Standard Error	Standardized coefficient	T-statistic	Significance Level
Period	-0.003	0.020	-0.015	-0.140	0.887
OS	0.004	0.005	0.069	0.720	0.472
VCA	-0.002	0.002	-0.148	-1.480	0.142
VCE	0.053	0.044	0.107	1.200	0.234
Constant	0.016	0.022		0.720	0.470

N=135, R=0.190, R²=0.036, adj. R²=0.007, F=1.223, p>0.05

The regression equation was constructed with ROA as the dependent variable and OS, VCE, VCA, and Period as the independent variables. All effects of Period, OS, VCA, and VCE on ROA were not significant, at the 5% level. Period and VCA both had negative coefficients with ROA, -0.003 and -0.002 respectively, whereas OS and VCE both had positive coefficients with ROA, 0.004 and 0.053 respectively. The F-statistic of the overall model is 1.223, not significant at the 5% level, and this model explains 3.6% of the ROA variance as a whole.

4.4 Discussion and analysis

According to above regression analysis results, the following discussion and analysis are conducted to examine the reasons behind these outcomes. From the multiple regression analysis, we could firstly see that the variable Period, indicator of pre-IPO and post IPO, is significantly related to ROS; Ownership structure (OS) shows positive correlations with ROS, ROE, and ROA, without any significant result to reject the original hypothesis, therefore there are differences in the post-IPO companies and pre-IPO companies and the ownership structure change did lead to positive organizational performance from pre-IPO to post IPO period from the analysis result. Secondly, VCE is positively correlated with ROA, but is negatively correlated with ROE, especially significantly negative related to ROS, where we could reject the original hypothesis and conclude that the change of Venture Capitalist Equity from pre-IPO to post-IPO would negatively impact on the organizational performance. Last but not the least, VCA is positively correlated with ROE, but negatively correlated with ROA, especially significantly negative related to ROS, where we could reject the original hypothesis and conclude that the change of Venture Capitalist Age from pre-IPO to post-IPO would negatively impact on the organizational performance.

These findings are partly in line with those of Lee and Wahal (2004), who provide evidence of venture capital backed IPOs experiencing larger first-day initial returns in the first few years, however, the performance declines in later stages. Another outcome that is worth mentioning is that of the variable that controls for the market index prior to the IPO. The coefficient is very high and significant, which shows a strong positive relationship between the initial returns and the return of the asset is released before and after the IPO. Loughran and McDonald (2013) found similar evidence in their study. However, the correlation points

between VCA and VCE, and the profitability ratio is shown in the above table, the relationship between the independent and dependent variables are not significantly correlated. Therefore, the limitations of interoperability were also taken into account when determining the stability of the analysis. Firstly, the research has already included the relevant conditions in the model and examined their effects. Therefore, none of the relevant conditions had any material impact. Explaining the rules by adding the natural history of the volume back to the list determines the quality of the validator. A small increase of 10% of the organizational performances suggests that companies who are confident in the outcome of the IPO will improve in terms of sound investments. Furthermore, there is a growing trend of the organizational performance in the first few years after the IPO. According to the financial report of these organizations, this increase is contributed by the increased revenues from the growing market. Many organizations selected in this research such as China ZhengTong Auto Service Holding Limited (IPO in 2011), Zhongsheng Group Holding Ltd (IPO in 2010), and Grand Baoxin Auto Group Ltd (IPO in 2012) are all experienced significant organizational performance growth in the first 3 years after IPO between 2010-2015. The market data indicated that, the automobile industry market has a CAGR of nearly 20% every year. This market growth was driven by the surging economy in China and the disposable income of every household also increased significantly. Furthermore, in China, the customs indicated that Chinese people think having a car could make them to have “face”, as a car not only could meet their transportation needs, but also could make them look “rich”. This phenomenon also contributed to the sales of cars when they have more disposable income. This could be one of the possible reasons that explained the performance growth during 2010-2015.

