



温州肯恩大学  
WENZHOU-KEAN UNIVERSITY

**The Relationship between Instability of Firms and IPO Underpricing in China**

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by

Liu Enyu

1098365

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## **Abstract**

In China, many companies now choose to obtain financing and liquidity through IPO. However, in addition to common factors such as company operations and debt status and shareholder opinions, there are also some unstable factors that will affect the IPO, and even lead to the appearance of IPO underpricing. This paper will discuss the relationship between unstable factors and IPO underpricing that may be encountered in the management of Chinese listed companies. It firstly briefly introduces the independent variable: "instability" which would be listed in detail. Secondly, it contains the IPO underpricing and the formulas and methods to measure it. The data in this paper mainly comes from CSMAR and Wind database and will be dealt with by Excel and R to draw statistical conclusions. Finally, in order to derive the relationship between, linear regression model will be made to test the hypothesis by analyzing the correlation coefficient and P value, that is, the higher the "instability", the easier the IPO underpricing phenomenon will occur. More precisely, figuring out how does the instable factors will influence the IPO underpricing.

*Keywords:* IPO Underpricing, Chinese Stock Market, Factors Affecting the Company's IPO, Instable Factors of Running IPO

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## Introduction

IPO has become the choice of more and more companies want to raise funds, increase capital liquidity and increase corporate visibility. However, for a company that wants to go public, an IPO requires many steps. Before getting an IPO, most companies would experience professional investors such as venture capitalists or angel investors. In addition, IPO usually requires a certain cost. Anything going wrong in any part of the IPO may lead to an IPO underpricing. The practice of issuing an initial public offering (IPO) at a price lower than the true value of the stock market is called underpricing. When new shares close above the designated IPO price on the first day of trading, it is said to be underpriced.

Many scholars and literatures have studied the external and internal reasons of IPO underpricing. Some scholars believe that external reasons such as changes in the relevant policies of the Chinese government, related technological innovations, and large-scale public health events (such as COVID) may affect all aspects of the company's operations and lead to the emergence of IPO underpricing. Additionally, there are also factors that can be considered as instable factors that could influence IPO like deposit-reserve ratio which is the portion of reservable liabilities commercial banks must hold onto, rather than lend out or invest and GDP which are believed to have strong influence on IPO. Apart from that, there are also some documents that point out that the company's internal reasons are also a very important factor, such as the behavior of the company's CEO, changes in the company's internal business strategy, and so on. Among these factors that affect or cause IPO underpricing, some internal

factors are hard to measure and control which makes it difficult for the research to draw a conclusion on the relationship, and some are unstable factors which influence the IPO macroscopically like deposit-reserve ratio and GDP. Therefore, this thesis will explore the relationship between these unstable factors and the IPO underpricing.

## Literature Review

First of all, according to historical literatures, there are some factors that are "unstable" which describe the conflicts between shareholders and underwriters, CEOs, policies, public emergencies, and natural disasters caused by force majeure. These unstable factors may cause the underwriter to list the new stock at a relatively low price that is lower than its actual value. Sometimes, shareholders and management may ask the underwriters to set a relatively high price in order to cash out higher remuneration, but the underwriters want to get as much sales as possible for this stock (because more sales means more he cost) may set a relatively low price. In addition, the company's CEO's political relations, social networks, media exposure, tenure and salary ratio may also have an important impact on the IPO pricing and the closing price of the first day. When the CEO has more media exposure, more investors may come to buy. At the same time, political relations will also win more policy support for their company. These attributes will give their company more advantages when it comes to IPO pricing and price corrections. Regarding policies, some documents also point out that in China, the operating conditions and development prospects of enterprises are closely related to policies. For a company that wants to conduct an IPO, if the company is affected by policy dividends and receives subsidies or other "facilitation", this will greatly help its IPO performance.

For most of the papers, external factors like local corruption, VC, R&D subsidy, government policy, Internet are considered to have huge influence on IPO. However,

there are also papers that mention the importance of internal factors (CEO, cost stickiness) on IPO. Therefore, in this section, the details of external as well as internal factors that influence IPO will be represented.

