Government Intervention and Financial Access: Evidence from China[1]

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Abstract

This paper distinguishes between different forms of government intervention in a micro economy, including a firm's tax burden, regulatory stringency, state shares and collective shares. To the best of my knowledge, I offer a first attempt to explore how these types of government intervention affect a firm's financial access. With evidence from China, I use the 2005 World Bank Investor Climate survey data to confirm that a firm's financial access is promoted by its tax burden and regulatory stringency but constrained by its state shares and collective shares. My estimates are robust to the potential endogeneity issue, the different measures of financial access and different samples. Given that most governments explicitly or implicitly dictate financial resources, this paper offers general applications for government policies or corporate finance.

Keywords: *government intervention, financial access, developing countries*

JEL Classification: G21, G28, O17

Introduction

The recent literature finds that governments in most developing countries play an important role in allocating financial resources (Allen, Qian and Qian, 2005; Ayyagari, Demirguc-Kunt and Maksimovic, 2010; 2013; Cull et al., 2015 and Fu, 2016). However, the effect of government intervention is controversial and confusing (e.g., Hopkin and Rodriguez-Pose, 2007); as such, it is difficult to identify whether government intervention function as helping or grabbing. This paper distinguishes between different functions of government intervention and

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explores how those types of government intervention determine a firm's financial access.

As an additional novelty, this paper observes both government intervention and financial access on the micro level. More specifically, despite measuring a firm's financial access, it distinguishes between various types of micro government intervention. As Stiglitz (1989) points, government economic activity should be divided into production (including regulation, subsidy, fiscal policy, and public services) and consumption (including redistribution and purchases). Based on my data, this paper distinguishes government interventions in the forms of redistribution, regulation and (the public) entrepreneurship. Correspondingly, it captures the government intervention in a micro economy with a firm's tax burden, regulatory stringency or state shares (collective shares).

As this paper theoretically uncovers, different types of government intervention have distinct effects on a firm's financial access. First, a firm's tax burden constructs a beneficial connection with local governments, and then local governments tend to promote firms' financial access. Second, regulatory stringency upon a firm reduces risk and releases information for financial institutions, thereby incentivizing financial institutions to provide financial access to firms. Third, due to their poor stipulation of property rights, state shares or collective shares tend to generate a principal-agent problem. State shares or collective shares represent a political connection that may promote a firm's financial access, but the principal-agent problem will weaken the incentive of the government delegator to use political connection. In sum, I predict financial access is promoted by tax burden and regulatory stringency but constrained by state shares and collective shares.

With evidence from China, I first confirm predicted relationships. Next, considering that my measure of tax burden may have a reverse causality with financial access, I use an exogenous instrument variable (hereafter IV) to remove the endogenous bias. My IV is the number of days that the taxation department interacts with the firm. According to the definition, this IV is positively related to the firm's tax burden, but irrelevant for the firm's financial access. Even if taxation departments affect firms' business behaviour, they can only expropriate firms via formal or informal payments. It is insensible to believe that taxation departments intervene in the particular financial transaction. Accordingly, the taxation-interaction days can affect financial access through tax burden, at most. My IV estimates confirm a positive effect of tax burden on financial access.

To test the robustness of my estimates, I repeat the previous estimations with a different dependent variable or different samples. Considering that some scholars (e.g., Ayyagari, Demirguc-Kunt and Maksimovic, 2010) use the favourable

treatment on financing (favourable financing) to measure financial access, I also regress favourable financing on my variables of interest and obtain the same findings as before. In particular, favourable financing reflects the firm's ability to obtain financial access. Thus, the regressions of favourable financing document that various types of government intervention affect a firm's ability to obtain financial access. The regressions also lessen a concern that government intervention only affects the demand for financial access. Second, I repeat my previous estimations with the sample of Small and Medium Enterprises (SMEs) or large enterprises. My results show that the predicted relationships are significant for both SMEs and large enterprises. Ultimately, my estimates are also robust to different measures of financial access and different samples.

I collect evidence from China for the following reasons. First, as the largest developing economy with the fastest economic growth, China lacks well-developed legal and financial institutions. La Porta et al. (2004) rank China among the worst countries for intellectual property rights protection; whereas the financial system is and will be controlled by local governments in the foreseeable future (Linton, 2006). The poor legal and financial systems represent the common background in developing countries. Second, China's development has been imbalanced due to its staged liberalization policy. My data come from the World Bank Investment Climate Survey undertaken in 2005.[2] 120 cities and 12 400 firms in my data provide a rich sample. The rich sample helps reveal the relationship among government intervention and financial access. I admit that my data are relatively old and a Chinese economy may be special such that the empirical implications are limited. However, this paper is motivated to study the theoretical effect of government intervention for financial access. Because governments in most countries have an important role to play in promoting well-functioning financial systems (Demirgüç-Kunt, 2010), this paper can provide generalized insights for the theoretical effect.

This paper first contributes to the institutional economics in the issue of government intervention. Since the public choice school (e.g., Tanzi and Schuknecht, 2000 and Alesina, Gerald and Nouriel, 1992), the academic world consistently viewed government intervention as a "grabbing hand". This view can be concluded as "Washington consensus" (see IMF, 2002 and World Bank, 1997; 2004).[3] However, public choice school has been recently challenged (Hopkin and Rodriguez-Pose, 2007). An increasing number of scholars explain a helping hand

[2] The survey provides relevant variables in 2004 or in the period during 2002 – 2004. In particular, the variables used in this research are in 2004.

[3] The original Washington Consensus is a bit less extreme, but the simplified later interpretations of Washington Consensus are almost in line with the "grabbing hand" statement.

of government intervention for economic development (e.g., Che, 2005) or corporate finance (Fu, 2016). To solve the government intervention dispute, this paper explores the various types of government intervention (see review in Hopkin and Rodriguez-Pose, 2007) with cross-sectional data. To the best of my knowledge, I explore how a firm's financial access is affected by various types of government intervention, including tax burden, regulatory stringency and the public entrepreneurship (state shares or collective shares).