The study, which focused on a database of 11 IPOs, analyses the reasons for the underperformance of these companies four years after IPO. Though there is a declining trend of the organizational performance in majority of the companies, the regression analysis

indicated that the VCE and VCA has limited impact on ROA and ROE. The possible reason that potentially contributed to the declined organizational performance is their financial strategies. According to their annual report, some companies are willing to spend money on their core business to improve efficiency and meet listing requirements, they have been investing in communications and acquisitions since the previous announcement to quickly add market value. These different financing strategies have led to a loss of efficiency. Another reason is that the return on investment is higher than the profit of the company in the first few years which attract leaders and make more investments. However, some of the investments are not sustainable, the market value is very low based on the company's performance. For instance, Yaxia Automobile Corporation has invested in a range of programs that led to substantial financial loss and its stock price declined to 4 from 43 in 2018. The importance of increasing market value by investing in other business activities is not as great as they may think. This shows that these managers have no real experience in managing investment projects in emerging markets. From a practical point of view of this study, it is recommended that only commercial investments in the business increase the long-term market value of the company. In addition, not only that, but also the core business of the company is the basis for the development of sustainable business operations and the development of market value.

There are many reasons for a declined performance of these organizations, though it might not directly relate to IPO. There is no information on the planned changes. Some of the key industries in the economic change are listed to explain the consequences. This applies to changes in product and efficiency. Financial planning and economics, as well as local business negotiations, are the places where these arrangements change the average effects in the long run. But the relationship is not good. Long-term results have improved, which has led to a recovery in the stock market. In addition, the average number of jobs reported by respondents was higher. The first conclusion of the article is that most IPO certificates are dedicated to

underperformance. However, this can have a positive effect on the product in the long run. The summary report is intended for executives interested in publishing. This is because IPOs are important for business growth. However, there are other important changes to the list. Overall, regulatory changes related to IPOs have proven to be an important source of long-term revenue in China. For this reason, we have come to the conclusion that organizational change will provide a significant boost to intellectual property, this explains the initial boost of the organizational performance after IPO. Furthermore, many aspects of the business (such as size and purpose) are visible after IPO. If this information is common to all information industries, the IPO market is likely to shorten longevity than traditional empirical studies have shown.

On the other hand, according to a survey conducted by the Deloitte China Excellent Auto Dealer Service Group (2021) on the operational risk status of auto dealers in the past few years, more than half of auto dealers think that their operational risks are increasing gradually every year. The various problems accumulated during the rapid growth of the market in the early stage are gradually reflected in the "intensifying" competitive environment, and the problems of dealers in their "profitability" and "operational risks" are particularly prominent. This explains the possible reason of the declined performance after 2016. In 2016-2017, the average return on sales of major listed dealer groups was only 1.62%, down nearly 55% from 2010. Among them, the inventory of new cars is too high, which seriously invades the working capital. The dealers are not allowed to adopt the method of "cutting the price and moving the volume" to reduce the inventory to ease the pressure on capital turnover and rely on the manufacturer's business rebates to supplement the cash flow. In addition, the after-sales business with high gross profit margin for dealers has also faced competition from multi-channel competitors in the past few years. According to the latest results of Deloitte China, more than one third of dealers believe that the emergence of independent and chain quick repair shops has led to a sharp decline in dealer output value and profits. Chinese auto dealers are

facing the challenge of transforming from the "extensive" management model in the past to the "lean" management model.

Meanwhile, according to the data presented, the non-IPO organizations seem to perform better than IPO organizations in the same period of time. The reason why non-IPO organization performed better than IPO organizations in 2019 to 2021 as results suggested above is their ownership structure. From the organizations' websites, the information indicated that the owners are often the board members of the companies which often exercise greater control of their business. Staying private means that the owners and the managers could ensure the business are in hands of a few of people in the board which means there are fewer interest conflicts, and managers are not beholden to the substantial impacts of shareholders. Furthermore, the non-IPO organizations are not subject to the capriciousness and volatility of the stock market. The stock price of the IPO organizations is impacted by many factors both in macro environment and internal factors. Though the volatility is accepted as a cost for the shareholders, however, it could distract the business and impact on the business decisions negatively. This is often true in case like many employees brought the stocks of the companies, they are often subject to the worries of the stock performance and neglect their jobs which also will negatively impact on the organizations. Yet, for the non-IPO organizations, there many motivation boost strategies to ensure the organizational performance.

Another reason of non-IPO auto dealers who continue growing and improving its performance is that they switch to private financing to access the financial resources which changed the IPO dynamics. According to the business press, six out of the eighteen non-IPO organizations have approached to private financings to raise capitals. Private financings allow these organizations to attract fundings from broader range of investors, and unlike IPO, the private financings often do not hurt the business decisions of the companies and could provide strategic advantages for both organizations and investors. Indeed, the performances of the

organizations subject to many factors, and often cannot be fully explained. Yet, the non-IPO organization did enjoy some benefits from the market compared to IPO auto dealers which often subject to stricter regulatory supervision and shareholder interests.

