2019-0948 IJOI
http://www.ijoi-online.org/

International Journal of Organizational Innovation

FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH: EVIDENCE FROM FINANCIAL LEGAL ENVIRONMENT PERSPECTIVE

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Abstract

As reforms of China's market economic system have deepened, the need to strengthen the rule of law over the country's economic development is becoming ever more urgent. Law is one of the key factors affecting financial development, and China's socialist market economy is inseparable from its development of the rule of law. In this study, based on the data from 31 provinces, direct controlled municipalities, and autonomous regions in China from 2005 to 2017, panel data analysis is conducted to explore the impact of financial development on economic growth from a financial legal environment perspective. The results reveal that the Herfindahl- Hirschmann Index and concentration ratio of lawyers have a significantly positive impact on economic growth, whereas the number of lawyer per 10,000 people, number of law firms per 10,000 people, and concentration ratio of law firms have a significantly negative impact on economic growth..

Key Words: Financial development, economic growth, financial legal environment

Acknowledgements: The planning project of 2019 Philosophy and Social Science in Zhanjiang city (Grant Number: ZJ19QN03)

Introduction

China's economy has grown rapidly since the implementation of reform and opening up in 1979, and this growth can be attributed to the fact that China has a national savings rate of over 40% and a massive labor force that has moved from the agricultural industry (a primary industry) to the manufacturing and production industry (a secondary industry). Mishkin (2018) argues that a few requirements should

be fulfilled to maintain sustainable development of China's economy, namely (1) sound finance mechanisms should be employed; (2) the legal system should be reformed; and (3) state-owned enterprises should be privatized. These ideas are centered on the principle that a country should emphasize financial development if it is to promote its national economic growth, and such financial development relies heavily on a sound legal system.

The "Decision of the Communist Party of China's [CPC] Central Committee on Major Issues Pertaining to Comprehensively Promoting the Rule of Law" was published in 2014 during the 4th Plenary Session of the 18th National Congress of the CPC, and it established the basic policy for comprehensively governing China by the rule of law. Additionally, this policy document specified that a socialist rule of law system with Chinese characteristics should be established, with the goal of establishing an integrated triad of a law based country, law based government, and law based society achieved through legislation, law enforcement, the judiciary, and law compliance. Subsequently, the 19th National Congress of the CPC report in 2018 asserts that China is still a developing country in the primary stage of socialism, and that it will continue to be so for a considerable period of time, thus meaning that the basic national conditions of China remain unchanged. This is not only reflected in China's economic level but also reflected in its law based governance level. However, China's citizens now have higher demands for their material and cultural life than they once had. Additionally, citizens now have increased needs for democracy, law based governance, fairness, justice, safety, and a cleaner environment (Hu, 2018). With the continued deepening of market economy reform, China has an ever increasing need for the rule of law over economic development; a market economy means an economy governed by the rule of law. In short, a socialist market economy and the development of the rule of law are inseparable.

Various scholars have argued that the law is a critical factor for financial development. For example, La Porta et al. (1998) investigate the relationship between law and financial development; they assert that the law and the legal system of a country have considerable influence over the country's financial system formation, financial development, and economic growth. Similarly, Beck and Levine (2003) stress that a country's legal system has a considerable influence over its financial development level. Law enforcement efficiency is a crucial indicator of a country's securities market. When an economic system is in the process of transitioning from a planned economy to a market economy, relevant laws are required to strengthen investor protections; protection of external investors boosts financial development through the execution of valid contracts. Therefore, a sound legal system is beneficial for external financing and new enterprise formation, and highly efficient capital allocation is beneficial for economic growth (Yu, 2005). Mishkin (2018) believes that for China to proceed toward the next level of economic development, legal reform leading to the compulsory enforcement of financial contracts is required.

Research on financial development and economic growth has typi-

cally focused on examining savings and loans in the financial sector, total trading values and stock values in the securities market, as well as other relevant factors (Bayar, 2014; Seven & Coskun, 2016; Demir & Hall, 2017); however, empirical studies taking a legal perspective are lacking (La Porta et al., 1998; Beck, Kunt, & Levine, 2003). To fill this research gap, the current study examines the influence of financial development on economic growth by employing lawyer density and law firm density as evaluation indicators and by considering their distributions from the perspective of financial legal environment. Data collected from 31 provinces, direct controlled municipalities, and autonomous regions in China from 2005 to 2017 are examined. A panel data approach is used to analyze the influence of financial development on economic growth. China's economic development is now in a crucial economic transition period under the "new normal" of the Chinese economy; that is, the industry production value of tertiary industries has now surpassed that of secondary industries. Therefore, investigating whether the law can affect China's economic growth under this "new normal" state has crucial practical implications.