This paper also contributes to the literature on corporate finance. Ayyagari, Demirguc-Kunt and Maksimovic (2010) and Linton (2006) analyse firms' formal or informal financing, but they do not discover what determines the firm's financial access when legal institutions are undeveloped. Even when scholars uncover the impact of government intervention (e.g., Allen, Qian and Qian, 2005; Ayyagari, Demirguc-Kunt and Maksimovic, 2010; 2013; Cull et al., 2015 and Fu, 2016) on firms' financial access, they treat government intervention as an aggregative entity in economies. This paper explores how various types of government intervention affect financial access. Given that most governments in developing countries play an important role in directing financial resources (Ayyagari, Demirguc-Kunt and Maksimovic, 2013), it offers valuable applications for corporate finance.

The rest of the paper is organized as follows. Section 1 illustrates a theoretical framework to explore how a firm's financial access is affected by government intervention in the form of tax burden, regulatory stringency, state shares or collective shares. Section 2 introduces my data and variables, while Section 3 reports the main results for my hypotheses. Section 4 tests the robustness of my estimates with a new dependent variable or split samples and the last section concludes.

1. An Theoretical Framework

This section provides a theoretical framework for this study. First, I will illustrate the institutional background of China's financial system. It will be shown that all claims of Section 1.1 have a consolidated foundation around 2004/2005. However, the claims should be also effective for latest development because China's financial system is still controlled by the government (see Jiang and Kim, 2015). After that, I can uncover why various types of government intervention affect the firm's financial access.

1.1. China's Financial System: Governments Intervene in Corporate Finance

Government intervention is crucial in China's financial system. First, China's financial system is consisted of financial institutions, stocks, bonds and venture

capital; all these financial intermediaries are partially or wholly controlled by the government (see Ayyagari, Demirguc-Kunt and Maksimovic, 2010; Linton, 2006 and Allen et al 2005). China's open-door policy empowers the local governments with three administrative decentralization phases. One of the three phases is to delegate state-owned-enterprises (hereafter SOEs) and other public organizations to local governments. As a result, local governments have the power to intervene in corporate finance.

Second, local governments have an incentive to intervene in corporate financing. In the absence of legal institutions, every chief official of local governments must finish an economic mission of GDP growth determined by its upper government department. Otherwise, his performance will be poorly assessed; as such, he will lose his position, not to mention a promotion. Due to the incentive structure for promotion, local governments tend to actively create a business-friendly environment for firms (Huang, 1998).

Third, corporate finance heavily relies on financial loans, and financial institutions are willing to accept government intervention for credit extension. For one thing, China's stock market (Allen, Qian and Qian, 2005), the bond market (People's Bank of China, 2006) and the venture capital market (Zero2IPO, 2005) have much smaller scales than the banking sector at least before 2005.[4] For another, government intervention can pragmatically reduce the risk of financial institutions for their credit-lending. If firms are financed with the intervention of local governments and then fall in financial distress, the firms or the corresponding financial institutions will be bailed out by local governments. As one of illustrative clues, banks have to support investments with the pressure from local governments such that 30 – 40% of bank loans in China are not recovery in March 2006 (Economist Intelligence Unit, 2006), but only one bank is allowed to file bankruptcy in People Republic of China's history.

As described above, China's local governments have a power and an incentive to intervene in the financial system. Meanwhile, financial institutions are also incentivized to allow government intervention to determine their credit extension. The above three factors contribute local governments to build an alliance structure with financial institutions and firms (Wang, 2007). Correspondingly, the alliance theoretically guarantees the important role of government intervention on the access of firms to loans.

In China's financial market, there are two special types of firms, the ones with state shares or collective shares. In principle, state shares are owned by the state (or all Chinese); collective shares are owned by the whole group of employee,

[4] Given that World Bank Investment Climate Survey in 2005 provides data in 2004, the relevant examples in this paper involve economic variables around in 2004.

the particular organizations/community or the local government (Cui, 1998). However, state shares or collective shares are actually controlled by only local governments due to their poor legal belonging. When financial institutions are also controlled by local governments, the firm with state shares or collective shares has an advantage to seek government support in the financial market (Linton, 2006). In sum, the firm with state shares or collective shares has unclear property rights allocation and inherent political connection, which may generate contradictory effects on financial access. I will later explore this issue in detail.

1.2. Theoretical Effects and Hypotheses

In economics words, local governments contribute "critical inputs" (Naughton, 1992; 1994) in the financial market such that the government intervention determines firms' financial access. The following distinguishes the roles of government and studies the distinct types of government intervention.

Tax Burden and Financial Access

In the consumption aspect, governments collect tax from firms. I study a firm's tax burden for two reasons. For one thing, it can be objectively quantified from a firm's accounting report. For another, it definitely reflects the effect of government grabbing. Tax burden has been controlled to explain a series of firms' performance in the existing literature (Cai, Fang and Xu, 2011).

I predict a promotion effect of tax burden on financial access. As mentioned before, local governments construct a strategic alliance with firms and financial institutions. The strategic alliance strategically allocates resource to form a joint competition (Teng and Das, 2008). When firms contribute tax to local governments, local governments will be incentivized to support firms' operation and growth. Especially when local governments control financial institutions in their domains, local governments will support firms' financial access.

The promotion effect of tax burden on financial access does not rely on the corruption. Instead, it is guaranteed by the economic connection between local governments and firms. Moreover, the promotion effect is neither based on a formal connection between local governments and financial institutions. Even when local governments do not control financial institutions, local governments can also support firms to obtain financial access because "some government role is needed, at least in financing" (Hart, Shleifer and Vishny, 1997, pp. 1 144).

Hypothesis 1: *Tax burden upon a firm promotes the firm's financial access.*

Regulatory Stringency and Financial Access

As a regulator, governments intervene in production. I study the stringency of the regulatory regime (i.e., regulatory stringency) because it objectively reflects

the normalization role of the regulation. Due to its objectiveness,[5] regulatory stringency has been emphasized and measured by Djankov et al. (2002) and the World Bank (2006). Different from Djankov et al. (2002) and the World Bank (2006) with cross-countries data, I capture the regulatory stringency in the micro economy.

I predict a promotion effect of regulatory stringency on financial access because regulatory stringency clearly generates two types of positive effect, at least. First, regulatory stringency can reduce risk for financial institutions such that financial institutions will extend credit to firms with a larger probability. With reference to credit information theory pioneered by Jaffe and Russell (1976) and Stiglitz and Weiss (1981), regulatory stringency releases information to verify the qualification of firms in the market and then increases creditors' expected returns. Therefore, financial institutions will provide access to a firm when the regulatory regime is qualified by the more stringent regulation regime.

Second, regulatory stringency transmits a signal of trustworthiness in a market. More stringent regulation will leave more trustworthy firms in a market; other unqualified firms will exit. According to social capital theory, trustworthiness actually represents the social capital in the relational dimension (Tsai and Ghoshal, 1998). Thus, regulatory stringency will promote the trustworthiness of the firm in a market, which, in turn, indicates a relational capital of the firm with local governments. As described before, local governments construct a strategic alliance with firms and financial institutions. Therefore, regulatory stringency can promote a firm' financial access via the relational capital of the firm with local governments.

Hypothesis 2: *Regulatory stringency upon a firm promotes the firm's financial access.*

State Shares and Financial Access

As the owner of shares, the government also intervenes in the form of (public) entrepreneurship. In the existing literature (e.g., Tanzi, 2000), state share is the standard measure of government intervention in the ownership.

I admit state shares have a potential promotion effect on financial access. State shares reflect a political connection of the firm (e.g., Dong, Wei and Zhang, 2016), which theoretically promote firms to obtain government support (Agrawal and Knoeber, 2001) and then financial access (Faccio, 2006). Political-connection provides a natural channel to seek government help.

[5] Some scholars (e.g., Duvanova, 2014) captures regulatory burden instead, but regulatory burden cannot be objectively qualified. Regulatory burden can be generated by the rent seeking incentive of firms (Tollison, 2012) or by inefficient government quality (La Porta et al., 1999). Put differently, regulatory burden can be government helping or government grabbing unlike tax burden.

However, government support must be based on the effective corporate governance. A large body of literature has already confirmed that firms with state shares have a low efficiency due to the principal-principal problem (Young et al., 2008). Even when government delegators join the operation of the firm to deal with the principal-principal problem, the delegators still have an incentive to seek private interests than the government interests. Because the property rights of state shares have no clear belonging, the principal-agent problem cannot be addressed.

Precisely, according to Economics of Contract (e.g., Cheung, 1974), the property right is divided into usage right, transfer right and income right. When income rights of state shares cannot be clearly identified, the whole property rights of state shares cannot be protected. Thus, the incentive of state shares is weakened and the entrepreneurship of the whole firm will be constrained. Ultimately, state shares will constrain financial access even when state shares have advantage to seek government support.

Hypothesis 3: *State shares of a firm constrain the firm's financial access.*

I do not deny a possibility that the positive effect of state shares on financial access due to the political connection exceeds the negative effect of state shares due to the weak entrepreneurship. Accordingly, there is a counterpart hypothesis.

Hypothesis 3': *State shares of a firm promote the firm's financial access.*

Collective Shares and Financial Access

As another form of government entrepreneurship, collective shares are generated as a historical product of property rights reform in transition countries (Zhang and Logue, 2016).

This type of share belongs to some particular collectives, but it is actually controlled by local governments. China' government tends to delegate a particular official to deal with the issue of collective shares in each firm. Similar to state shares, collective shares weaken the efficiency incentive because the private interest of the delegated official does not equal the interest of the whole collective. Though collective shares also reflect the connection of the firm with governments, but the weak entrepreneurship behind collective shares tends to weaken the incentive to take use of the political connection.

Hypothesis 4: *Collective shares of a firm constrain the firm's financial access.*

I do not deny that the positive effect of collective shares on financial access due to the political connection may exceed the negative effect of collective shares due to the weak entrepreneurship. Accordingly, there is a counterpart hypothesis.

Hypothesis 4': *Collective shares of a firm promote the firm's financial access.*

2. Variables

The data on China's firms come from the World Bank Investment Climate Survey, which was undertaken in 2005. In the survey, there are 12 400 firms that are located across 120 cities in 30 provinces. All of these firms are surveyed from the 30 types of manufacturing industries. All variables are updated to 2004. The World Bank also provides other similar surveys, but I select the survey dataset in 2005 because (1) the used survey provides information on various types of government intervention and that (2) China's investment climate behind the survey can be figured out with objective evidences. I provide the definitions of variables and representative references in Table 1. The descriptive statistics and the correlation matrix for main variables are reported in Table 2.

Dependent Variable (Financial Access and Favourable Financing)

I use a dummy variable to measure whether the firm has financial access. Precisely, the dummy variable is based on the manager's response to the question: "Does your company have loans from banks or other financial institutions?" As mentioned above, firms rely on financial loans for corporate capital. China's bond market (People's Bank of China, 2006) and the venture capital market (Zero2IPO, 2005) have extremely smaller size than financial institutions'. Even if the size of stock market (Allen, Qian and Qian, 2005) cannot be overlooked, my data do not involve publicly listed firms. Thus, all scholars with the same survey (e.g., Ayyagari, Demirguc-Kunt and Maksimovic, 2010 and Cull et al., 2015) use access to financial loans to measure a firm's financial access. According to Pecking Order Theory, firms prefer internal finance to external finance because the former is less costly than the latter (Leary and Robert, 2005). Accordingly, when firms compete with capital demand, the ones that obtain access to (relatively costly) external finance have advantage in competition. More practically, given that external finance tends to be far larger than internal finance and that firms must have access to their internal finance, it is access to external finance that is critical for firms.

Given that the above dummy only objectively reflects a firm's financial access, I also use the answers of the respondents to the question of "Does your company enjoy favourable terms on overdraft or have a loan quota?" to measure *favourable financing*.

Favourable financing obviously reflects the trustworthiness of the surveyed firm from financial institutions (see Ayyagari, Demirguc-Kunt and Maksimovic, 2010), put differently, it reflects the ability of the firm to obtain the access to financial loans. In particular, favourable financing will be used as dependent variable in robustness tests.

