

Study on the Impact of Financing Constraints on The Marketization Process

-- Based on A Domestic Macro-Circulation Perspective

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Abstract: In recent years, China has proposed to build a new development pattern with the domestic great cycle as the main body and the domestic and international double cycle promoting each other, and in this context, it explores how to promote the domestic great cycle and build a unified domestic big market from the micro level. This paper selects the data of Chinese A-share listed enterprises from 2011 to 2021 as a sample, studies the relationship between corporate financing constraints and the marketization process, explores the role of the mechanism, puts forward relevant hypotheses and conducts empirical research, and finally conducts the relevant heterogeneity test. It is found that there is a significant negative correlation between corporate financing constraints and the marketization process, in which the characteristics of state-owned enterprises, economically underdeveloped regions, and a higher degree of environmental regulation make the negative relationship stronger, and the conclusion still holds after further testing. The test of the mechanism of action shows that enterprise innovation, enterprise investment and residents' consumption are the three mechanisms through which financing constraints play a role in the marketization process.

Keywords: Financing constraints, Domestic general circulation, Marketization, Innovation, Investment, Consumption.

1. Introduction and Literature Review

2022 In April 2022, the Opinions of the Central Committee of the Communist Party of China and State Council on Accelerating the Construction of the Nationwide Unified Big Market was released, which clearly put forward the need to accelerate the establishment of a nationally unified market system and rules, break local protection and market segmentation, open up key blockages restricting the economic cycle, and accelerate the construction of a nationally unified big market that is highly efficient and standardized, fair and competitive, and fully open. Therefore, it is necessary to build a national unified market to better promote the internal economic cycle and to support a new development pattern in which the domestic cycle is the mainstay and the domestic and international cycles are mutually reinforcing.

The definition of the domestic macro-cycle includes four links: production, distribution, exchange and consumption, and a smooth economic cycle requires the organic coordination of the four links [1, 2]. From the international perspective, the world's macroeconomic situation is grim, geopolitical conflicts are frequent, and Western countries are worried about China's rise, China's economy has shifted from an external cycle to an internal cycle, which can give full play to the advantages of the domestic mega-market and attenuate the negative impacts on China's development from external factors, which is in line with the current international situation. In addition, from the domestic perspective, science and technology is the first productive force, China's basic science development attaches low importance to the output of a large number of high-quality papers, but the innovative power in the world's major countries is still backward, the conversion rate of science and technology is low; the domestic market in the super-large-scale market in the market to bring the advantages of the same time, but also need to have a matching scale of employment, China's supply-side structural reforms

to promote the transformation and upgrading of the industry, the new provision of high-end jobs can not meet the huge domestic demand for employment. China's supply-side structural reform to promote industrial transformation and upgrading, the new high-end jobs can not meet the huge domestic demand for employment, while China's education system to cultivate the level of intellectuals can not meet the requirements of the domestic job market; China's vast territory coupled with tilted policies, the level of economic development between the regions and the urban and rural areas there is a huge gap in the level of economic development, the gap between the rich and the poor is large, and the problem of income distribution is hindering the goal of common prosperity; China's inter-provincial and inter-regional circulation of commodities and factor circulation There exists a serious market segmentation [3], which is not conducive to the formation of a unified domestic market; the problem of China's large economic volume but low per capita income level also restricts the consumption demand of residents. There are urgent problems in every link of the domestic cycle, and only by solving these problems can the domestic cycle be truly smooth.

The relationship between financing constraints and firm innovation has been explored in the literature. Digital finance [4], supply chain changes [5], and knowledge network centrality [6] through financing constraints thereby affecting firms' innovations and innovation efficiency, while Hall B H [7] and Hottenrott H [8] investigated the direct impact of financing constraints on innovation. The effect of financing constraints on the intensity of corporate R&D expenditures is significantly negative, the lower the financing constraints, the lower the cost of capital of the enterprise, the higher the R&D expenditures, and the more it can promote the level of innovation and innovation efficiency, in addition to the factors of enterprise size, property rights attributes and capital intensity play a moderating role in the effect of financing