Theoretical Basis And Literature Review

Financial Development Theories

Schumpeter (1912) asserts that bank credit is the prerequisite for entrepreneurs to innovate and the root cause of economic growth. Goldsmith (1969) proposes the financial interrelations ratio (FIR) and systematically examines the relationship between financial structures and financial development, confirming that the bank system of any country is the foundation of its financial development. Regarding the influence of financial development on economic growth, McKinnon (1973) and Shaw (1973) propose the financial repression and financial deepening theories, respectively. Financial repression hinders economic growth through financial repression measures such as credit rationing, interest rate caps, restrictions on market entry, and high reserve requirements. Therefore, the implementation of financial deepening policies is imperative to promote healthy development of the economy, and these include ending direct credit rationing, lowering reserve requirements, and removing interest rate caps.

Following on from the aforementioned theories, King and Levine (1993) examine the process of how financial development influences economic growth. They believe that market friction stimulates the emergence of financial markets and financial institutions. These markets and institutions then form the financial system, which serves four basic functions, namely trade facilitation, hedging, financial diversification, and risk pooling. Normal performance of these functions facilitates the optimum allocation of resources, optimizes supervisory management, exerts corporate control rights, and achieves the goal of mobilizing savings by facilitating the exchange of goods and services. A well-functioning financial system promotes economic growth through technological innovation and capital accumulation.

Associations Between Law And Financial Development

La Porta et al. (1998) believe that a legal system should effectively protect external investors and that such a system is the foundation for the steady economic development of countries, corporations, and industries. As a document guaranteeing certain rights, financial contracts must be protected under the law. Thus, financial development is dependent on legal support; this can be considered a type of social contract. In short, law is the key variable that influences financial development. In the process of economic transition, developing countries often overlook monitoring and regulation of the financial sector. As financial liberalization occurs, financial repression and regulations are slowly abandoned. However, no corresponding legal framework is constructed in time to effectively monitor bank behaviors, and little effort is exerted to construct the legal environment required in liberalized financial systems; all of these factors can subsequently lead to frequent and severe financial system upheavals and crises (Beck, Kunt, & Levine, 2003)..

Given the potential for negative consequences, when developing countries adopt financial liberalization, they should not simply abandon financial regulation. In fact, a complete set of comprehensive and effective legal regulations and market rules should be developed to support the orderly liberalization of financial systems; only through doing so can countries facilitate financial liberalization, which can in turn lead to true and substantial financial development and economic growth (Mishkin, 2018).

Literature Review

On the basis of relevant legal and financial development theories, various researchers have conducted research to examine how law can influence economic growth. Results from some of these studies confirm that financial law is a positive factor that influences economic growth. Levine (1998, 1999) examines how legal environment affects financial development and how legal environment is related to long term economic growth. The results of the empirical analysis reveal that both the law and regulatory environment are exogenous factors of financial intermediary development, and they are both positively correlated to economic growth. Laeven (2005) measures the law and order conditions of various countries by using the aggregate data of 106 countries, bank interest rate spread data of 32 countries, and International Country Risk Guide data from risk rating agencies. The empirical study results indicate that improving the judicial efficiency and judicial enforcement of debt contracts could reduce the costs of financial intermediation for households and firms and in turn promote economic growth. Laeven and Woodruff (2007) examine the relationships between the scale of financial market development and the level of investor protection in 24 countries undergoing economic transition; the authors believe that the rule of law can effectively reduce the risks faced by investors, protect the rights of investors, stimulate investments, and facilitate financial development. Yao and Yueh (2009) analyze the reasons that led to a weak legal system but rapid economic growth in China, finding that for countries that are in a period of economic transition, law is not a critical factor that greatly influences the country's economic growth. Subrama-

nian and Tung (2016) examine the causal relationships between investor protection laws, project financing, and company debt financing trade options using a series of transnational data. The empirical results indicate that a lack of legal protection for external investors results in low- efficiency project financing, and this is counterproductive for economic growth. Lastly, Ranasinghe and Restuccia (2018) investigate micro establishment level data of multinational companies and report that the establishment of the rule of law helps to reduce the negative effects caused by financial friction, and enhancing legal efficiency results in a positive effect on financial liberalization.

