Volkswirtschaftliche Schriften

Band 571

Essays on Money and Finance: Evidence for China

By

Jiajin Huang

Duncker & Humblot · Berlin

JIAJIN HUANG

Essays on Money and Finance: Evidence for China

Volkswirtschaftliche Schriften

Begründet von Prof. Dr. Dr. h. c. J. Broermann †

Band 571

Essays on Money and Finance: Evidence for China

By

Jiajin Huang

Vincit Veritas D&H

Duncker & Humblot · Berlin

The Graduate School of Economics, Finance and Management
of the Johann Wolfgang Goethe-University Frankfurt/Main
accepted this work as a thesis in the year 2016.

Bibliographic information of the German national library

The German national library registers this publication in
the German national bibliography; specified bibliographic data
are retrievable on the Internet about http://dnb.d-nb.de.

D30

Typesetting: L101 Mediengestaltung, Fürstenwalde
Printing: CPI buchbücher.de gmbh, Birkach
Printed in Germany
ISSN 0505-9372
ISBN 978-3-428-15690-0 (Print)
ISBN 978-3-428-55690-8 (E-Book)
ISBN 978-3-428-85690-9 (Print & E-Book)

Printed on no aging resistant (non-acid) paper
according to ISO 9706 ♾

Internet: http://www.duncker-humblot.de

Preface

First and foremost, I would like to thank my supervisor, Prof. Michael Binder, for his invaluable advice, incredible supervision and constant support. I appreciate all his contributions of time and ideas to make my Ph.D. experience productive and stimulating. I am especially grateful to Prof. Philipp Harms, Prof. Hermann Remsperger and Prof. Ctirad Slavik, for incredible guidance and encouragement.

I would also like to thank the members of my defense committee, Prof. Uwe Walz and JunProf. Crummernel, for their help and suggestions. I gratefully acknowledge the funding source *Geld and Währung* managed by Prof. Uwe Walz, which made my Ph.D work possible. In addition, I thank Jun-Prof. Baptiste Massenot, Likun Wang, Kailin Zeng, Jian Li, Xiaobei He, Xuan Zhang, Chengzhi Xu, Le Wang, Xiaoxi Zhang, Izabela Sobiech, Christian Guth, Tugba Karagöz, Mohammed Aldegwy for their helpful discussions and support. My time at Frankfurt University was made enjoyable in large part due to the many friends who became a part of my life, albeit some of them have already left Germany.

Last but not the least, I wish to express my love and gratitude to my family for all their love and encouragement. For my parents, Deshan Huang and Meifang Sun, who raised me with a love of exploring unknown world and support me in all my pursuits as well as my sister, Jiali, who always stands by me. And most of all for my loving, supportive, encouraging, and patient wife Xinyue, whose faithful support through the duration of my study is so appreciated. Of course, for my little angel, Julia, who is so cute and lovely and has grown up with my Ph.D dissertation writing, without whom I might be complete the dissertation earlier, but with much less joy and happiness.

Shanghai, September 2018 *Jiajin Huang*

Table of Contents

List of Tables

List of Figures

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 devaluate. 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