constraints on innovation [9]. In addition to innovation, financing constraints also affect enterprise investment efficiency, especially more obvious in non-state-owned enterprises [10], state-owned enterprises will receive credit support from the government due to policy tilting, and the credit resources of non-state-owned enterprises have been seriously squeezed out, so from the financing point of view, non-state-owned enterprises are facing a higher cost of financing relative to state-owned enterprises, which in turn affects the investment efficiency of state-owned enterprises and non-state-owned enterprises. The investment efficiency of both state-owned and non-state-owned enterprises is affected. Finally, financing constraints also affect residents' income. On the one hand, changes in China's financial environment and the credit system dominated by state-owned banks make non-SOEs face serious financing constraints, and in order to alleviate the predicament, non-SOEs are forced to shift from exogenous to endogenous financing, and the increase in retained earnings of enterprises crowds out the distribution of profits to the labor force, lowering household incomes, which, coupled with China's tradition of thriftiness and frugality, inhibits the consumption of the residential sector [11, 12]. On the other hand, the financing constraint also affects the distribution of income in the residential sector by influencing firms' labor productivity, savings rate [13, 14, 15], and labor force hiring, especially hiring of highly educated talents [16, 17], which in turn acts on residential consumption.

The above studies provide perspectives on the rationality of China's new development pattern and the key issues facing the smooth flow of the domestic macrocycle in the current environment, as well as an in-depth discussion of the hot issue of financing constraints of Chinese enterprises. These literatures provide theoretical support for an in-depth understanding of the topic of this paper, i.e., the impact and mechanism of financing constraints on the domestic macrocycle, but there is little literature linking the two together, specifically in the following aspects: most of the literature on the domestic macrocycle focuses on the macro level, such as its theoretical logic and policy initiatives, and very little literature examines the impact of the micro level on the domestic macrocycle; and a portion of the studies on the domestic macrocycle focus on the macro level. Another part of the research on domestic macrocycling proposes innovations in measurement methods, such as input-output tables based on the national and regional levels [18, 19] or the measurement of market segmentation indices [20, 21, 22].

Compared with the existing literature, the possible innovations of this paper are as follows: firstly, from the research content, this paper is based on the micro perspective of enterprise financing constraints and the macro perspective of the domestic macro-cycle, and it is the first time to study the relationship between enterprise financing constraints and the domestic macro-cycle, and it proposes a number of conduction paths for validation, which enriches the theory of financing constraints and the domestic macro-cycle from the analysis of heterogeneity from multiple perspectives, and provides policy suggestions and guidance that can be entered into and specifically operated in order to facilitate the domestic macro-cycle in China. It provides policy suggestions and guidance that can be cut through and operated concretely; in addition, in terms of indicator measurement, since promoting domestic macro-circulation requires the construction of a unified domestic macro-market, this paper draws on the experience of Ziruo Li [20] and Xiaolu

Wang [23] and uses the marketization index to measure the level of domestic macro-circulation.

2. Theoretical Analysis and Research Hypotheses

Enterprises are the great driving force of China's economic development, absorbing the employment of Chinese society and bearing the heavy responsibility of scientific and technological research and development. Easing the financing constraints of enterprises, especially those of private enterprises, will effectively enhance the production efficiency of China's enterprises, raise the income of the residential sector, and increase the ratio of re-investment and the efficiency of investment [24].

Enterprise innovation is a long-term continuous process and faces higher risks and information asymmetry problems, innovative enterprises have huge R&D risks, so it is more difficult for innovative enterprises to obtain financing. External financing constraints significantly inhibit enterprise R&D investment [25], the availability of enterprise financing decreases, the scale of financing decreases, and enterprises are unable to obtain sufficient funds to invest in innovative R&D activities. Banks' credit and credit limits to enterprises also affect the probability of R&D and R&D investment density [26]. Enterprises may seek internal financing when facing serious external financing, but only if they have enough retained earnings as well as sustainable subsequent revenues to support such a large innovation investment. The current rise in the technological complexity of China's innovative designs and innovative products, the rise in R&D costs, the shortening of the product life cycle, the acceleration of iteration, and the decline in R&D productivity means that enterprises have to invest more and more quickly [27], so enterprises are basically unsustainable by relying only on endogenous financing and must rely on external financing. This paper proposes a second hypothesis.H2: Financing constraints affect the domestic general circulation through firms' innovation inputs.