Overall, the organizational performance of the selected automobile dealership companies indeed has experienced declined performance after a few years of IPO. The research results indicated that it has limited correlations in ownership structure and capital investment. Instead, the declined performance is more associated with the macro environment of the business such as government policies and economy growth in China.

CHAPTER 5

CONCLUSION & RECOMMENDATION

This article explains why some of the 12 companies decided to register for an initial public offering (IPO) in China, the research is based on the finance data before and after IPO. When a company has an offering, the ownership structure allows to select and resolve specific lifecycle model issues. The success of an IPO is measured by the short-term growth of the market before a listing decision is made. Starting an IPO may affect the business decision due to the changes on ownership structure. It has a direct impact on long-term decisions. This could be found as the review results of previous articles. When they are made available to the public, the profits of a company decrease, but the ROA increase in the first of years after IPO. However, the results of this research indicated that thought there is a declining trend of these organizational performance after a few years of IPO. The results indicated the VCE and VCA has limited impact on ROA and ROE. In short, the research has found that listed companies have the advantage of increasing their profits through proper discussion and resolution of internal affairs in the first few years of IPO. It also shows that companies are growing in different conditions of the economy in China. Despite the challenges faced by large organizations, the findings confirm that listing is good for the organization, at least for the first few years after its introduction. Share prices provide the company with a source of financing for the sale of its products. Investors can increase their earnings by shifting their business strategies to stocks, and companies need to see results over time. However, the performance will decline in the following years due to market environment changes and government policies in China. This is because in China, the central government plays a significant role in the market planning.

This document lists 12 companies that lost official registration this year and focuses on public registration. After regression analysis, the research also looked at 11 IPOs in China automobile dealership industry that successfully completed the IPO, as one organization has been filtered out due to lack of data availability. Therefore, explaining the poor performance of the switch is a complex feature due to many factors. There is no single theory or hypothesis that explains this decline. Our research does not aim to add value to the model, so it does not fully explain the evolution of key performance indicators. Meanwhile, in this research, the independent variable selected are VCA and VCE, the dependent variables are ROS, ROA and ROE. There are many other impacting factors and financial performance indicators. One of the possible reasons of the non-significant results of this empirical analysis could be the wrongly identification of the variables that are associated to IPO changes. Therefore, further studies can be done to build a full model. This improves a change in performance after IPO. The common model seeks to incorporate all key variables through post-market performance metrics such as incentive plans and leadership incentives, and dividend policy. Therefore, it is difficult to fully estimate the market value of a company. Secondly, we look at certain issues in China's single market research focused on the auto dealer market. Thirdly, due to the private issues of the non-IPO organizations, it negatively impacts on the data availability which made the analysis limited to only 3 years when comparing the non-IPO and IPO organizational performances. In the future, the research should include more samples in both IPO and non-IPO organizations.

This research also presented some limitations. First, the sample size is limited. There are only 12 companies went public in China in the examined market. The small sample size will limit the research results and generalization. In future research, it is recommended to conduct research with more sample size, and comparable research can be conducted to examine an industry with similar characteristics to generate more viable results with larger sample size.

Based on the findings of this research, the recommendation is proposed for the company to improve its organizational performance.

1) The return on investment is higher than the profit of the company in short term attracts leaders and make more investments. While these investments are not sustainable, the market value is very low based on the company's performance. Suggest to spending money focus on the core business to avoid haphazard investment in short term.

2) From a practical point of view of this study, the company is the basis for the development of sustainable business operations and the development of market value. It is recommended that only commercial investments in the business register increase the long-term market value of the company.

3) The reason why non-IPO organization performed better than IPO organizations as results suggested is their ownership structure. The ownership structure should make the owners and the managers could ensure the business are in hands of a few of people in the board, which means there are fewer interest conflict, and not beholden to the substantial impacts of shareholders.

4) Another reason why non-IPO auto dealers are continuing to grow and improve its performance is their switching to private financing to access the financial resources. The private financings often do not hurt the business decisions of the companies and could provide strategic advantages for both organizations and investors. Suggest to do consider alternative financing solution before IPO rather than just go for it.

