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**Essays on Money and Finance:  
Evidence for China**

By

**Jiajin Huang**



**Duncker & Humblot · Berlin**

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## Preface

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Shanghai, September 2018

*Jiajin Huang*



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## Introduction

This dissertation consists of three papers. Each chapter covers a topic in money and finance in China: the first chapter investigates the role of the informal financing in China. Both the second and third chapters focus on the measurement and effect of Chinese monetary policy.

In the first chapter, I use a firm-level dataset for Chinese manufacture industry over the 2001–2007 period to examine the effect of informal financing on firm performance, including output growth, labor productivity growth and TFP growth. According to the accounting information in our dataset, financial sources are divided into short-term liabilities, long-term liabilities, equity issuance and internal financing. More specifically, we invent a new term *interest expense rate*, which is defined as the interest expenses of firms divided by total liabilities, showing which financing sources the firm relies on. Therefore, a firm's main financing sources are classified into three categories: standard bank loans, low risk informal financing and high risk informal financing. We find that the low-risk informal financing exerts a positive effect on a firm's performance, including output growth, labor productivity growth and TFP growth. The effect of high-risk informal financing on firm performance is endogenous, whereby higher potential returns prompt the usage of high-risk informal financing. After using instrumental variables, we find no significant relationship between high-risk informal financing and output growth and it actually impedes labor productivity growth and TFP growth. My findings suggest that low-risk informal financing play an important and significant role in improving economic growth and should be encouraged and protected.

The second chapter investigates the performance of various monetary indicators in responding to macroeconomic conditions. Besides the commonly-used indicators such as the official lending rate, the reserve money growth and the broad money supply growth, I also take an index obtained by a narrative approach into comparison. Furthermore, this paper establishes a new index by using a state space method, reflecting changes in various monetary instruments implemented by the PBC (People's Bank of China, the central bank of China). Our indicator has both theoretical and empirical advantages in measuring the monetary policy stance of the PBC, since all of these monetary instruments are directly controlled by the monetary authority and given varying emphasis in different phases. It also reacts

significantly to both the inflation and output gap, coinciding with the legal mandates of the PBC to maintain price stability and economic growth.

Due to the growing influence and spillover effect of China's monetary policy, we analyze its changing impact on its neighboring countries in the third chapter. We first explore the institution and mechanism of China's monetary policy and exchange regime, as well as establishing a new indicator of the Chinese monetary stance through a state space model. Based upon global VAR (GVAR) methods, we investigate the effect of China's monetary policy shocks on its close trading partners in developing Asia. Our results show that an expansionary monetary policy in China will give rise to an economic growth for most countries and its transmit mechanism may be through trade owing to its insignificant effect on inflation in other countries. A devaluation shock of RMB will actually hurt the Chinese economy and the other currencies will also devalue. In addition, we compare these findings with the same model using the 1995 trading volume, whereby the results show that the impact of China's monetary policy has almost doubled in the past two decades.

## *Chapter 1*

# **Financial Sources and Economic Growth: Firm-Level Evidence from Chinese Manufacturing Industry**

## **1.1 Introduction**

The relationship between financial development and economic growth has attracted significant attention in the past two decades. The predominant view is that the increased availability of financial instruments and institutions helps economic agents to hedge, trade and pool risk, which reduces transaction and information costs and ultimately increases investment and economic growth. Many scholars have proved this positive relationship through cross-country studies (Schumpeter, 1912; Levin and Zervos, 1998; Beck, Levine and Loayze, 2000).

However, China seems to be a special case. Indeed, exploring the empirical literature regarding China's finance-growth nexus, the relationship becomes more complicated. Existing research on the links between finance and growth in China has led to contrasting results, whereby some authors have documented a positive relationship, others a negative one and sometimes no significant relationship at all (Aziz and Duenwald, 2002; Guariglia and Ponce, 2008; Boyreau-Debray, 2003; Liang, 2005; Hao, 2006; Chang, 2002; Shang, 2005). Scholars like Bekaert et al. (2006) have begun to claim that China's extraordinary growth cannot be fully explained using standard growth regressions, whereby understanding its determinants remains an open question. Allen et al. (2005) also characterize China as a counter-example to the findings of the finance-growth literature, given that despite having a malfunctioning financial system it has been one of the fastest-growing economies in the world.

While research interest has mainly been focused on formal financial institutions, the literature has also recognized the existence and role played by informal financial systems, especially in developing economies. These informal financing channels include trade credit, private lending, underground money houses, etc. These informal financial institutions rely on relationships and reputation rather than standard ways to provide credit. Monitoring and enforcing repayments are considered more efficient than