High-quality investment projects can enhance a company's sustainability, but the final decision depends on the strength of the company's financing ability, and the company's investment decision cannot be independent of its financing decision. The theory of preferential financing explains that the cost of external financing is higher than the cost of internal financing, and if the enterprise cannot obtain the financing support required for the optimal level of investment, then it can only turn to internal financing thus leading to the problem of underinvestment. Research has proved that the investment and cash flow of listed enterprises in China are highly sensitive, and the problem of financing constraints is serious [28], which makes it difficult for enterprises to obtain sufficient funds to carry out investment activities, and prevent them from reaching the optimal investment level. At the same time, China's economic transformation has not been completed, the financial supply structure is unreasonable, and the role of investment activities in promoting economic growth has been weakened. This paper puts forward the third hypothesis.H3: Financing constraints affect the domestic general circulation through the investment efficiency of enterprises.

Because of the existence of external financing constraints, enterprises are forced to turn to internal financing for innovative and investment activities, which crowds out the

income distribution of the residential sector. Consumption is the last link of the domestic macro-cycle, which is the ultimate purpose and final flow of the whole cyclic process, and with low residential consumption, the domestic economy cannot complete the cycle. This paper proposes a fourth hypothesis.H4: Financing constraints affect the domestic macro-cycle through residential consumption.

3. Research Design

3.1. Sample selection and data sources

This paper conducts an empirical study based on the data of China's A-share listed companies from 2011 to 2021. In this paper, the data samples are treated as follows: (1) the samples of listed firms in the financial industry are excluded; (2) the samples of firms with ST, *ST, PT, as well as suspended and delisted firms are excluded; (3) the samples of firms with gearing ratios greater than 100%, less than 0%, and with negative owner's equity are excluded; and (4) the samples of firms with missing key data are excluded. (5) The remaining missing data are supplemented by linear interpolation. After the above processing, 25,668 sample observations are finally obtained. All sample data in this paper come from CSMAR database and city yearbooks.

3.2. Definition of variables

3.2.1. Explained variables

Marketization process (Market). The current theories of domestic general circulation measurement include: using the dependence of industrial value added on domestic and foreign demand [29]; constructing measurement indexes based on dependence and so on [30]; and from the perspective of supply and demand of intermediate and final goods [18]. This paper is based on the Fan Gang marketization index compiled by Wang Xiaolu [23] and using the method of Qian Wei [31] to calculate the market index represents the domestic macro-circulation, and the higher the marketization index, the higher the level of the domestic macro-circulation.

3.2.2. Explanatory variables

Financing constraint (KZ). This paper draws on the research of KAPLAN and ZINGALES [32] and uses the methodology of Yue Tan [33] and Zhihua Wei [34] to construct the KZ index to construct a financing constraint indicator, where a larger index implies that a listed company faces a higher degree of financing constraint.

3.2.3. Mediating variables

Enterprise Innovation (RD), Enterprise Investment (Investment), and Consumption. Enterprise innovation uses the logarithm of RD investment by listed firms, enterprise investment draws on the model of Richardson [35] to calculate the efficiency of enterprise investment, and consumption by residents uses per capita consumption expenditures of residents in the urban yearbook.

3.2.4. Control variables

In this paper, the following control variables are selected: firm size (Size), gearing ratio (Lev), equity concentration (Share), growth rate of operating income (Growth), Tobin's Q (TobinQ), operating year of the firm (Age), net cash flow from operations (Cfo), Z-value (ZScore), the number of shares held by the management (Mh), the total compensation of the management (Mss), the proportion of independent directors (IDR), industry dummy variables (d_industry), and time dummy variables (d_year). (Mss), proportion of

independent directors (IDR), industry dummy variable (d_industry), and time dummy variable (d_year).

3.3. Modeling

This paper empirically examines the impact of financing constraints on the marketization process based on data from listed firms using a fixed effects model, controlling for year and industry fixed effects and constructing the following model:

$$\text{Market}_{it} = \beta_0 + \beta_1 \text{KZ}_{it} + \beta_2 \text{Size}_{it} + \beta_3 \text{Lev}_{it} + \beta_4 \text{Share}_{it} + \beta_5 \text{Growth}_{it} + \beta_6 \text{TobinQ}_{it} + \beta_7 \text{Age}_{it} + \beta_8 \text{Cfo}_{it} + \beta_9 \text{ZScore}_{it} + \beta_{10} \text{Mh}_{it} + \beta_{11} \text{Mss}_{it} + \beta_{12} \text{IDR}_{it} + \sum \text{d_year} + \sum \text{d_industry} + \varepsilon_{it} \quad (1)$$

$$\text{M}_{it} = \mu_0 + \mu_1 \text{KZ}_{it} + \mu_2 \text{Size}_{it} + \mu_3 \text{Lev}_{it} + \mu_4 \text{Share}_{it} + \mu_5 \text{Growth}_{it} + \mu_6 \text{TobinQ}_{it} + \mu_7 \text{Age}_{it} + \mu_8 \text{Cfo}_{it} + \mu_9 \text{ZScore}_{it} + \mu_{10} \text{Mh}_{it} + \mu_{11} \text{Mss}_{it} + \mu_{12} \text{IDR}_{it} + \sum \text{d_year} + \sum \text{d_industry} + \varepsilon_{it} \quad (2)$$

$$\text{Market}_{it} = \varphi_0 + \varphi_1 \text{M}_{it} + \varphi_2 \text{KZ}_{it} + \varphi_3 \text{Size}_{it} + \varphi_4 \text{Lev}_{it} + \varphi_5 \text{Share}_{it} + \varphi_6 \text{Growth}_{it} + \varphi_7 \text{TobinQ}_{it} + \varphi_8 \text{Age}_{it} + \varphi_9 \text{Cfo}_{it} + \varphi_{10} \text{ZScore}_{it} + \varphi_{11} \text{Mh}_{it} + \varphi_{12} \text{Mss}_{it} + \varphi_{13} \text{IDR}_{it} + \sum \text{d_year} + \sum \text{d_industry} + \varepsilon_{it} \quad (3)$$

Where 'ε' is the random error term, 'I' represents listed firms, 't' represents the year, 'M' is the mediating variable (RD, Investment, Consumption)

4. Empirical Analysis

4.1. Benchmark regressions

Table 1 reports the test results of model (1) with the explanatory variable being the marketization process (Market) and the explanatory variable being the corporate financing constraints (KZ). The results in column (1) show that the estimated coefficient of KZ is about -0.018, which is significantly negative at the 1% level, which indicates that corporate financing constraints are negatively correlated with the marketization process, proving the research theme of this paper. In order to prevent other factors from interfering with the results, this paper controls other variables such as enterprise size, gearing ratio, etc. The results are shown in column (2), and the estimated coefficient of KZ is also significantly negative at 1% level, which indicates that enterprise financing constraints are negatively correlated with the process of marketization, i.e., the higher the degree of enterprise financing constraints, the lower the process of marketization, and the lower the level of the domestic macrocycle. All the above results are in line with the expected theoretical analysis that easing financing constraints can promote domestic macro-circulation.

4.2. Robustness tests

4.2.1. Culling of samples

First, excluding the impact of major macro events, this paper excludes the data during the 2020 and 2021 New Crown epidemics because the outbreak of the epidemic may have an impact on the study of this paper. After excluding the above samples, the regression results are still significant, but the significance is reduced, which indicates that the epidemic makes the impact of financing constraints on the process of marketization deepen greatly, and in the stagnant state of enterprise production activities caused by the epidemic, the reduction of financing constraints is more able to promote the production activities of enterprises, improve the level of marketization, and unimpeded the domestic macro-

circulation. In addition, this paper deletes the data of any year from 2011 to 2021, the regression results are still significant. The findings of this paper are robust.

4.2.2. Substitution of variables

In this paper, we change the measurement method of the explanatory variable financing constraints, and adopt SA index and FC index as the alternative indexes of financing constraints KZ index for testing. The regression results are

shown in Table 2, when no control variables are added and only industry and year are controlled, both SA index and FC index are significant at 1% level; when control variables are added and industry and year are controlled, SA index and FC index are still significant at 1% level, which indicates that the lower the financing constraints of enterprises are, the higher the process of marketization is, and the conclusion of the previous paper is robust.

Table 1. Benchmark model regression results

variable	(1) Market	(2) Market
KZ	-0.018*** (0.004)	-0.017*** (0.006)
control variable	NO	YES
_cons	10.103*** (0.099)	10.609*** (0.200)
observed quantity	25143	23278
variance (statistics)	0.500	0.505
Industry dummy variables	Yes	Yes
Year dummy variable	Yes	Yes

Table 2. Replacement variable test results

variable	(1) Market	(2) Market	(3) Market	(4) Market
SA	-0.230*** (0.039)	-0.574*** (0.092)		
FC			0.208*** (0.042)	-0.278*** (0.088)
_cons	9.240*** (0.171)	8.583*** (0.391)	9.920*** (0.107)	11.123*** (0.265)
control variable	NO	YES	NO	YES
Industry dummy variables	YES	YES	YES	YES
Year dummy variable	YES	YES	YES	YES
observed quantity	25668	23278	23283	23278
variance (statistics)	0.499	0.506	0.503	0.505

5. Heterogeneity Analysis

5.1. Financing constraints, property rights attributes and the marketization process

A large number of studies on financing constraints have mentioned the impact of property rights attributes on financing constraints. State-owned enterprises (SOEs) are backed by the government, and it is easier for them to obtain high-quality orders to enhance their revenue capacity, and they are more advantageous in terms of external financing, with little operational and bankruptcy risks, which makes them less constrained by financing compared with non-SOEs. The Fan Gang Marketization Index, which this paper draws on, has secondary indicators such as "development of non-state economy" and "degree of development of product market", which reflects that there are indeed differences in the impact of property rights attributes on the marketization process, which is related to the theme of this paper. In this paper, the enterprises belonging to "state-run or state-controlled" and "institutions" in the attributes of property rights are set as state-owned enterprises, which are represented by 1; the enterprises belonging to "Sino-foreign equity joint venture" and "private enterprise" are set as non-state-owned enterprises, which are represented by 0. "private enterprises" as non-state-owned enterprises, represented by 0. In this paper, we add the cross-multiplier terms of property

rights attributes, financing constraints and property rights attributes to the base model for regression, and conduct group regression test at the same time. The results indicate that the alleviation of financing constraints has a stronger effect on the enhancement of the marketization process for SOEs compared to non-SOEs, which may be due to the fact that: the state-owned economy is the lifeblood of China's economy and possesses a stronger ability to allocate resources, and the financing advantage of SOEs further crowds out non-SOEs; the Chinese government and the economy are closely linked, and the SOEs are the means by which the government achieves its economic goals.

5.2. Financing constraints, level of economic development and the marketization process

According to the latest opinion, China is divided into four major economic regions, namely, the east, the center, the west and the northeast, with large differences in geography, economy and natural resources among the regions, with the east having advantages in economy, science and technology, and education, and the west being rich in natural resources. In this paper, the east and center are set as economically developed regions, represented by 1, and the northeast and west are set as economically underdeveloped regions, represented by 0. Similar to the heterogeneity test of property

attributes in the previous part, the results of this part of the test show that: the coefficient of the cross-multiplier term is significantly positive at the 1% level, in addition, the coefficient of the grouped regression of the economically developed regions is not significant, the coefficient of the grouped regression of the economically underdeveloped regions is significantly negative at the 1% level, the test of the grouped regression of the coefficient of the difference between the groups is significant and passes, and the results of the cross-multiplier test and the grouped regression test are consistent with the results, which indicates that economically developed regions The influence of financing constraints on the marketization process is weakened, and changes in financing constraints in economically less developed regions are more effective. This conclusion may be due to: economically developed regions are very full of all kinds of factors of production, the impact of changes in a single factor on the marketization process does not appear to be prominent; the interval of the sample data in this paper is from 2011 to 2021, and the level of marketization in economically developed regions in this period is already quite high, so that the marginal effect of the enhancement is weakened.