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APPENDIX

Appendix 1. Table of VCE

Company Name											
Year	Sinomach Automobile Co. Ltd. (2001)	Zhongheng Group Holding Ltd. (2010)	China Zhengfong Auto Service Holding Limited (2010)	Pangda Automobile Trade Co. Ltd. (2011)	Yaxia Automobile Corporation (2011)	Grand Baoxin Auto Group Ltd. (2012)	China Yongda Automobile Service (2013)	China Harmony New Energy Auto Holding Limited (2013)	China Meidong Auto Holding Limited (2014)	China Rundong Auto Group (2014)	Centenary United Holding (2019)
2007	0%	0%	15.32%								
2008	0%	0%	15.32%	6%	0%						
2009	0%	0%	15.32%	6%	0%	0%					
2010	0%	28.63%	20.51%	6%	0%	0%	15.00%	35.41%			
2011	0%	28.63%	20.51%	11.73%	3.24%	0%	15.00%	35.41%	26.79%	0.00%	
2012	0%	28.63%	20.51%	11.73%	3.24%	7.73%	15.00%	35.41%	26.79%	17.34%	
2013	0%	28.63%	20.51%	11.73%	3.24%	7.73%	20.48%	45.06%	26.79%	17.34%	
2014	0%	28.63%	20.51%	11.73%	3.24%	7.73%	20.48%	45.06%	56.31%	29.67%	
2015	0%	28.63%	20.51%	11.73%	3.24%	7.73%	20.48%	45.06%	56.31%	29.67%	
2016	0%	28.63%	20.51%	11.73%	3.24%	7.73%	20.48%	45.06%	56.31%	29.67%	12.37%
2017	0%	28.63%	20.51%	11.73%	3.24%	7.73%	20.48%	45.06%	56.31%	29.67%	12.37%
2018	0%	28.63%	20.51%	11.73%	3.24%	7.73%	20.48%	45.06%	56.31%	29.67%	12.37%
2019	0%	28.63%	20.51%	11.73%	3.24%	7.73%	20.48%	45.06%	56.31%	29.67%	25.99%
2020	0%	28.63%	20.51%	11.73%	3.24%	7.73%	20.48%	45.06%	56.31%	29.67%	25.99%
2021	0%	28.63%	20.51%	11.73%	3.24%	7.73%	20.48%	45.06%	56.31%	29.67%	25.99%

Appendix 2. Table of VCA

Company Name											
Year	Sinomach Automobile Co. Ltd. (2001)	Zhongsheng Group Holding Ltd. (2010)	China ZhengTong Auto Service Holding Limited (2010)	Pangda Automobile Trade Co. Ltd. (2011)	Yaxia Automobile Corporation (2011)	Grand Baoxin Auto Group Ltd. (2012)	China Yongda Automobile Service (2013)	China Harmony New Energy Auto Holding Limited (2013)	China Meidong Auto Holding Limited (2014)	China Rundong Auto Group (2014)	Centenary United Holding (2019)
2007	0	0	2	2							
2008	0	1	3	3	0						
2009	0	2	4	4	0	5					
2010	0	3	5	5	1	6	0	3			
2011	0	4	6	6	2	7	1	4	0	1	
2012	0	5	7	7	3	8	2	5	0	2	
2013	0	6	8	8	4	9	3	6	1	3	
2014	0	7	9	9	5	10	4	7	2	4	
2015	0	8	10	10	6	11	5	8	3	5	
2016	0	9	11	11	7	12	6	9	4	6	0
2017	0	10	12	12	8	13	7	10	5	7	1
2018	0	11	13	13	9	14	8	11	6	8	2
2019	0	12	14	14	10	15	9	12	7	9	3
2020	0	13	15	15	11	16	10	13	8	10	4
2021	0	14	16	16	12	17	11	14	9	11	5