Table 1

Definition and Representative References

Variable	Definition	Representative reference
Outcome of interest (Y)		
Financial access	"Does your company have loans from banks or other financial institutions?"	Ayyagari, Demirguc-Kunt and Maksimovic (2010)
Variable of interest (X)		
Tax burden	Log (tax/employee number)	Cai, Fang and Xu (2011)
Regulatory stringency	Log of (1 + the official number of licenses and registration)	Djankov et al. (2002)
State shares	The ratio of state shares in the surveyed firm's ownership structure.	Tanzi (2000)
Collective shares	The ratio of collective shares in the surveyed firm's ownership structure	Boisot and Meyer (2008)
Control variables (Z)		
Firm age	Log of (2004-established year)	Argyres and Silveman (2004)
Firm size	Log of employee number	Scherer (1992) and Cohen and Klepper (1996)
Exports	Only if the surveyed firm has export sales, the dummy of exports equals 1.	Aggarwal et al. (2011)
Foreign shares	The percentage of foreign shares	Cai, Fang and Xu (2011)
CEO's Incentive payment	Only if CEO's annual income is directly related to the company's performance, the dummy of CEO incentive equals 1	Lin et al. (2010b)
CEO education	Seven education levels of CEO education are optional.	World Bank (1998) and Narayan et al. (2000)
CEO tenure	Log of (1 + CEO tenure)	ditto
The severity of the anti-competition issue	How serious is the problem of anti-competition	e.g., Grossman and Helpman (1991)
The severity of access to legal information	How serious is the problem of access to legal and regulatory information	e.g., Hadfield and Weingast (2010)
Instrument variable (IV)		
Tax-interaction days	Log(1 + tax interaction days)	Du, Lu and Tao (2008)
Another potential dependent variable		
Favourable financing	Does your company enjoy favourable terms on overdraft or have a loan quota?	Ayyagari, Demirguc-Kunt and Maksimovic (2010)
The variable for sample splitting		
Small or medium enterprises	If the employee number is less than 300	Vasak (2008)
Large medium enterprises	If the employee number is at least 300	ditto

Source: The author's compilation.

Table 2

Descriptive Statistics and Correlation Matrix

		Descriptive statistics					Correlation matrix													
	Variable	Obs	Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Financial access	12 398	0.600	0.490	0	1	1.000													
2	Favourable financing	12 400	0.283	0.451	0	1	0.389	1.000												
3	Tax burden	12 388	2.524	1.408	–6.043	13.205	0.103	0.134	1.000											
4	Regulatory stringency	12 400	1.609	0.719	0	5.553	0.076	0.086	0.041	1.000										
5	State shares	12 400	0.134	0.316	0	1	–0.008	–0.035	0.023	–0.019	1.000									
6	Collective shares	12 400	0.085	0.257	0	1	–0.086	–0.086	–0.032	–0.052	–0.120	1.000								
7	Firm age	12 400	2.128	0.880	0.693	4.934	0.077	0.012	0.040	0.007	0.332	0.119	1.000							
8	Firm size	12 395	5.553	1.491	0	11.700	0.281	0.230	0.125	0.109	0.236	–0.091	0.302	1.000						
9	Exports	12 400	0.377	0.485	0	1	0.160	0.189	0.007	0.101	–0.029	–0.122	0.049	0.357	1.000					
10	Foreign shares	12 400	0.146	0.317	0	1	–0.047	0.101	0.026	0.101	–0.146	–0.123	–0.064	0.112	0.342	1.000				
11	CEO's incentive payment	12 243	0.668	0.471	0	1	0.115	0.090	0.094	0.007	0.035	–0.020	0.025	0.121	0.015	–0.138	1.000			
12	CEO education	12 386	5.578	0.998	1	7	0.101	0.130	0.194	0.062	0.161	–0.092	0.082	0.347	0.180	0.165	0.120	1.000		
13	CEO tenure	12 384	1.591	0.754	0	4.025	0.046	0.000	–0.044	0.005	–0.109	0.059	0.167	–0.080	0.015	–0.063	–0.011	–0.166	1.000	
14	Anti-competition	12 400	1.128	1.106	0	4	0.042	0.037	0.066	0.055	0.071	–0.039	0.070	0.073	–0.001	–0.029	0.037	0.072	–0.036	1.000
15	Access to legal information	12 400	0.717	0.824	0	4	0.058	0.069	0.071	0.074	0.050	–0.061	0.045	0.114	0.072	0.060	0.039	0.105	–0.038	0.444

Source: The author's compilation.

Variables of Interest (Various Types of Government Intervention)

Tax burden: I measure tax burden with the firm's tax per capita,[6] which is the standard in the existing literature (e.g., Cai, Fang and Xu, 2011). To reduce the potential endogeneity issue, I use tax per capita instead of tax relative to sales in this paper. The survey provides the actual tax information and the number of employees. To better fit data, I calculate the tax burden with the natural logarithm of tax per capita.

Regulatory stringency: I measure regulatory stringency with the natural logarithm of 1 plus the official number of regulatory certificates.[7] In particular, regulatory certificates include licenses and registrations. Similar to Djankov et al. (2002) and the World Bank (2006), regulatory stringency reflects the entry regulation.

State shares: I measure state shares with the ratio of state shares in the firm's ownership. The survey provides the information of ownership structure in each surveyed firm. The ratio of state shares is the standard measure of government entrepreneurship in the literature (e.g., Tanzi, 2000).

Collective shares: I measure collective shares with the ratio of collective shares in the firm's ownership. Because collective shares are actually controlled by local governments, the ratio of collective shares in the ownership also reflects the government entrepreneurship (Boisot and Meyer, 2008).

Control Variables

I include three types of control variables, involving the relevant characteristics of the firm, Chief Executive Officer (CEO) or market. For the firm nature, I first control for the firm age. The survey provides the establishment year of the firm, I can obtain the firm age in 2004. Second, I use the log of employee number to control for the firm size, as other scholars (e.g., Cai, Fang and Xu, 2011; Lin, Lin and Song, 2010a) do. Because firm size may affect government intervention such as regulatory stringency in the long run, I select the total employee number in 2003 to lessen the potential endogeneity issue. Moreover, I also control for whether the firm has exports and what are the ratios of the foreign share in the ownership structure. The export firms tend to obtain the support of preferential policies (e.g., Lemoine, 2000) and then their financial access tends to be

[6] In fact, using a tax rate also obtain the same findings, the results are available from the author upon request.

[7] In principle, the official number of license and registration also reflects the diversification of the companies' activities. However, firm samples in this survey have one main activity such that the firms are identified in one industry. Given that using the industry identity (or main activity) to measure the diversification is the standard approach in the existing literature (Du, Lu and Tao, 2015), the firms in my data have a small potential for diversification. Moreover, even when the number of licenses and registration is related to the diversification, it functions to increase regulatory stringency due to diversification; hence, it cannot deny my predictions.

promoted. Foreign shares may be also related to the government preference policy. However, the variable of foreign shares can be also negatively related to financial access because a firm with foreign shares has a disadvantage to obtain financial loans with domestic competitors (Du, Lu and Tao, 2008).

About the characteristics of CEO, I control three variables. First, I control for the incentive payment of CEO. Only if CEO's annual income directly related to the company's performance, the dummy of CEO incentive equals 1. Managerial incentive payoffs theoretically mitigate the effects of principal-agent problems and CEO risk aversion and then promote R&D investments (Lin et al., 2010b). Moreover, I control for the education and tenure of CEO, respectively. Because these two characteristics create social capitals for firms to get supports (World Bank, 1998), they are expected to promote a firm's financial access and performance.

At the market level, I first control the severity of anti-competitive behaviour because anti-competitive behaviour affects information release and then the credit extension of financial institutions (Stiglitz and Weiss, 1981). I also control the severity of access to legal information. As Hadfiled and Weingast (2015) demonstrate, the micro-foundation of law rules depends on whether individuals access to legal information. The severity of access to legal information can affect the response behaviour of firms. The survey requires the respondents to indicate to what extent market anti-competition (or the access to legal information) affects the firm's operation and growth. The answers are classified in five levels, from zero (no severity) to four (very high severity).

3. Main Results

3.1. Basic Results

I test the potential causality from government intervention to financial access by estimating the following equation with Probit method:

$$Pr\left(FA_i = 1\right) = aGI_i + bZ_i + city_i + industry_i + e_i \tag{1}$$

where

FA – financial access,

GI – government intervention (including tax burden, regulatory stringency, state shares or collective shares),

Z_i – the matrix of control variables introduced in the last section.

To lessen the potential issue of variable omitted, I also control the fixed effects of city and industry. With Probit method, I estimate Equation (1) using two types of standard errors.

First, I use robust standard errors to avoid the heterogeneity issue. Second, I use cluster standard errors to lessen the heterogeneity issue across different firm groups. Considering that I have controlled the fixed effect of city, I control the cluster standard errors at the level of county.

Table 3

Basic Estimates

Hypothesis	**H1** (A firm's tax burden promotes its financial access)		**H2** (Regulatory stringency upon a firm promotes the firm's financial access)		**H3** (A firm's state shares constrain its financial access)		**H4** (A firm's collective shares constrain its financial access)	
Tax burden	0.063*** (0.010)	0.063*** (0.012)						
Regulatory stringency			0.092*** (0.018)	0.092*** (0.018)				
State shares					–0.311*** (0.044)	–0.311*** (0.049)		
Collective shares							–0.243*** (0.049)	–0.243*** (0.052)
Firm age	–0.016 (0.016)	–0.016 (0.016)	–0.017 (0.016)	–0.017 (0.016)	0.013 (0.016)	0.013 (0.016)	–0.008 (0.016)	–0.008 (0.016)
Firm size	0.254*** (0.011)	0.254*** (0.012)	0.251*** (0.011)	0.251*** (0.012)	0.266*** (0.011)	0.266*** (0.013)	0.251*** (0.011)	0.251*** (0.012)
Exports	0.258*** (0.031)	0.258*** (0.032)	0.245*** (0.031)	0.245*** (0.032)	0.243*** (0.031)	0.243*** (0.032)	0.244*** (0.031)	0.244*** (0.032)
Foreign shares	–0.350*** (0.048)	–0.350*** (0.054)	–0.346*** (0.049)	–0.346*** (0.054)	–0.377*** (0.049)	–0.377*** (0.055)	–0.346*** (0.048)	–0.346*** (0.055)
CEO's incentive payment	0.145*** (0.027)	0.145*** (0.027)	0.156*** (0.027)	0.156*** (0.027)	0.154*** (0.027)	0.154*** (0.028)	0.157*** (0.027)	0.157*** (0.027)
CEO education	0.048*** (0.014)	0.048*** (0.015)	0.057*** (0.014)	0.057*** (0.015)	0.066*** (0.014)	0.066*** (0.015)	0.055*** (0.014)	0.055*** (0.015)
CEO tenure	0.103*** (0.017)	0.103*** (0.017)	0.102*** (0.017)	0.102*** (0.017)	0.089*** (0.017)	0.089*** (0.017)	0.105*** (0.017)	0.105*** (0.017)
Anti-competition	0.021* (0.013)	0.021+ (0.013)	0.021* (0.013)	0.021+ (0.013)	0.024* (0.013)	0.024* (0.013)	0.022* (0.013)	0.022* (0.013)
Access to legal information	0.047*** (0.017)	0.047*** (0.017)	0.047*** (0.017)	0.047*** (0.017)	0.050*** (0.017)	0.050*** (0.017)	0.048*** (0.017)	0.048*** (0.017)
Constant	–1.289*** (0.163)	–1.289*** (0.177)	–1.387*** (0.165)	–1.387*** (0.178)	–1.340*** (0.163)	–1.340*** (0.177)	–1.223*** (0.162)	–1.223*** (0.176)
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#
Pseudo R square	0.146	0.146	0.145	0.145	0.147	0.147	0.145	0.145
N	12,223	12,223	12,234	12,234	12,234	12,234	12,234	12,234

Note: For these estimations, I use robust standard errors or clustered standard errors. Standard errors of estimate are given in brackets. # Considering that I have controlled the fixed effect of city, I control the cluster standard errors at the level of county. + $p < 0.15$; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Source: The author's estimates.