5.3. Financing constraints, environmental regulations and the marketization process

In the process of marketization and the domestic general cycle, green development has become increasingly prominent, adjusting the industrial structure, developing high-tech industries such as artificial intelligence, new energy and digital economy, and restricting highly polluting traditional industries. The industrial structure, natural environment, and human geography of each region in China are different, and the degree of environmental regulation varies. The level of environmental regulation will inevitably affect the financing constraints of enterprises in the region as a whole, as well as those of enterprises in different industries. This paper draws on the environmental regulation measurement methods of Yijun Yuan [36] and Jingyan Fu [37], and uses the city-level pollutant emission weighting method to measure the environmental regulation indicators at the city level in China from 2011 to 2021, using the average of 11 years of environmental regulation in each city as the critical value, with years less than the average value being low environmental regulation, which is denoted by 0, and years above the Years smaller than the average are considered low environmental regulation and are denoted by 0, and years above the average are considered high environmental regulation and are denoted by 1. The specific test method is the same as above. The final group regression test is consistent with the cross-multiplier test: environmental regulation plays a positive moderating role in the financing constraints on the marketization process, i.e., the stronger the local environmental regulation, the greater the impact of financing constraints on the marketization process. Environmental regulation can drive industrial structure upgrading [44], thus promoting the marketization process and unblocking the domestic general circulation. In these 11 years, environmental regulation has been increasing over time, and

the samples in the latter half of the years are all in the high environmental regulation group, which may be a problem: environmental regulation does not produce a moderating effect, it is some other factor that plays a moderating role, it just happens to be in a high environmental regulation sample, in this regard, this paper takes the average of the environmental regulation in all the cities in each year as a critical value, and the cities that are lower than the critical value are low in In this regard, the paper takes the average value of environmental regulation of all cities in each year as the critical value, and cities below the critical value are considered low environmental regulation, while cities above the critical value are considered high environmental regulation.

6. Mechanism of Action Test

In this paper, we believe that financing constraints affect the marketization process mainly through three mechanisms: enterprise innovation, enterprise investment and residents' consumption demand. According to the model, if the coefficient β_1 is significant, then test the effect of explanatory variable KZ on mediating variable RD; if the coefficient μ_1 is significant, then test the effect of explanatory variables and mediating variables on the explained variables; if the coefficient φ_1 is significant and the coefficient φ_2 is not significant, then the mediating variable RD is fully mediated effect; if the coefficient φ_1 is significant and the coefficient φ_2 is significant, then the mediating variable RD is partially mediated effect; if the coefficient φ_1 is not significant, then there is no If the coefficient φ is not significant, there is no mediating effect.

6.1. Financing constraints, firm innovation and the marketization process

The regression results are shown in Table 3: in column (1), the coefficient of the explanatory variable KZ is about -0.017, which is significant and negative at 1% level; in column (2), the coefficient of KZ is about -0.036, which is significant and negative at 1% level, indicating that financing constraints negatively affect innovation; in column (3), both KZ and RD are examined in terms of their impact on the marketization process, and the coefficient of KZ is about -0.016 and the degree of influence has decreased compared to the previous one, which is significant at the 5% level, and the RD coefficient is about 0.036, which is significant at the 1% level. The Sobel test for the mediating effect shows a Z value of -3.729 and is significant at the 1% level. Bootstrap test of mediation effect (set the number of regressions as 500) shows that the Z value of RD is -3.59 with a p-value of 0, which does not include the value of 0 in 95% confidence interval, and the Z value of KZ is -2.46 with a p-value of 0.014, which does not include the value of 0 in 95% confidence interval, which proves that there is a mediation effect. Both the Sobel test and Bootstrap test are passed, and corporate innovation is the most important factor in the development and growth of enterprises. test both pass, corporate innovation is the mechanism by which financing constraints affect the marketization process, and hypothesis one is valid.

Table 3. Financing constraints, firm innovation and the marketization process

variable	(1) Market	(2) RD	(3) Market
KZ	-0.017*** (0.007)	-0.036*** (0.006)	-0.016** (0.007)
RD			0.036*** (0.008)
_cons	14.509*** (1.614)	9.680*** (1.437)	14.157*** (1.614)
control variable	Yes	Yes	Yes
Industry dummy variables	Yes	Yes	Yes
Year dummy variable	Yes	Yes	Yes
observed quantity	21480	21480	21480
variance (statistics)	0.501	0.495	0.502

6.2. Financing constraints, enterprise investment and the marketization process

The regression results are shown in Table 4: in column (1), the coefficient of KZ is about -0.018 and significant at 1% level; in column (2), the coefficient of KZ is about -0.003 and significant at 1% level, which indicates that financing constraints are negatively related to the investment efficiency of firms; in column (3), the coefficient of KZ is about -0.019

and significant at 1% level, and the coefficient of Investment is about -0.302 and significant at 5% level. Sobel's test shows that Z value is 2.157 with p-value of 0.031, which is significant at 5% level. Bootstrap's test shows that Z value is 2.28 with p-value of 0.023, which doesn't contain zero value at 95% confidence interval. The result of the test proves that hypothesis two is valid and the mediating effect of business investment is established.

Table 4. Financing constraints, business investment and the marketization process

variable	(1) Market	(2) Investment	(3) Market
KZ	-0.018*** (0.006)	-0.003*** (0.000)	-0.019*** (0.006)
Investment			-0.302** (0.137)
_cons	10.686*** (0.218)	0.093*** (0.011)	10.714*** (0.219)
control variable	Yes	Yes	Yes
Industry dummy variables	Yes	Yes	Yes
Year dummy variable	Yes	Yes	Yes
observed quantity	22751	22751	22751
variance (statistics)	0.504	0.088	0.505

6.3. Financing constraints, consumption and the marketization process

The regression results are shown in Table 5, in column (1), the coefficient of KZ is about -0.017, which is significant at 1% level; in column (2), the coefficient of KZ is 0.041, which is significant at 1% level; in column (3), the coefficient of KZ is about -0.013, which is significant at 5% level, and the

coefficient of Consumption is about -0.088, which is significant at 1% level. In Sobel test, Z value is -5.778, significant at 1% level. In Bootstrap test, Z value is -5.79, p value is 0, and it does not contain 0 value at 95% confidence interval. Both Sobel test and Bootstrap test pass, indicating that Consumption plays a mediating effect in the impact of financing constraints on the process of marketization, and hypothesis three is established.

Table 5. Financing constraints, consumption and the marketization process

variable	(1) Market	(2) Consumption	(3) Market
KZ	-0.017*** (0.007)	0.041*** (0.006)	-0.013** (0.007)
Consumption			-0.088*** (0.007)
_cons	10.778*** (0.221)	8.568*** (0.213)	11.529*** (0.228)
control variable	Yes	Yes	Yes
Industry dummy variables	Yes	Yes	Yes
Year dummy variable	Yes	Yes	Yes
observed quantity	22093	22093	22093
variance (statistics)	0.504	0.168	0.508

7. Conclusions

China's new development pattern requires the construction of a unified and efficient national unified market, and it is crucial to understand the influencing factors and path mechanisms of the formation of the national unified market. In this paper, we select the data of listed enterprises and city yearbook data from 2011 to 2021 as samples to study the impact of enterprise financing constraints on the marketization process and its influence mechanism. This paper draws the following conclusions: financing constraints have a significant negative impact on the marketization process, i.e., alleviating financing constraints can effectively promote the marketization process, and the conclusions are still valid after the endogeneity test and the robustness test; the mediation effect test proves that financing constraints affect the marketization process mainly by influencing the three paths of enterprise innovation, enterprise investment, and residents' consumption; the heterogeneity test reveals that The heterogeneity test shows that the positive impact of the alleviation of financing constraints on the marketization process is greater in state-owned enterprises, economically underdeveloped regions, and high environmental regulation.

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