



Bank risk taking, efficiency, and law enforcement: Evidence from Chinese city commercial banks[☆]

Jianhua ZHANG^a, Peng WANG^a, Baozhi QU^{b,*}

^a People's Bank of China, China

^b Skolkovo Institute for Emerging Market Studies, Moscow School of Management, Beijing

ARTICLE INFO

Article history:

Received 30 May 2011

Received in revised form 7 November 2011

Accepted 20 December 2011

Available online 29 December 2011

JEL classification:

G21

G28

K0

Keywords:

Bank risk taking

Bank efficiency

Law enforcement

Stochastic frontier analysis

China

ABSTRACT

We investigate bank risk taking, efficiency and their relation to law enforcement using a unique sample of 133 Chinese city commercial banks across 31 regions for the 1999–2008 period. We find that stronger law enforcement tends to promote greater bank risk taking in the region. Furthermore, employing a stochastic distance function approach, our analysis shows that the performance of Chinese city commercial banks, as measured by bank efficiency, is heavily influenced by the effectiveness of law enforcement in the region. Better legal environment, higher efficiency in the legal system, and stronger protection of intellectual property right are associated with a higher level of efficiency among these banks.

© 2012 Elsevier Inc. All rights reserved.

1. Introduction

The growing law and finance literature (pioneered by La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998) has documented that a well-developed legal system enhance the enforcement of financial contracts. Since banks are usually in the center of a country's financial system and their operation and performance depend heavily on the contract enforcement (e.g., a loan contract), legal institutions may have a significant impact on banking. Previous research has reported some evidence of such influences. For instance, Cole and Turk-Ariss (2008) find that banks have higher loan ratios in countries with English legal origin and weaker creditor rights. Houston, Lin, Lin, and Ma (2010) document that stronger creditor rights protection tends to promote greater bank risk taking. The legal system and the effectiveness of law enforcement may also influence the operation and performance of a country's banking sector through other channels, such as by enhancing lending technology (Berger & Udell, 2006), increased availability of loans (Qian & Strahan, 2007), or reduced rigidity of regulations (Demirguc-Kunt, Laeven, & Levine, 2003).

Most of the abovementioned studies use a standard cross-country setting to examine the links between law and bank operations on the basis of country-level institutions. However, such a setting has two limitations. First, cross-country analysis may not sufficiently account for the great heterogeneities across countries, such as the difference in history, culture, natural endowment,

[☆] This paper represents the views of the authors and does not necessarily represent the People's Bank of China's views or its policy. The views expressed herein should be attributed to the authors and not to the People's Bank of China.

* Corresponding author. Tel.: +86 10 64981634x217; fax: +86 10 64981634x208.

E-mail address: Baozhi.Qu@skolkovo.ru (B. Qu).

etc. Second, by assuming uniform legal and institutional environment within a single country, these studies fail to take into consideration the significant degree of variation in the institutions and law enforcement within a particular country, which has been well documented and proved important in affecting economic and financial outcomes.¹ Micro data analysis at the bank level that takes into consideration the variation in institutional quality within a country can therefore provide valuable empirical evidence that complements and extends the existing country-level research. As [Acemoglu \(2005\)](#) correctly points out, questions related to the importance of legal institutions “will be almost impossible to answer with cross-country data alone, and micro data investigations, for example, exploiting differences in regulations across markets and regions appear to be a most promising avenue” (p. 1045).

Our study contributes to the literature by providing bank-level evidence of a link between bank risk taking and law enforcement using a within-country setting. It further provides a direct examination of the potential effects of the law enforcement on bank performance (as measured by bank efficiency), which is noticeably absent in this recent literature as correctly argued by [Berger and Mester \(1997\)](#) and [Hasan, Wang, and Zhou \(2009\)](#). We take advantage of a unique data set which has extensive information on 133 Chinese city commercial banks (CCBs) from 1999 to 2008. Such a rich data set of Chinese CCBs serves our purpose particularly well because China is a big country with great regional variation. Although China is a centralized country so that the laws on book are highly uniform across regions, the quality of law enforcement varies significantly across provinces. CCBs usually conduct their business only within the boundaries of a city or province, which provides us with a unique opportunity to study how regional institutional environment affect bank risk taking and performance while controlling for a large set of bank-level characteristics and country-level variables.² In addition, since CCBs are relatively small and they do not have a significant impact on the regional institutional development, the concern for the endogeneity of legal institutions and law enforcement is significantly reduced in this setting (more discussion in [Section 4.1](#)).