In addition to the aforementioned studies conducted outside of China, studies conducted in China have confirmed that financial law is a positive factor that influences economic growth. Tan and Wu (2005) use relevant data from 20 provinces and autonomous regions in China to examine the relationship between the judiciary and financial development, with their results revealing that strengthening the establishment of the rule of law is the key to narrowing regional economic disparities, and that establishment of the rule of law can effectively mitigate regional economic development disparities. Using a series of data spanning from 1980 to 2004, Pi and Wang (2007) investigate the relationship between Chinese law and China’s financial development. The study results reveal that a sound legal system would facilitate the growth of financial intermediaries and enhance efficiency, both of which would be beneficial for increasing financial depth. In a study examining the effects of rule of law establishment on financial development, Li (2009) uses two indicators, namely legislation efficiency and judiciary efficiency, to represent the rule of law establishment status in China. Additionally, he uses the degree of financial deepening and financial marketization as indicators of the degree of financial development, with the results indicating that China’s establishment of the rule of law during the economic transition period has had a profound and positive effect on its financial development.

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financial marketization as indicators of the degree of financial development, with the results indicating that China's establishment of the rule of law during the economic transition period has had a profound and positive effect on its financial development.

Some studies conducted by Chinese scholars have also reported that the law does not affect economic growth significantly. China's private economy has expanded rapidly during the period of economic transition. However, the corresponding formal financing channels are still incomplete in many ways, and the consequent spread of informal finance has made it difficult for people involved in the private economy to be legally protected (He, 2002). By using the case settled to case received ratio as an indicator for law enforcement efficiency, Lu and Yao (2004) examine the relationships between the rule of law, financial development, and economic growth under financial repression. The study results indicate that strengthening the legal system could raise the amount of bank loans obtained by the private sector, and this could in turn promote competition among the banking industry. However, the study results also reveal that strengthening the legal system suppresses private investments and cannot enhance the economic growth rate. Jiang and Xu (2004) argue that as a country that is undergoing economic transition, appropriate finance development regulations by the government and several informal systems have facilitated the economic growth of China, rather than formal legal protections. They believe that this explains why the influence of the rule of law on financial development is less significant in China.

In summary, researchers have mainly measured the influence of the rule of law on economic growth on two levels: the sources of law and law enforcement efficiency. Compared with the quality of statutes, law enforcement efficiency appears to have stronger explanatory power over the development level of financial markets in countries undergoing economic transition (Pistor, 2000; Yu, 2005). However, studies have typically employed variables such as investor protection, lawyer density ratio, law firm density ratio, and rate of settling cases as the evaluation indicators for law enforcement efficiency. On the basis of relevant legal and financial theories and previous studies, the present study examines the influence of financial development on economic growth from the perspective of industrial distribution concentration. This is accomplished by employing new measurement variables, such as lawyer concentration ratio and law firm concentration ratio, as well those variables typically used in previous studies. The data used in this study are from 2005 to 2017 and collected from 31 provinces, direct controlled municipalities, and autonomous regions in China.

Research Design

Data Source

The data are sourced from the National Bureau of Statistics of China, the China Stock Market and Accounting Research database, and the All China Lawyers Association. The data are for the period 2005–2017 and collected from 31 provinces, direct controlled municipalities, and autonomous regions in China. The data for every year

during the study period are regarded as research intervals

Research Hypotheses

This study examines the influence of China's financial legal environment on its economic growth. A sound legal environment is beneficial for the healthy development of banks, markets, and financial services. Consequently, a sound legal environment can reduce trading fiction, lower trading costs, enhance trading efficiency, and ultimately help to promote economic growth. On the basis of relevant studies (Schumpeter, 1912; Levine, 1999; Tan & Wu, 2005), gross domestic product (GDP) growth rate is used as the dependent variable of this study. Additionally, the lawyer density ratio per 10,000 people, lawyer Herfindahl–Hirschman Index (HHI), lawyer concentration ratio, law firm density ratio per 10,000 people, law firm HHI, and law firm concentration ratio are chosen as the independent variables of this study. Lastly, bank loan to assets ratio, stock market capitalization, and amount of life insurance are adopted as the control variables. Hence, this study proposes the following hypothesis:

Hypothesis 1: Lawyer density ratio has a significant positive influence on the real GDP growth rate.

Hypothesis 2: Lawyer HHI has a significant positive influence on the real GDP growth rate.

Hypothesis 3: Lawyer concentration ratio has a significant positive influence on the real GDP growth rate.

Hypothesis 4: Law firm density ratio has a significant positive influence on the real GDP growth rate.

Hypothesis 5: Law firm HHI has a significant positive influence on the real GDP growth rate.

Hypothesis 6: Law firm concentration ratio has a significant positive influence on the real GDP growth rate.

Variables

Dependent Variables.

Real GDP refers to the monetary aggregate and market value of all final goods and services produced by the residents of a country in a given year, calculated based on the market price of the base year. The real GDP does not consider the influence on GDP caused by price fluctuations in different years. Thus, the real GDP reflects the real changes in the actual output of the GDP within a given period, enabling comparison between GDP values from different years.

The measurement method is as follows:

Real GDP growth rate (GDP) = (real GDP of the current period − real GDP of the previous period) / real GDP of the current period

Independent Variables.

(i) Lawyer density ratio and law firm density ratio

In their study, Tan and Wu (2005) chose to use the number of lawyers per 10,000 people (i.e., the lawyer density ratio per 10,000), the number of law firms per 10,000 people (i.e., the law firm density ratio per 10,000), and the number of law firms per 10,000 square

kilometer as law enforcement efficiency indicators. Accordingly, the present study employs the lawyer density ratio per 10,000 people and law firm density ratio per 10,000 people as the indicators for measuring law enforcement efficiency.

The measurement method is as follows:

Lawyer density ratio per 10,000 people (LAW) = number of lawyers / total population of the region (10,000 people)

Law firm density ratio per 10,000 people (OFFICE) = number of law firms / total population of the region (10,000 people)

(ii) Lawyer HHI and law firm HHI

The distribution of the lawyer profession is measured using the HHI. The HHI is calculated based on the number, sizes, and distribution of the enterprises within the industry concerned. Specifically, the HHI is the sum of the squared market shares for all enterprises in the relevant market. An HHI value close to 1 indicates a balanced distribution, whereas an HHI value close to 0 indicates a concentrated distribution.

The measurement method is as follows:

Lawyer HHI (HHIL) = $1-\sum_{i=1}^{31}(S_i)^2$, S_i = the number of lawyers in the ith region) / the number of lawyers in the whole country

Law firm HHI（HHIO）=$1-\sum_{i=1}^{31}(S_i)^2$, Si = the number of law firms in the ith region / the number of law firms in the whole country

(iii) Lawyer HHI and law firm HHI

The industry concentration ratio (CRn index) is adopted for measuring the concentration of the lawyers industry. The industry concentration ratio is the most basic and crucial factor in determining market structure; it embodies the degree of competition and monopoly of the market. The CRn index is the sum of the market shares of the Nth largest business operators in the relevant market. The present study uses the number of lawyers and law firms of the top five regions with the most number of lawyers and law firms. A high CRn index value indicates an oligopoly market, whereas a low high CRn index value indicates a competitive market.

The measurement method is as follows:

Lawyer concentration ratio (CR5L) = the number of lawyers in the top five regions with the most lawyers / the number of lawyers in the whole country

Law firm concentration ratio (CR5O) = the number of law firms in the top five regions with the most law firms / the number of law firms in the whole country

Control variables.

(i) Bank loan to assets ratio

During the initial stages of economic development, a bank based financial system can convert savings into investments and allocate resources such that capital can be raised and accumulated quickly (Schumpeter, 1912). Bank credit is a prerequisite for entrepreneurs to innovate, and bank credit is the root cause of economic growth. Commercial bank assets can protect the normal daily functioning of banks,

buffer incoming risks, and provide capital for bank expansion, and the initiation and development of new bank businesses or projects. Accordingly, the bank credit to assets ratio is adopted as the evaluation indicator of financial development in this study.

The measurement method is as follows:

BANK = the bank's loan amount / the bank's total assets

(ii) Stock market capitalization

The fundamental market perspective emphasizes the positive role that the market plays in strengthening risk management, information dissemination, corporate control, capital allocation, and mitigating problems that are closely related to banking (Levine & Zervos, 1998) [32]. Market capitalization is the market value of a publicly traded company's outstanding shares and is often used as a key indicator in evaluating the status of a company. In several studies examining the influence of market development on economic growth—for example Beck, Kunt, and Levine (1999), Seven and Coskun (2016), and Nyasha and Odhiambo (2016)—the researchers use stock market capitalization as the evaluation indicator of financial deepening. Thus, the present study employs stock market capitalization to GDP ratio as the evaluation indicator of financial development.

The measurement method is as follows:

STOC = stock market capitalization / GDP

(iii) Life insurance amount

The key to economic growth does not lie with banks or markets. Instead, such growth requires sound financial services that are provided by financial intermediaries and the financial market. Therefore, the development of financial services has more influence over economic growth (Levine, 2002). A 2010 technical consultation report from Washington proposes direct and indirect methods of evaluating the effects of financial services on GDP. Among them, indirect evaluation indicators include pensions, life insurance, non- life insurance, and social insurance. In accordance with the evaluation standards of that report, this study adopts life insurance premium as the evaluation indicator of financial services.

The measurement method is as follows:

SER = life insurance premium / GDP

Research Models.

(i) Model 1. lawyer as the Independent Variables

$$GDP_{it} = \alpha_0 + \beta_1 LAW_{it} + \beta_2 HHIL_t + \beta_3 CR5L_t + \beta_4 BANK_{it} + \beta_5 STOC_{it} + \beta_6 SER_{it} + \varepsilon_{it}$$

(ii) Model 2. law firm as the Independent variable

$$GDP_{it} = \alpha_0 + \beta_1 OFFICE_{it} + \beta_2 HHIO_t + \beta_3 CR5O_t + \beta_4 BANK_{it} + \beta_5 STOC_{it} + \beta_6 SER_{it} + \varepsilon_{it}$$

Where, GDP_{it} the real GDP growth rate of the ith region on the tth year; LAW_{it} the lawyer density ratio per 10,000 people of the ith region on the tth year; $HHIL_t$ the lawyer HHI on the tth year; $CR5L_t$ the lawyer concentration ratio on the tth year; $OFFICE_{it}$ the law firm density ratio per 10,000 peo-

ple of the ith region on the tth year; $HHIO_t$ the law firm HHI on the tth year; $CR5O_t$ the law firm concentration ratio on the tth year; $BANK_{it}$ the bank loan to assets ratio of the ith region on the tth year; $STOC_{it}$ the stock market capitalization of the listed companies in the ith region on the tth year; SER_{it} the life insurance amount in the ith region on the tth year; α_0 is the coefficient of constant; β_i is $i=1,\ldots,9$, which is the regression coefficient; and ε_{it} is the random error value.

Empirical Analysis

Descriptive Analysis

Table 1 shows the descriptive statistics of the dependent, independent, and control variables.

Table 1: Descriptive analysis results

Variable	Observed value	Maximum value	Minimum value	Mean value	Standard deviation
GDP	403	0.322	- 0.224	0.138	0.067
LAW	403	17.555	0.361	2.257	2.808
HHIL	403	0.951	0.943	0.947	0.002
CR5L	403	0.427	0.372	0.399	0.014
OFFICE	403	1.456	0.049	0.193	0.211
HHIO	403	0.959	0.948	0.952	0.003
CR5O	403	0.382	0.310	0.363	0.021
BANK	403	0.828	0.252	0.558	0.091
STOC	403	18.660	0.057	0.645	1.451
SER	403	1.525	0.0002	0.019	0.075

The results of the descriptive analysis reveal considerable differences between the maximum and minimum values of the real GDP growth rate, bank loan to assets ratio, stock market capitalization, and life insurance amount; this indicates that there are disparities between the economic growth and financial development of different provinces in China.

The results also reveal that there are greater differences between the maximum and minimum values of the lawyer density ratio and law firm density ratio, but there are smaller differences between the maximum and minimum values of the lawyer and law firm HHI and the lawyer and law firm concentration ratio. These results indicate that the lawyer and law firm distributions in the different provinces of China are relatively balanced, with the differences between the ratios being caused by differences in population numbers.

Correlation Analysis

As can be observed from Table 2 and Table 3, none of the correlation coefficients between the independent

Table 2: Correlation analysis results for Model 1

Corr	LAW	HHIL	CR5L	BANK	STOC	SER
LAW	1.000					
HHIL	0.076	1.000				
CR5L	- 0.082	- 0.982	1.000			
BANK	- 0.504	0.125	- 0.113	1.000		
STOC	0.588	- 0.077	0.060	- 0.402	1.000	
SER	0.026	0.021	- 0.032	- 0.014	0.032	1.000

and control variables exceeds 0.7, indicating that the serial correlation between the different variables is weak, and that each independent variable can explain the correlations of the dependent variable independently.

Hausman Test

In this study, the Hausman test is used for the selection of a random effects model or a fixed effects model. If the Hausman test results indicate acceptance of the null hypothesis, the random effects model is used. If the Hausman test results indicate the rejection of the null hypothesis, the fixed effects model is used.

The results of the Hausman test are presented in Table 4. As illustrated in Table 4, the χ^2 statistical values of models 1 and 2 are 0.000, and the probabilities of models 1 and 2 are both 1.000. The null hypothesis is accepted at p = .01, and thus the random effects model is used.

Regression Results and Analysis of the Fixed Effects Models

(i) The results of empirical testing of the regression models are presented in Table 5. For model 1, the determination coefficient (R^2) is 0.271, whereas the adjusted determination coefficient (Adj- R^2) is 0.260, indicating reasonable goodness of fit for model 1. The F- Stat is 24.572, significant at p < .001, meaning that model 1 possesses good explanatory power. The results of empirical testing of model 1 indicate that the lawyer HHI, lawyer concentration ratio, and bank loan to assets ratio have a significant and positive influence on the real GDP growth rate; thus, H2 and H3 are supported. For every 1% increase of the lawyer HHI, the real GDP growth rate increases by 45.611%; for every 1% increase of the lawyer concentration ratio, the real GDP growth rate increases by 8.92%; and for every 1% increase of the bank loan to assets ratio, the real GDP growth rate increases by 0.071%. The results also indicate that the lawyer density ratio has a significant and negative influence on the real GDP growth rate; for every 1% increase of the lawyer density ratio, the real GDP growth rate decreases by 0.002%. Thus, H1is not supported.

(ii) For model 2, R^2 is 0.228, whereas Adj- R^2 is 0.271; indicating reasonable goodness of fit for model 2. The F- Stat is 19.593, significant at p < .001, meaning that model 2

Table 3: Correlation analysis results for Model 2

Corr	OFFICE	HHIO	CR5O	BANK	STOC	SER
OFFICE	1.000					
HHIL	- 0.153	1.000				
CR5O	0.147	- 0.983	1.000			
BANK	- 0.527	0.131	- 0.145	1.000		
STOC	0.549	- 0.066	0.054	- 0.402	1.000	
SER	0.021	- 0.049	0.056	- 0.014	0.032	1.000

Table 4: Hausman Test Results

Model	χ^2 statistical value	χ^2 degree of freedom	Probability
Model 1	0.000	6	1.000
Model 2	0.000	6	1.000

Table 5:Models Regression analysis results

Variable	Model 1	Model 2
C	- 46.662***	0.545
	[6.330]	[5.622]
LAW	- 0.002*	
	[0.001]	
HHIL	45.611***	
	[6.271]	
CR5L	8.920***	
	[0.997]	
OFFICE		- 0.035*
		[0.018]
HHIO		0.141
		[5.605]
CR5O		- 1.458*
		[0.791]
BANK	0.071*	- 0.007
	[0.037]	[0.039]
STOC	0.004	0.003
	[0.002]	[0.002]
SER	- 0.028	- 0.034
	[0.037]	[0.038]
R^2	0.271	0.228
Adj- R^2	0.260	0.271
F- Stat	24.572***	19.593***

Note: *p < .01. ** p < .01. *** p < .001. Values in [ ] are the standard error values.

possesses good explanatory power. The results of empirical testing of model 2 indicate that the law firm density ratio and law firm concentration ratio have a negative influence on the real GDP growth rate; thus, H4 and H6 are not supported. For every 1% increase of the law firm density ratio, the real GDP growth rate decreases by 0.035%; for every 1% increase of the law firm concentration ratio, the real GDP growth rate decreases by 1.458%. Lastly, the results also indicate that the law firm HHI has no significant influence on the real GDP growth rate. Hence, H5 is also not supported.

Empirical Testing Results Discussion

The results of empirical testing reveal that the lawyer density ratio and law firm density ratio have a negative influence on the real GDP growth rate. This indicates that merely increasing the number of lawyers and law firms cannot improve the legal environment for economic development. Instead, the focus should be placed on enhancing the quality of the lawyers and law firms, because lawyers can play a key role in the financial industry. With lawyers acting as intermediaries, two parties are more likely to trust each other, and this in turn facilitates deal making and ensures contract execution (Tan & Wu, 2005). In addition to its lawyers' professional ability, the quality of a law firm also depends on its operation mode. An effective operation mode can reduce possible friction in financial trades, enhance trading efficiency, and ultimately result in economic growth.

The empirical testing results also reveal that the lawyer HHI and lawyer concentration ratio have a positive influence on the real GDP growth rate. This indicates that the distribution of lawyers in China is reasonable and beneficial for the optimization of the legal environment. Conversely, the results reveal that the law firm concentration ratio negatively affects the real GDP growth. Thus, future establishment of law firms in China should be more balanced across the nation. Tan and Wu (2005) and Zhou (2018) argue that the development of regional economies requires support from the regional legal environment, and that imbalances in financial development are caused by legal differences between different regions. Therefore, optimizing legal resource allocation is an effective approach for raising the financial development level and promoting economic growth.

Conclusions and Suggestions

Study Conclusions

Compared with banks, markets, and financial services, the law has a stronger influence on the financial development level and economic growth. Therefore, China should optimize its legal environment and raise its law enforcement efficiency. A sound legal environment and high law enforcement efficiency are the essential requirements that guarantee promotion of reform to a market economy system. Additionally, they are also the inevitable requirements for achieving financial deepening and sustainable economic development.

Study Suggestions

The legal environment in China remains far from ideal. According to Lu and Yao (2009), developing coun-

tries that are in the early stages of economic transition often face problems such as lack of motivation in the implementation of the rule of law and difficulties in law enforcement. Based on the empirical results of the present study, the following proposals are made:

(i) Improve the integrity of the lawyer system and enhance the quality of the rule of law

The results of the present study indicate that the density of lawyers and the density of law firms have a significant negative influence on the real GDP growth. Therefore, improving the integrity of the lawyer system is imperative for improving the legal environment and facilitating economic growth. The “Opinions on Deepening Reform of the Lawyer System” promulgated by the State Council of the People's Republic of China in 2016 stated that deepening reform of the lawyer system requires the enactment of measures that can protect lawyers' right to practice, optimization of the lawyers' code of practice, and full utilization of lawyers' functions in legislation, law enforcement, the judiciary, and law compliance. Implementing these measures would enhance lawyers' professional abilities and enable lawyers to fully participate as intended in the law enforcement system. Therefore, enhancement of the system integrity requires optimization of the lawyers' occupational environment and optimization of other protection mechanisms relevant to the lawyer profession, including procedural rights, practice rights, and salvation mechanisms.

(ii) Emphasize the cultivation of legal talents and transform the operation mode of law firms

The cultivation of legal talents is necessary for the sustainable development of law firms, and it is an inevitable requirement of forming a law- governed society. However, the current system for the cultivation of young lawyers is flawed, and the current operating mechanisms of lawyer firms are still incomplete (Wang & Wan, 2012). Judging from the current state and development trends of the legal environment, both lawyers and law firms must strive toward professionalization. With the ever increasing extent of lawyers’ responsibilities and services, lawyers must expand their knowledge bases and skill sets to incorporate elements of other nonlegal professional domains and strive to be well- learned experts in these domains. Regarding law firms, they should be encouraged to comply with market demands and improve their service quality accordingly to achieve the commercialization, institutionalization, compartmentalization, and streamlining of law firm operations.

(iii) Optimize legal resource allocation

The results of empirical testing show that the lawyer HHI and lawyer concentration ratio have a positive influence on the real GDP growth rate, indicating that the allocation of legal resources plays a critical role in facilitating economic growth. To achieve a balanced distribution of legal resources, China’s government must first increase the relevant expenditure, followed by establishing legal development funds and expanding the scope of

legal aid. In this information age, the dissemination of legal information on the Internet can help with optimizing legal resource allocation. However, although the Internet contains many genuinely helpful sources of legal information, many sites are disorganized and intertwined with false or fabricated information. Thus, the government must work on establishing a standardized and authoritative source for online legal information in order to ensure effective publication, acquisition, and dissemination of such information (Lu, 2013).

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