Appendix 3. Table of OS

Year	Sinomach Automobile Co. Ltd. (2001)	Zhongsheng Group Holding Ltd. (2010)	China ZhengTong Auto Service Holding Limited (2010)	Pangda Automobile Trade Co. Ltd. (2011)	Yaxia Automobile Corporation (2011)	Grand Baoxin Auto Group Ltd. (2012)	China Yongda Automobile Service (2013)	China Harmony New Energy Auto Holding Limited (2013)	China Meidong Auto Holding Limited (2014)	China Rundong Auto Group (2014)	Centenary United Holding (2019)
2007	2.32	0.98	2.64								
2008	2.32	0.98	2.64	4.00	7.00						
2009	2.32	0.98	2.64	4.00	7.00	3.8					
2010	1.85	0.61	2.44	4.00	7.00	3.8	0.98	4.57	1.24		
2011	1.85	0.61	2.44	4.00	7.33	3.8	0.98	4.57	1.24	0.92	
2012	1.85	0.61	2.44	4.00	2.12	3.54	0.98	4.57	1.24	0.92	
2013	1.85	0.53	2.44	4.00	2.12	3.54	1.17	3.34	0.98	0.92	
2014	1.85	0.53	2.44	1.50	2.12	1.77	1.17	3.18	0.76	1.28	
2015	1.85	0.53	0.96	1.50	0.42	1.77	1.17	2.79	0.76	1.28	
2016	1.22	0.53	0.96	1.50	0.42	1.77	1.17	2.79	0.76	1.28	3.96
2017	1.22	0.53	0.96	1.50	0.42	1.77	1.17	2.79	0.43	1.28	3.96
2018	1.22	0.53	0.96	1.38	0.26	1.63	1.17	2.79	0.43	0.76	3.96
2019	1.22	0.53	0.96	1.38	0.26	1.63	0.88	2.79	0.43	0.76	2.12
2020	1.22	0.53	0.58	1.38	0.26	1.63	0.88	2.79	0.43	0.76	2.12
2021	1.22	0.53	0.58	1.38	0.26	1.63	0.88	2.79	0.27	0.76	2.12

Appendix 4. Table of ROA

Year	Sinomach Automobile Co. Ltd. (2001)	Zhongsheng Group Holding Ltd. (2010)	China ZhengTong Auto Service Holding Limited (2010)	Pangda Automobile Trade Co. Ltd. (2011)	Yaxia Automobile Corporation (2011)	Grand Baoxin Auto Group Ltd. (2012)	China Yongda Automobile Service (2013)	China Harmony New Energy Auto Holding Limited (2013)	China Meidong Auto Holding Limited (2014)	China Rundong Auto Group (2014)	Centenary United Holding (2019)
2007		4.73%	2.23%								
2008		5.86%	2.34%	3.21%	2.91%						
2009		4.92%	2.68%	0.43%	1.74%		5.96%				
2010	11.24%	5.42%	3.23%	0.33%	3.91%		3.94%	2.62%	2.71%		
2011	12.19%	6.42%	2.29%	0.53%	1.43%		6.81%	3.87%	1.84%	1.21%	1.83%
2012	9.82%	4.72%	3.10%	0.32%	1.67%		2.89%	3.23%	1.93%	1.75%	2.94%
2013	4.87%	3.29%	1.09%	0.27%	1.60%		3.47%	2.19%	1.99%	0.92%	3.92%
2014	3.29%	2.77%	0.10%	0.30%	1.00%		3.16%	1.89%	2.01%	4.89%	3.49%
2015	2.12%	2.00%	0.29%	0.17%	-26.89%		2.27%	1.20%	1.77%	6.68%	0.37%
2016	2.16%	2.46%	0.29%	0.11%	-78.92%		1.21%	1.96%	1.63%	3.83%	2.85%
2017	2.37%	2.13%	0.29%	0.87%	6.24%		0.95%	1.87%	1.38%	4.62%	1.86%
2018	2.58%	2.13%	0.29%	0.48%	5.93%		0.82%	1.27%	1.04%	2.98%	0.11%
2019	5.41%	2.13%	0.29%	0.54%	6.07%		0.85%	0.89%	0.73%	3.56%	0.12%
2020	4.14%	2.13%	0.29%	0.94%	6.62%		1.21%	0.47%	0.32%	1.29%	0.88%
2021	2.43%	1.30%	-2.29%	-0.78%	-7.69%		0.25%	-1.58%	0.22%	1.38%	0.75%