As Table 3 shows, the coefficients of tax burden and regulatory stringency are positive and highly significant; whereas the coefficients of state shares and collective shares are negative and significant. Consequently, these findings confirm Hypotheses 1 – 4. Moreover, all coefficients of control variables are positive except firm age and foreign shares. This indicates that my control variables well outline the research background and my estimates include important relevant factors.

Among the effects of control variables, all positive effects do not contradict my predictions. The traditional institutional literature may predict that the severity of anti-competition issue or the severity of access to legal information constrains financial access, but my results reject the traditional views. This rejection is also logical because China's financial system (my research background) is controlled by government intervention instead of economic institutions (also see Fu, 2016). More serious anti-competition issue may promote the surveyed firm to grab resources in the financial market (Fisher and Termin, 1979); whereas the poor access to legal information may foster firms to hold up financial institutions (Klein, 1996).

Among negative effects of control variables, the one of firm age expected though it is insignificant. The negative effect of foreign shares is highly significant, which reflects foreign shares constrain a firm's financial access due to the disadvantage to compete financial access with domestic shares.

3.2. The Endogeneity Issue

As mentioned above, my estimates control important variables. Meanwhile, my estimations include fixed effects of city and industry. The robust or clustered standard errors help deal with the heterogeneity. All these specifications can pragmatically lessen the issue of variable-omitting. Except tax burden, all variables of interest are exogenous. First, regulatory stringency measured by the number of licenses and registration is determined by the regulatory regime; hence it will not be changed by the individual firm's short run behaviour or performance. Second, state shares and collective shares are politically sensitive (Wang and Chen, 2006); hence, they are also exogenous for a firm's financial access.

I admit there is a potential issue of reverse causality between tax burden and financial access. With financial access, a firm tends to obtain larger revenue or profit that can enlarge the firm's tax burden. The following especially addresses the reverse causality between tax burden and financial access. Precisely, I use IV Probit method to estimate the following equations.

$$Pr(FA_i = 1) = a\widehat{Tax}_i + bX_i + city_i + industry_i + e_i \quad (2)$$

$$\widehat{Tax}_i = cIV_i + dX_i + city_i + industry_i + e_i \quad (3)$$

$\widehat{Tax_i}$ in Equation (2) is the fitted value of Tax_i, which is estimated from Equation (3). *IV* in Equation (3) is the interaction days for tax issues. The investment climate survey enquires the firm manager how many days the taxation department interacts with the firm for tax issues. I use the natural logarithm of [1 plus the day number] to measure tax-interaction days. According to definition, the tax-interaction days are positively related to the firm's tax burden.[8] Meanwhile, tax-interaction days are irrelevant for financial access because it only involves tax issues. Even if taxation departments affect firms' business behaviour, they can only expropriate firms via formal or informal payments. It is insensible to believe the taxation departments intervene in the business of financial loans. Thus, my IVs may affect financial access through tax burden, at most. In IV estimations, I also use robust standard errors or cluster standard errors.

Table 4

IV Estimates for Tax Burden (Hypothesis 1)

	1st-stage estimates		**2nd-stage estimates**	
Tax-interaction days	0.079*** (0.012)	0.079*** (0.012)		
Tax burden			0.558*** (0.084)	0.558*** (0.081)
Firm age	–0.033** (0.014)	–0.033** (0.015)	0.003 (0.015)	0.003 (0.015)
Firm size	0.034*** (0.010)	0.034*** (0.012)	0.179*** (0.027)	0.179*** (0.027)
Exports	–0.146*** (0.028)	–0.146*** (0.031)	0.274*** (0.030)	0.274*** (0.031)
Foreign shares	0.219*** (0.052)	0.219*** (0.064)	–0.390*** (0.047)	–0.390*** (0.050)
CEO's incentive payment	0.161*** (0.025)	0.161*** (0.026)	0.027 (0.036)	0.027 (0.037)
CEO education	0.163*** (0.013)	0.163*** (0.012)	–0.047** (0.023)	–0.047** (0.022)
CEO tenure	0.003 (0.016)	0.003 (0.018)	0.081*** (0.018)	0.081*** (0.018)
Anti-competition	0.031*** (0.012)	0.031** (0.012)	–0.001 (0.012)	–0.001 (0.012)
Access to legal information	0.044*** (0.016)	0.044*** (0.016)	0.013 (0.017)	0.013 (0.017)
Constant	0.240+ (0.153)	0.240+ (0.146)	–1.214*** (0.171)	–1.214*** (0.169)
City	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
SE	Robust	Clustered#	Robust	Clustered#
R^2	0.24	0.24		
N	12,125	12,125	12,123	12,123

Note: For these estimations, I use robust standard errors or clustered standard errors. Standard errors of estimate are given in brackets. # Considering that I have controlled the fixed effect of city, I control the cluster standard errors at the level of county. + $p < 0.15$; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Source: The author's estimates.

[8] In fact, interaction is always used to measure the degree of intervention (Du, Lu and Tao, 2008).

I report my IV estimates in Table 4. As Columns 1 – 2 in Table 4 shows, the coefficient of the interaction days for taxation issues is positively and significantly related to the tax burden. As Columns 3 – 4 of Table 4 shows, the coefficient of the tax burden is significant and positive with IV Probit method. Moreover, most control variables obtain the same signals as ones in Table 3. My IV estimates uncover the positive and significant effect on financial access as basic estimates in Table 3 do. Therefore, IV estimates document that Hypothesis 1 is confirmed with robustness to the potentially endogenous bias.

4. Robustness Tests

This section tests the robustness of my estimates. First, I use the favourable treatment on financing to measure financial access, and then my estimates obtain the same findings. Second, I will show that my estimates are not only robust to small and medium enterprises (hereafter SMEs) but also large enterprises.

4.1. Another Measure of Financial Access

Despite using the existence of financial loans (see my outcome variable of interest), scholars (e.g., Ayyagari, Demirguc-Kunt and Maksimovic, 2010) also use the favourable treatment on financing (or favourable financing) to measure financial access. As mentioned before, favourable financing can well reflect the ability of the surveyed firm to obtain financial access. The following uses the new measure to repeat previous estimations. If the regressions of favourable financing obtain the same findings as before, I can confirm my estimates are robust to the different measures of financial access.

In fact, if the regressions of favourable financing obtain the same findings as before, it can also lessen concerns as follows. My previous estimates confirm that state shares and collective shares constrain financial access. However, state shares or collective shares may promote a firm's informal financing (Ayyagari, Demirguc-Kunt and Maksimovic, 2010) and then reduce the demand for financial access; as such, the negative effect of state shares or collective shares on financial access may be much less valuable. Similarly, tax burden and regulatory stringency may also only constrain a firm's informal financing and then enlarge the demand for formal financing. If my estimates are not robust to this concern, the positive effect of tax burden and regulatory stringency on financial access will become also less meaningful. I conduct the regressions of favourable financing as follows. Considering the potential reverse causality between tax burden and favourable financing, I also use IVs to test the relationship. Put differently, I estimate Equation (4) for regulatory stringency, state shares and collective shares and estimate Equations (5) for the tax burden.

$$Pr(FF_i = 1) = a\widehat{Tax}_i + bX_i + city_i + industry_i + e_i \quad (4)$$

$$Pr\left(FF_i = 1\right) = aGI_i + bZ_i + city_i + industry_i + e_i \quad (5)$$

where

FF – favourable financing,

GI – only involves regulatory stringency, state shares or collective shares.

$\widehat{Tax}$ – the fitted value of tax burden estimated from Equation (3) with my IV. I report the estimation results in Table 5.

The regressions of favourable financing obtain the same findings as before; therefore, I uncover my estimates are robust to the different measure of financial access and robust to the above concerns. I report the regressions of favourable financing in Table 5. As Table 5 shows, favourable financing is positively related to tax burden and regulatory stringency but negatively associated with state shares and collective shares. Thus, it obtains the same findings as financial access does. Therefore, it confirms Hypotheses 1 – 4 with another measure of financial access; it also suggests that government intervention affects a firm's ability to obtain favourable financing, thereby determining the firm's financial access.

Despite significant variables of interest, most control variables in the regressions of favourable financing obtain the same signals and significances as in the previous regressions of financial access. Firm age that is insignificant in the previous regressions of financial access becomes significant in the regressions of favourable financing. This indicates favourable financing may be more sensitive than the previous measure of financial access. The severity of anti-competition issue become insignificant in the regression of favourable financing, this reflects that financial institutions can assess the market situation and then reduce the effect of anti-competitive behaviour.

4.2. Split Samples

To further test the robustness of my estimates, I divide my sample into two samples. Precisely, Sample 1 includes only surveyed firms whose employee number is less than 300; whereas Sample 2 includes the large enterprises with the minimum of 300 employees.[9] The regressions with split samples also help test the concern that the effect of government intervention may be unimportant for large enterprises' external financing. In theory, SMEs more rely on external financing and government intervention than large enterprises (Beck et al., 2006).

[9] Considering that the definition of an SME in China is quite complex (see Li and Rowley, 2007), I refer to other international standards, Multilateral Investment Guarantee Agency (MIGA) and International Finance Corporation (IFC). As defined by MIGA or IFC, SMEs employ a maximum of 300 employees (see Vasak, 2008). Most scholars in Chinese issues use 300 employees to define SMEs or large enterprises (e.g., Lin, Lin and Song, 2010a).

Table 5

Robustness Test (the Regressions of Favourable Financing[1])

Method	**IV Probit**		**Probit**					
Hypothesis	H1		H2		H3		H4	
Tax burden	0.662*** (0.059)	0.662*** (0.058)						
Regulatory stringency			0.104*** (0.019)	0.104*** (0.020)				
State shares					–0.281*** (0.048)	–0.281*** (0.047)		
Collective shares							–0.183*** (0.058)	–0.183*** (0.060)
Firm age	–0.032** (0.016)	–0.032** (0.016)	–0.075*** (0.016)	–0.075*** (0.016)	–0.051*** (0.017)	–0.051*** (0.017)	–0.070*** (0.016)	–0.070*** (0.016)
Firm size	0.106*** (0.021)	0.106*** (0.020)	0.187*** (0.011)	0.187*** (0.011)	0.202*** (0.011)	0.202*** (0.012)	0.189*** (0.011)	0.189*** (0.011)
Exports	0.229*** (0.028)	0.229*** (0.030)	0.192*** (0.031)	0.192*** (0.032)	0.193*** (0.031)	0.193*** (0.032)	0.193*** (0.031)	0.193*** (0.032)
Foreign shares	–0.034 (0.051)	–0.034 (0.056)	0.155*** (0.048)	0.155*** (0.056)	0.134*** (0.049)	0.134** (0.056)	0.160*** (0.048)	0.160*** (0.056)
CEO's incentive payment	0.014 (0.035)	0.014 (0.036)	0.179*** (0.029)	0.179*** (0.030)	0.179*** (0.029)	0.179*** (0.030)	0.180*** (0.029)	0.180*** (0.030)
CEO education	–0.054** (0.021)	–0.054** (0.021)	0.081*** (0.015)	0.081*** (0.016)	0.087*** (0.015)	0.087*** (0.016)	0.080*** (0.015)	0.080*** (0.016)
CEO tenure	0.037** (0.016)	0.037** (0.016)	0.050*** (0.018)	0.050*** (0.018)	0.040** (0.018)	0.040** (0.018)	0.053*** (0.018)	0.053*** (0.018)
Anti--competition	–0.011 (0.012)	–0.011 (0.012)	0.017 (0.013)	0.017 (0.014)	0.019+ (0.013)	0.019 (0.014)	0.018 (0.013)	0.018 (0.014)
Access to legal information	0.008 (0.017)	0.008 (0.018)	0.055*** (0.018)	0.055*** (0.018)	0.059*** (0.018)	0.059*** (0.018)	0.057*** (0.018)	0.057*** (0.018)
Constant	–1.709*** (0.219)	–1.709*** (0.201)	–2.253*** (0.180)	–2.253*** (0.192)	–2.173*** (0.179)	–2.173*** (0.189)	–2.076*** (0.177)	–2.076*** (0.191)
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#
N	12,125	12,125	12,236	12,236	12,236	12,236	12,236	12,236

Note: For these estimations, I use robust standard errors or clustered standard errors. Standard errors of estimate are given in brackets. [1] I use the response of the question of "Does your company enjoys favourable terms on overdraft or has a loan quota?" in the survey to measure the favourable treatment on finance (i.e., favourable financing). Given that it reflects the surveyed firm's ability to obtain financial access, the variable of favourable financing is also a measure of financial access. # Considering that I have controlled the fixed effect of city, I control the cluster standard errors at the level of county. + $p < 0.15$; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Source: The author's estimates.

I repeat the estimations as before but with split samples. I report results in Tables 6 – 7. Table 6 reports result for financial access; whereas Table 7 reports result for favourable financing. As showed by Panel A of Table 6 (for SMEs), tax burden and regulatory stringency are positively related to financial access; whereas state shares and collective shares are negatively associated with financial access.

Panel B of Table 6 shows the same findings for larger enterprises, indicating that my estimates for financial access are robust to SMEs and large enterprises.

Moreover, Panel A of Table 7 shows that the tax burden and regulatory stringency on the SMEs are positively related to financial access; whereas state shares and collective shares of SMEs are negatively associated with financial access. Panel B of Table 7 shows the same findings for large enterprises, indicating that my estimates for favourable financing are robust to SMEs and large enterprises.

T a b l e 6

Robustness Test (with split samples)

	Panel A: Small or medium enterprises							
Method	IV Probit		Probit					
Hypothesis	H1		H2		H3		H4	
Tax burden	0.362** (0.155)	0.362** (0.162)						
Regulatory stringency			0.115*** (0.025)	0.115*** (0.025)				
State shares					–0.431*** (0.071)	–0.431*** (0.077)		
Collective shares							–0.253*** (0.061)	–0.253*** (0.066)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#
N	6,536	6,536	6,608	6,608	6,608	6,608	6,608	6,608
	Panel B: Large enterprises							
Method	IV Probit		Probit					
Hypothesis	H1		H2		H3		H4	
Tax burden	0.715*** (0.071)	0.715*** (0.069)						
Regulatory stringency			0.073*** (0.027)	0.073*** (0.028)				
State shares					–0.235*** (0.060)	–0.235*** (0.061)		
Collective shares							–0.234*** (0.085)	–0.234*** (0.082)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#
N	5,586	5,586	5,625	5,625	5,625	5,625	5,625	5,625

Note: For these estimations, I use robust standard errors or clustered standard errors. Standard errors of estimate are given in brackets. # Considering that I have controlled the fixed effect of city, I control the cluster standard errors at the level of county. + $p < 0.15$; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Source: The author's estimates.

Table 7

Robustness Test (the Regressions of Favourable Financing[1] with Split Samples)

	Panel A: Small or medium enterprises							
Method	IV Probit		Probit					
Hypothesis	H1		H2		H3		H4	
Tax burden	0.362** (0.155)	0.362** (0.162)						
Regulatory stringency			0.115*** (0.025)	0.115*** (0.025)				
State shares					–0.431*** (0.071)	–0.431*** (0.077)		
Collective shares							–0.253*** (0.061)	–0.253*** (0.066)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#
N	6,536	6,536	6,608	6,608	6,608	6,608	6,608	6,608
	Panel B: Large enterprises							
Method	IV Probit		Probit					
Hypothesis	H1		H2		H3		H4	
Tax burden	0.736*** (0.064)	0.736*** (0.062)						
Regulatory stringency			0.089*** (0.024)	0.089*** (0.025)				
State shares					–0.253*** (0.058)	–0.253*** (0.058)		
Collective shares							–0.172* (0.092)	–0.172* (0.092)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#	Robust	Clustered#
N	5,588	5,588	5,627	5,627	5,627	5,627	5,627	5,627

Note: For these estimations, I use robust standard errors or clustered standard errors. Standard errors of estimate are given in brackets. [1] I use the response of the question of "Does your company enjoys favourable terms on overdraft or has a loan quota?" in the survey to measure the favourable treatment on finance (i.e., favourable financing). Given that it reflects the surveyed firm's ability to obtain financial access, the variable of favourable financing is also a measure of financial access. # Considering that I have controlled the fixed effect of city, I control the cluster standard errors at the level of county. + $p < 0.15$; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Source: The author's estimates.

Conclusions

The recent literature finds an important role of government intervention in directing financial resources in most developing countries. To explore the mechanism of government intervention on financial access, this paper distinguishes between various types of government intervention including tax burden, regulatory

stringency, state shares and collectives. This paper explores how these types of government intervention affect a firm's financial access.

Combined with China's investment background, I predict financial access is promoted by tax burden and regulatory stringency but constrained by state shares and collective shares. Put differently, government intervention functioning as redistribution and regulation will promote a firm's financial access; whereas government intervention functioning as (the public) entrepreneurship will constrain a firm's financial access. With the data surveyed by the World Bank, my estimates confirm these predictions. In particular, my estimates are robust to the potential endogeneity issue, the different measures of financial access and different samples.

This paper first contributes to the literature on corporate finance. Given that most governments in developing countries play an important role in directing financial resources, this paper offers general applications to improve a firm's financial access. This paper also contributes to the literature in government intervention. To the best of my knowledge, I offer a first attempt to explore how a firm's financial access is affected by various types of government interventions, including tax burden, regulatory stringency and the public entrepreneurship (i.e., state shares or collective shares). Given that governments in most countries have an important role to play in promoting well-functioning financial systems, this paper provides generalized insights for the theoretical effect of government intervention on financial access.

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