When it comes to IPO, people will always be curious about what kinds of the external and internal factors in firms can influence IPO. In China, company's operations and investment environment have always been regarded as major factors affecting IPOs.

Two authors whose names are Xin and Di believed that the impact of local corruption on IPO underpricing is huge (Xin&Di, 2021). Those in high-corruption areas had higher IPO underpricing than companies in low-corruption areas, according to the researchers.

We discovered that high-reputation underwriters and auditors can reduce the positive association between local corruption and IPO underpricing in a cross-sectional investigation. Furthermore, we discovered that the positive relationship between local corruption and IPO underpricing is restricted to non-state-owned businesses. Our research contributes to the understanding of the effects of corruption and the factors that influence IPO underpricing. In order to verify their conjecture, they used an empirical model to quantify their conjecture, by analyzing the dependent variable IPO underpricing and independent variable political corruption, they finally verify their conclusions. Despite the fact that political corruption is indeed a factor that affects IPOs, I still believe that political corruption is a difficult standard to measure, and there is a lack of relevant data to accurately measure political corruption. Therefore, I remain questionable about their conclusions.

Apart from the political corruption, there are also other internal factors that influence the IPO. In another paper, it discussed the impact of chief executive officer (CEO) qualities on price revisions in Chinese initial public offerings (IPOs) is investigated in this study. We find that political ties, social networks, media exposure, tenure, and salary ratio of these CEOs have a significant impact on price revisions, using samples of 628 enterprises from the ChiNext Board and 555 firms from the Small and Medium-Sized Enterprises Board ((Hai&Ying, 2020)). Furthermore, political connections are extremely valuable to issuing companies, and media exposure is used to monitor IPO price. Furthermore, politically linked CEOs like to establish high offering prices, resulting in long-term underperformance. They use formulas to examine the effects of the CEO attributes on the price revisions, underpricing, and long-term performance, respectively. I think the conclusions of this document are relatively reliable. I also agree that the attributes of the CEO will have a great impact on the IPO. According to the theory of behavioral finance, the personal characteristics of the current CEO significantly affect the price correction.

In addition to these two internal factors that affect IPOs in China, there are many literatures that have carried out research on external factors. For example, there are many papers that investigated the impact of venture capital (VC) investment on the performance and growth following an initial public offering (IPO). After an IPO, VC investment adds to the long-term profitability and growth of entrepreneurial enterprises, according to firm-level panel data research (Ding, Kun&Xiaoting, 2015). Meanwhile,

they see a strong and beneficial link between corporate governance and venture capital investment. However, they find little evidence that a VC firm's expertise or specialization influences the effects of venture capital. Similarly, another author investigates the factors that influence IPOs. Between 2009 and 2013, 783 SMEs in China performed well that were listed on the SME and Growth Index in 2012, Boards of Directors. According to the findings of the survey, companies that does not have a past venture capital (VC) investment those who did not perform better than those who did (S&Wilson, 2017). Ventures with strong VC control are more likely to receive VC funding in comparison to the rights of the largest block shareholder. With a previous ownership relationship between the VC and the entrepreneur that paid more IPO fees than the underwriter and the underwriter had a poor long-term track record the disadvantages. As the association between VC-underwriter ownership affiliation and long-term performance weakens, so does the relationship between long-term performance and VC-underwriter ownership affiliation. These two papers explained and discussed the impact of VC on IPO, though the measurement as well as the results are different, they definitely prove the effect of the VC.

Apart from the VC, there are also studies that examines how R&D and non-R&D subsidies affect the success of entrepreneurial enterprises in an emerging economy like China's initial public offering (IPO). The authors discovered that R&D subsidy has an inverted U-shape effect on IPO performance, whereas non-R&D subsidy has a positive effect on IPO performance (Jin et al., 2018), based on data from 269 IT (information

technology) entrepreneurial enterprises in China. Furthermore, the inverted U-shape link between R&D subsidy and IPO performance is moderated by both state ownership and patent intensity. Neither of them, on the other hand, moderates the favorable correlation between non-R&D subsidies and IPO performance. I quite agree with these authors' conclusion since through the data of the Chinese government, the positive relationship between non-research subsidies and IPO has also been subtly confirmed.

Additionally, some scholars believe that cost stickiness has also become an important external factor affecting IPO. The impact of IPO surplus financing on cost stickiness is investigated in this paper. It illustrates that the liquidity supplement of IPO excess financing raises the incentives for managers to build empires and diminishes the company's operational efficiency by demonstrating that the liquidity of IPO excess financing is positively connected with China's cost stickiness (Lu, Jincai&Huijuan, 2019). Furthermore, they discovered that this positive link is stronger in organizations with inferior governance, such as those with less power balances, lower debt constraints, and less institutional investor oversight. This is due to the fact that corporate governance has a significant impact in the efficiency with which IPO funds are raised. Although this document does not directly explain the relationship between cost stickiness and IPO, through the relationship between IPO excess and cost stickiness, we can also get cost stickiness or cost. The company's profitability is also an important external factor that affects IPO funds.

In addition, there are also documents showing that the external IPO environment (the Chinese government's policy on IPOs) is also an important factor affecting IPOs. The Chinese government has occasionally stopped initial public offerings, leaving companies that have previously been permitted to go public with indefinite listing delays. The interim ban on going public raises concerns about affected companies' access to public markets. The authors demonstrate that a suspension-induced delay decreases business innovation activity both during and after the listing. Financial constraints during the suspensions are removed after listing, therefore negative effects on physical investment and positive benefits on leverage are only temporary (Lin&Sibrina, 2018). And I believe that the findings of this study imply that stable, well-functioning IPO markets are critical for maximizing business value.

Finally, some scholars believe that the external conditions of information disclosure (the popularization of the Internet) also have an important impact on IPOs. The author of the literature believes that due to the current use of the Internet in IPOs, the allocation of IPOs has undergone a fundamental change. Through the Internet, the company issues share to a wider range of small investors. From the perspective of online marketing, attention to information disclosure has a huge impact on IPO performance and corporate governance. In addition, the author also studied whether the high degree of IPO company performance in the IPO after-sales market is related to corporate governance. By constructing the corporate governance index CG of the IPO company, it is composed of the ownership structure, the characteristics of the board of directors,

the management style and the quality of information disclosure. In the end, they used empirical evidence to prove that the information disclosure threshold has a positive impact on the performance of the IPO company (Wenxiu, Chuan&Weiwei, 2019).

Through these literatures, external and internal factors in firms are proved to have huge influence on IPO. Since IPO is a complicated process, internal factors in terms of political corruption and CEO as well as external factors like VC, the government policy on IPO, Internet, R&D subsidy and cost stickiness are considered to influence IPO from every aspect (Pre-IPO and Post-IPO).

## Methodology

In this section I decide to use multiple regression analysis model to measure the relationship between instability of firms and IPO underpricing. In the formula shown below, the y stands for the dependent variable IPO underpricing which is measured by certain formula shown below while there is also independent variable instability measured by policy, public events as well as innovation. Besides, since there are also factors that could influence the IPO underpricing, control variable measured by P/E ratio, IPO size, turnover and ROA is necessary to avoid influence from other factors.

Among the regression model, I believe that there is a liner proportional relationship between the independent variables and the dependent variable. In order to verify my hypothesis, I will collect the data of all the variables from China Securities Market and Accounting Research (CSMAR) database. By selecting the sections of IPO A share market and stock trading on the database, I can acquire the raw data every listed companies from 2015 to 2020. More precisely, in order to get the useful data, I also sort the information I need by choosing the fields. For example, as for the dependent variable IPO underpricing, I select the premium to issue price, IPO price, stock code, date listed, and year listed. To get the data for independent variable, I select industry name, province, nature of the firm, company status, market type. To get the data for control variable, I select number of shares issued, par value.

After getting and dealing with the data, by using the function of regression analysis in the Excel I can get the output of the regression. Since I have not fully got

the data I need, I cannot show the regression output now. However, once the data collection is done, the output which consists of determination of the degree of fit, significance test of regression equation will be given to help me conclude whether my hypothesis, there is a liner proportional relationship between the instability of firms and IPO underpricing, is true or not.

### **Method Used**

In this thesis, I mainly adopted the method that is generally regarded as the formula used to calculate IPO underpricing in the literature review and the formula of multiple linear regression.

The hypothesis mainly focuses on the relationship between instability and IPO underpricing, so I use the following equation to verify my hypothesis

$$y = \alpha + \beta_1 x + \Sigma \beta_2 z$$

where y represents the IPO underpricing and X stands for instability and z is control variable.

$$\text{Price Revision} = \frac{\text{final Offering price} - \text{initial offering price}}{\text{initial offering price}} * 100\%$$

Independent variable: Instability

Since the independent variable consists of three variables which are GDP, and deposit-reserve ratio. It will be measured and quantified by the following formula.

$$\text{Instability} = \beta_0 + \beta_1 \text{deposit-reserve} + \beta_2 \text{GDP}$$

Control variable: Other factors that influence IPO underpricing

Since IPO underpricing is not solely influenced by the instability factors, I choose some of the control variables that proven to have significant influence on the underpricing.

$$= q_0 + q_1 \text{P/E ratio} + q_2 \text{turnover} + q_3 \text{IPO size} + q_4 \text{ROA} + q_5 \text{M1 money supply}$$

## **Data Collection**

In this paper, all the data is collected from CSMAR and Wind database. CSMAR and Wind database provide the relatively accurate, abundant data for Chinese stock market. The paper gets access to CSMAR by the provided education account from WKU online library. And as for the Wind database which is also a well-known database focus on the Chinese listed companies, I registered the account and accessed to the data I need.

The data that collected from the databases are ranging from 2015 to 2020 and there are data serves for independent variables, response variables, and control variables. For the independent variables, the deposit reserve ratio and GDP come from the Wind database, and the deposit reserve ratio is calculated as a percentage.

The data on the dependent variable IPO underpricing comes from the Wind database. First, I collected the first-day issue price and first-day closing price of all listed companies in China from 2015 to 2020 in chronological order and calculated the IPO underpricing as mentioned above. The formula calculates the value of each company's IPO underpricing.

For the control variables, I found relevant data from the CSMAR and Wind databases

from 2015 to 2020, and also sorted the companies in chronological order, including the company's ROA, P/E ratio, M1 money supply, and IPO raising. Funds, data related to transaction volume on the day of issuance, I deleted a small part of the missing data.

### Analysis and Findings

	Underpricing	GDP	P/E	ROA	Funds	Turnover	DR Ratio	M1 Supply
Mean	0.673647822	871876.3824	38.27349722	0.094054	883239551	9062926.075	15.81238	479083.573
Standard Error	0.020011512	3020.531585	1.882703376	0.001614	57392987.1	1714670.409	0.058923	1764.87669
Median	0.440033642	832035.9486	29.85081291	0.08905	484000000	29602	17	472526
Standard Deviation	0.796196661	120177.6864	74.90699221	0.064211	2283490905	68221475.89	2.344369	70219.0299
Sample Variance	0.633929124	14442676303	5611.057482	0.004123	5.2143E+18	4.65417E+15	5.496067	4930712165
Skewness	5.45421625	-0.102786722	-2.105938198	1.643044	13.8108873	17.69543335	-0.13859	-0.6390449
Range	10.68096712	327127.982	2779.322388	1.436132	5.323E+10	1619471992	7	197529
Minimum	-0.066793893	688858.218	1508.39502	-0.57779	0	920	12.5	348109
Maximum	10.61417323	1015986.2	1270.927368	0.858345	5.323E+10	1619472912	19.5	545638

Table 1- Descriptive Data of All the Variables

In this table, it mainly shows various data of descriptive statistics of all variables, such as mean, standard deviation, variance, etc. Among them, the most eye-catching statistics are related to IPO underpricing. Although the gap between the maximum value and the minimum value is very large, the range of fluctuations is not large. In other words, Chinese companies that went public from 2015 to 2020 have suffered similar IPO underpricing to some extent.

Although the time of listing of different companies in different years has changed, it is not possible to make a graph to show the change curve of the company's IPO underpricing from 2015 to 2020, but it can be seen from the data that during the period from 2015 to 2018, the degree of IPO underpricing is maintained at about 44%. Between 2018 and 2020, the proportion of IPO underpricing of different companies has changed significantly.

	Underpricing	GDP	P/E Ratio	ROA	Funds Raised	Turnover	DR Ratio	M1 Supply
Underpricing	1							
GDP	0.344142665	1						
P/E Ratio	0.27157281	0.15429	1					
ROA	0.01146869	0.01347	0.05608	1				
Funds Raised	0.017629987	0.10974	0.04617	0.09272	1			

Turnover	0.095724299	0.14691	0.038	0.09745	0.628936389	1		
DR Ratio	-0.382264969	0.94781	0.15387	0.00998	0.103620505	-0.13973	1	
M1 Supply	0.277946792	0.96624	0.1281	0.02179	0.098200079	0.12516	0.89052	1

Table 2- Correlation Table

The correlation table shows us the relationship between different variables, which can also verify our previous hypotheses.

The correlation table shows us the relationship between different variables, which can also verify our previous hypotheses. From this table, we can find that IPO underpricing is indeed related to the preset independent variables, instability (including GDP and DR ratio). GDP and underpricing have a positive relationship (the value is approximately 0.34) and have a negative relationship with the DR ratio (the value is approximately -0.38), which also verifies our hypothesis that IPO underpricing is related to instability. GDP has a positive relationship with IPO underpricing, while DR ratio has a negative relationship with IPO underpricing. From this, we can also find that Chinese companies listed from 2015 to 2020 are greatly affected by the economic environment, and all industries are affected by the country's monetary policy, currency in circulation, and gross national product. From the table, we can also find that M1 money supply also has a positive relationship with IPO underpricing (value is about 0.28), that is, under other conditions unchanged, the more

currency circulating in the market, the more the IPO underpricing. The more serious the price. In addition, the company's ROA, P/E ratio, transaction volume on the day of issuance and the amount of funds raised do not have a strong relationship with IPO underpricing (the values are all less than 0.1). Although from the literature, we can know that these factors (ROA, P/E ratio, etc.) greatly affect the company's IPO, but in terms of results, the impact on IPO underpricing is very limited.

Regression Statistics	
Multiple R	0.473211631
R Square	0.223929248
Adjusted R Square	0.220480045
Standard Error	0.702965434
Observations	1583

Table 3- Regression Statics

From this regression table, it reflects the coefficient of determination, multiple correlation coefficient, standard error, observations.

According to the table, after deleting some invalid data, there are 1583 observations in total. The multiple R is about 0.47 which shows that the correlation coefficient between the independent variable and the dependent variable is not so approximately to 1. Thus, they are not having a strong correlation. Additionally, the R Square is about 0.23 which means that the independent variable can approximately explains 23% of the dependent variable. As for the adjusted R Square, it is about 0.22 and also

indicates that the independent variable can explain about 22 percentage of the dependent variable.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	2.925623307	0.809437119	3.61439232	0.00031052	1.3379356	4.51331	1.337936	4.51331
GDP	3.4396E-06	8.61829E-07	3.99104945	6.8805E-05	1.749E-06	5.1E-06	1.75E-06	5.1E-06
P/E Ratio	0.002221204	0.000240153	9.24912218	7.1305E-20	0.0017502	0.00269	0.00175	0.00269
ROA	0.030371338	0.27752077	0.10943807	0.91286898	-0.513978	0.57472	-0.51398	0.57472
Funds Raised	-2.91915E-11	9.9717E-12	-2.9274321	0.00346679	-4.88E-11	-1E-11	-4.9E-11	-9.6E-12
Turnover	9.93572E-10	3.36026E-10	2.95683269	0.00315444	3.345E-10	1.7E-09	3.34E-10	1.7E-09
DR Ratio	-0.13135004	0.024856666	-5.2842983	1.4385E-07	-0.180106	-0.0826	-0.18011	0.08259
M1 Supply	-6.77E-06	1.03291E-06	-6.5575873	7.3937E-11	-8.8E-06	-5E-06	-8.8E-06	-4.7E-06

Table-4 Regression Output

According to the table, there are different coefficients for different independent variables on the dependent variable. It means that the influence of different x on y, that is, every time x changes an observation object to change y, it is also the coefficient in the regression equation.

In the aspect of P-value, when  $P < 0.05$ , the model can be considered significant at the level of  $\alpha = 0.05$ , or the confidence level reaches 95%; when  $P < 0.01$ , the model can be considered significant at the level of  $\alpha = 0.01$ , or the confidence level reaches 99%;

According to the table, there's only one independent variable, ROA, has a P-value

which is larger than 0.05. It means that we should accept the null hypothesis. Thus, the null hypothesis should be rejected besides the one related to ROA.

## **Conclusion**

The instability has a significant relationship with IPO underpricing. This paper uses deposit-reserve ratio and GDP to measure the instability and proves that there's positive relationship between GDP and IPO underpricing and a negative relationship between deposit-reserve ratio and IPO underpricing. From looking through the result, IPO underpricing rate for the companies listed from 2015 to 2020 has relatively steady change while fluctuates greatly after 2018. The general movements of the IPO underpricing also reflects that the changes of external and internal environment of pricing a listed company. Meanwhile, the study also reveals that other factors besides the instability of the firm, the P/E ratio, M1 money supply, Turnover, funds raised and ROA. However, since in the t-test, the P-value of ROA is larger than 0.05, it indicates that there is no significant relationship between ROA and IPO underpricing.

## **Limitations and Contributions**

Generally, the paper has many limitations and requires lots of improvement.

One limitation is that there are more factors other than M1 money supply, P/E ratio, ROA, funds raised that could influence IPO underpricing. In reality, there are other factors or there are factors like local policy which cannot be measured and qualified and put into this formula.

Then, since the data is ranging from 2015 to 2020 which only lasts for 5 years which

would be likely to be influenced by accidents or large public events, resulting in too many abnormal values. That is also the reason why the summary output indicates a relatively small R square value and a high SS. Additionally, with more observations putting into the model, the result will be more accurate and convincing as well. However, due to the difficulty of finding longer periods of data, the study could not apply a larger dataset.

However, although the paper has some limitations, it still provides readers with useful information and implications. Since the stock market in China is huge where there are many investors lack of financial knowledge, this paper will help the investors understand more about the factors that influence IPO underpricing especially the instable factors, which will help them make better decisions. Additionally, the paper also analyzes the field which other authors may not pay attention to. By catalogizing some of the factors that influence IPO underpricing into instability, it provides readers with more thoughts on the “accidents” not just the regular factors like firm performance.

## References

Di, G. & Kun, J., 2015, *Venture Capital Investment and the Post-IPO Performance of Entrepreneurial Firms: Evidence from the People's Republic of China* from <https://direct.mit.edu/adev/article/32/1/113/9875/Venture-Capital-Investment-and-the-Post-IPO>

Haifeng, G. & Ying, W., 2020, *Do CEO Attributes Create Value in IPO Price Revision? Evidence from China*  
From [Full article: Do CEO Attributes Create Value in IPO Price Revision? Evidence from China \(tandfonline.com\)](#)

Lin, W. & Sarbina, H., 2020, *Policy Uncertainty and Innovation: Evidence from IPO Interventions in China*  
From <https://www.nber.org/papers/w24657>

Lu, Z. & Jingcai, L., 2018, *IPO over-funding and cost stickiness*  
From [https://www.tandfonline.com/doi/full/10.1080/16081625.2019.1601024?casa\\_token=zo7fOmpYWUkAAAAA%3AWyPexwdhMzkJmb-mZKJp-1eBGUYdxAdZ4ZMuqj-OJND1f1aB2SnIt9\\_HHMni8KS6Y17ucLBjENxuzFQ](https://www.tandfonline.com/doi/full/10.1080/16081625.2019.1601024?casa_token=zo7fOmpYWUkAAAAA%3AWyPexwdhMzkJmb-mZKJp-1eBGUYdxAdZ4ZMuqj-OJND1f1aB2SnIt9_HHMni8KS6Y17ucLBjENxuzFQ)

Jing, C. & Cheng, S., 2018, *The distinct signaling effects of R&D subsidy and non-R&D subsidy on IPO performance of IT entrepreneurial firms in China* From [https://www.sciencedirect.com/science/article/pii/S004873331730166X?casa\\_token=2R\\_r0EX44EMAAAAA:jvj\\_cKoY3DtpiuGS4rxcrHHGD1RVxfMpWTpDau-EKTO\\_dfpuwneHZrfq0sUDJLyuhBP3dLkfvH3i](https://www.sciencedirect.com/science/article/pii/S004873331730166X?casa_token=2R_r0EX44EMAAAAA:jvj_cKoY3DtpiuGS4rxcrHHGD1RVxfMpWTpDau-EKTO_dfpuwneHZrfq0sUDJLyuhBP3dLkfvH3i)

Velamuri, S. & Wilson, 2016 *Ownership structure, insider behavior, and IPO performance of SMEs in China* from <https://link.springer.com/content/pdf/10.1007/s11187-016-9797-7.pdf>

Wenxiu, T. & Bing, Z., 2019, *Does the threshold of information disclosure improve corporate governance? Evidence from China*  
From <https://link.springer.com/article/10.1007/s10660-019-09351-w>

Xin, W. & Di, S., 2021 *Does local corruption affect IPO underpricing? Evidence from China* from [https://www.sciencedirect.com/science/article/pii/S1059056021000071?casa\\_token=x6Mz\\_xrgdEoAAAAA:bZ5PxGjEiKcEFjw\\_KONxkuTGntUYFPzMWnXgniiDCIDvhnDXNR4jucxAUuSdNW-JcVk2teFu0FWK](https://www.sciencedirect.com/science/article/pii/S1059056021000071?casa_token=x6Mz_xrgdEoAAAAA:bZ5PxGjEiKcEFjw_KONxkuTGntUYFPzMWnXgniiDCIDvhnDXNR4jucxAUuSdNW-JcVk2teFu0FWK)

Yan, Z. & Yan, X., 2020, *Guanxi, media coverage and IPO approvals: Evidence from China*

[https://www.sciencedirect.com/science/article/pii/S0927538X20306806?casa\\_token=MKcRwW3SFfYAAAAA:xsLTnqbPt8O6vFyTJsp7q\\_IgSDObDMPCBi4PVZqhnUsin-2muadfWC0tUfSoUgnanbmzpWFjmsg](https://www.sciencedirect.com/science/article/pii/S0927538X20306806?casa_token=MKcRwW3SFfYAAAAA:xsLTnqbPt8O6vFyTJsp7q_IgSDObDMPCBi4PVZqhnUsin-2muadfWC0tUfSoUgnanbmzpWFjmsg)

Yingkai, T. & Li, Z., 2015, *Venture Capital and the Corporate Performance After IPO: Based China GEM Market*

From [Venture Capital and the Corporate Performance After IPO: Based China GEM Market | SpringerLink](#)