Appendix 5. Table of ROE

Year	Sinomach Automobile Co. Ltd. (2001)	Zhongsheng Group Holding Ltd. (2010)	China ZhengTong Auto Service Holding Limited (2010)	Pangda Automobile Trade Co. Ltd. (2011)	Yaxia Automobile Corporation (2011)	Grand Baoxin Auto Group Ltd. (2012)	China Yongda Automobile Service (2013)	China Harmony New Energy Auto Holding Limited (2013)	China Meidong Auto Holding Limited (2014)	China Rundong Auto Group (2014)	Centenary United Holding (2019)
2007		9.71%	9.84%								
2008		8.61%	10.76%	1.45%	15.67%						
2009		11.21%	7.52%	3.46%	9.31%	7.79%					
2010	23.68%	9.31%	11.04%	4.21%	2.22%	6.93%	4.52%	3.42%			
2011	14.21%	11.45%	24.71%	0.09%	8.45%	6.985	3.87%	2.91%	2.81%	3.87%	
2012	18.34%	8.87%	19.82%	0.08%	6.72%	8.20%	4.41%	2.76%	3.02%	3.94%	
2013	12.99%	12.89%	13.88%	0.06%	8.79%	9.10%	3.21%	1.80%	2.99%	4.92%	
2014	19.39%	11.98%	9.87%	0.05%	9.85%	7.87%	4.15%	1.78%	5.68%	3.88%	
2015	17.80%	9.98%	8.36%	0.09%	11.12%	6.37%	2.28%	1.65%	6.24%	1.29%	
2016	18.67%	8.79%	6.76%	0.09%	7.80%	5.64%	2.29%	8.32%	4.99%	3.16%	2.98%
2017	12.98%	8.54%	5.56%	0.58%	3.73%	4.04%	1.80%	6.37%	4.22%	2.98%	1.98%
2018	16.74%	7.90%	4.96%	0.01%	2.79%	2.76%	1.25%	4.55%	3.91%	3.26%	3.42%
2019	13.72%	8.44%	2.67%	0.06%	4.35%	2.25%	1.22%	3.42%	4.73%	1.92%	5.96%
2020	11.45%	4.07%	-0.55%	0.08%	4.66%	3.50%	1.04%	1.25%	2.15%	0.90%	4.51%
2021	12.79%	2.18%	-0.71%	-0.14%	-5.76%	1%	-0.18%	2.11%	2.80%	-0.37%	1.14%

Appendix 6. Table of ROS

Company Name											
Year	Sinomach Automobile Co. Ltd. (2001)	Zhongsheng Group Holding Ltd. (2010)	China ZhengTong Auto Service Holding Limited (2010)	Pangda Automobile Trade Co. Ltd. (2011)	Yaxia Automobile Corporation (2011)	Grand Baoxin Auto Group Ltd. (2012)	China Yongda Automobile Service (2013)	China Harmony New Energy Auto Holding Limited (2013)	China Meidong Auto Holding Limited (2014)	China Rundong Auto Group (2014)	Centenary United Holding (2019)
2007		5.76%	11.21%								
2008		4.83%	7.64%	16.75%	8.91%						
2009		12.49%	12.34%	19.92%	6.57%	6.72%					
2010	17.82%	18.43%	18.29%	18.75%	8.95%	5.62%	16.51%	18.74%			
2011	23.98%	16.44%	18.57%	21.91%	7.90%	7.83%	15.74%	16.32%	7.91%	7.81%	
2012	16.91%	17.85%	17.88%	19.54%	2.90%	4.38%	14.31%	13.97%	8.32%	6.93%	
2013	23.82%	17.01%	16.23%	23.45%	3.80%	3.75%	12.12%	15.56%	9.92%	5.27%	
2014	13.65%	16.25%	15.76%	22.91%	2.67%	4.92%	11.85%	16.87%	6.78%	5.98%	
2015	18.67%	12.68%	13.89%	18.82%	1.56%	3.84%	10.37%	10.54%	6.81%	4.32%	
2016	24.21%	10.37%	16.98%	14.82%	4.12%	2.86%	9.88%	9.43%	5.41%	5.67%	6.91%
2017	19.36%	6.76%	14.53%	12.47%	21.98%	1.97%	10.23%	8.23%	4.93%	4.31%	11.32%
2018	22.19%	3.43%	11.98%	9.33%	7.80%	1.54%	7.53%	6.48%	3.28%	3.89%	13.54%
2019	25.93%	3.43%	10.87%	7.01%	6.75%	1.71%	6.78%	4.17%	3.44%	2.91%	10.34%
2020	19.83%	3.43%	13.31%	8.37%	11.23%	0.59%	4.90%	4.21%	3.64%	3.32%	10.09%
2021	19.83%	3.43%	11.98%	7.01%	12.89%	0.78%	2.11%	5.02%	3.71%	1.15%	9.87%