In China, a number of market-oriented reforms took place during the past decade and these reforms led to important changes in the institutional environment of Chinese banks.³ These changes developed in a very unbalanced way across different provinces, especially in terms of the effectiveness of law enforcement. According to [Fan et al.'s \(2000, 2004, 2006, 2010\)](#) measures, the necessary market intermediaries that are essential for the effective law enforcement are more developed in some provinces (such as Zhejiang) than others (such as Qinghai). Similarly, the efficiency of the regional legal system and the effectiveness of certain laws (such as the protection of the intellectual property rights) also have great variations across provinces. Such difference in law enforcement could affect bank risk taking and the efficiency of banks in the region both directly and indirectly. For instance, more effective law enforcement reduces credit risk by providing more protection to banks when the loan contract is defaulted, thus encourage banks to take more risks and make more loans ([Houston et al., 2010](#)). In addition, better legal protection (such as protection of the intellectual rights) creates a better market environment for firms thus may improve the performance of borrowers. This will in turn affect banks indirectly by reducing the credit risk of banks' loan portfolio and encourage banks to take more risk by lending to more risky borrowers such as new startups of IT companies.

Our empirical results show that stronger law enforcement encourages risk taking among Chinese banks. In addition, using a stochastic function approach, our study shows that better legal environment, more efficient law enforcement and better protection of intellectual property rights are significantly related to greater bank efficiency. The findings are in general consistent with the cross-country research by [Houston et al. \(2010\)](#) and with [John, Litov, and Yeung \(2008\)](#)'s argument that stronger legal protection could lead to riskier but value-enhancing investments.

By focusing on CCBs in China, our paper also makes a contribution to the efficiency study of Chinese banks. A number of studies have examined bank efficiency in China (e.g., [Berger, Hasan, & Zhou, 2009](#); [Chen, Skully, & Brown, 2005](#); [Hasan et al., 2009](#); [Jiang, Yao, & Zhang, 2009](#)). Most of these studies focus on the listed Chinese banks that are relatively large with nationwide business operations, probably because the financial information of these banks is publicly available and thus easily obtained. However, one of the most important changes in the Chinese banking sector in the past decade is the emergence and rapid development of a new breed of dynamic regional banks – CCBs. In contrast to the major state-owned commercial banks, these banks are recent entities, have a lower level of state ownership and operate mainly in the regional market of a city or province. As of 2008, there were more than 136 CCBs in China, with at least one in almost every major city. Most of them, however, are unlisted. This constraint on data availability makes CCBs significantly underrepresented in previous efficiency studies of Chinese banks. The very few studies of CCBs have had to rely mainly on survey data, and their sample size is significantly limited (e.g., [Ferri, 2009](#)⁴). The rich data set of Chinese CCBs in our study thus allows us to fill the gap by providing empirical evidence on their risk-taking behavior and the efficiency of CCBs. Our study also differs from the previous research (e.g., [Ferri, 2009](#)) in several other ways: we use a distance function approach to study the efficiency of CCBs, which may better capture the quality of banking

¹ For instance, corruption in some regions may be more pervasive than that in other regions, and a country may have strong rules and regulations on the books but weak law enforcement in some regions and for some firms. [Berkowitz and Clay \(2006\)](#) show that the quality of state courts varies significantly across U.S. states and is greatly affected by the initial conditions of a state. [Laeven and Woodruff \(2007\)](#) find significant variation in the quality of the Mexican legal system. [Acemoglu and Dell \(2010\)](#) argue that both *de jure* and *de facto* institutions vary greatly within countries. Using World Bank enterprise survey data, [Ma, Qu, and Zhang \(2010\)](#) find that the average within-country variation in judicial quality is much greater than the cross-country variation in judicial quality.

² This empirical setting distances our paper from similar research (e.g., [Hasan et al., 2009](#)) that focuses on Chinese banks that have country-wide banking operation. If a bank is allowed to operate across different provinces, then it will be difficult to isolate the effect of regional institutional environment on its efficiency.

³ Given that the banking sector in China has been under heavy regulation of the government and most of the reforms related to this sector followed a “top-down” procedure, we expect that the causality goes from market development and institutional changes to banks' risk-taking and efficiency and not the other way around.

⁴ In addition, [Ferri \(2009\)](#) did not consider the risk-taking of Chinese CCBs.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات