



**ANDREW SHENG  
NG CHOW SOON**

**SHADOW**

**BANKING**

**IN CHINA**

**AN OPPORTUNITY FOR FINANCIAL REFORM**

**WILEY**

# Shadows Banking in China

*An Opportunity for Financial  
Reform*

EDITED BY  
ANDREW SHENG  
NG CHOW SOON

WILEY

This edition first published 2016  
© 2016 Fung Global Institute Limited

The right of Andrew Sheng and Ng Chow Soon to be identified as the editors of this work has been asserted in accordance with the Copyright, Designs and Patents Act 1988.

Registered office

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ,  
United Kingdom

For details of our global editorial offices, for customer services and for information about how to apply for permission to reuse the copyright material in this book please see our website at [www.wiley.com](http://www.wiley.com).

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, except as permitted by the UK Copyright, Designs and Patents Act 1988, without the prior permission of the publisher.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at <http://booksupport.wiley.com>. For more information about Wiley products, visit [www.wiley.com](http://www.wiley.com).

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The publisher is not associated with any product or vendor mentioned in this book.

Limit of Liability/Disclaimer of Warranty: While the publisher and editors have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. It is sold on the understanding that the publisher is not engaged in rendering professional services and neither the publisher nor the editors shall be liable for damages arising herefrom. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

*Library of Congress Cataloging-in-Publication Data*

Names: Sheng, Andrew, editor. | Ng, Chow Soon, editor.

Title: Shadow banking in China : an opportunity for financial reform / Andrew Sheng, Ng Chow Soon.

Description: Hoboken : Wiley, 2016. | Includes index.

Identifiers: LCCN 2016004493 (print) | LCCN 2016011405 (ebook) |

ISBN 9781119266327 (hardback) | ISBN 9781119266358 (ePDF) |

ISBN 9781119266341 (ePub)

Subjects: LCSH: Nonbank financial institutions—China. | Finance—China. |

BISAC: BUSINESS & ECONOMICS / Finance.

Classification: LCC HG187.C6 S53343 2016 (print) | LCC HG187.C6 (ebook) |

DDC 332.10951—dc23

LC record available at <http://lccn.loc.gov/2016004493>

A catalogue record for this book is available from the British Library.

ISBN 978-1-119-26632-7 (hardback) ISBN 978-1-119-26635-8 (ebk)

ISBN 978-1-119-26634-1 (ebk) ISBN 978-1-119-26639-6 (obk)

Cover design: Wiley

Cover image: © Liufuyu/Getty Images

Set in 11/13.5pt TimesLTStd-Roman by Thomson Digital, Noida, India

Printed in Great Britain by TJ International Ltd, Padstow, Cornwall, UK

## FOREWORD

The Fung Global Institute (FGI) was established in August 2011 to create a dialogue on global issues from Asian perspectives. Its research agenda covered a wide range of global issues, such as global trade and supply chains, development growth models, finance and the environment. This study on shadow banking in China comprises the third of three major FGI studies on China. Our first report comprised a major study undertaken with the China National Development Research Council on the story of Foshan and how a city could be a prototype for the evolving growth model for China to tackle a wide range of social and developmental issues. The second report was a major review of the issues and challenges of RMB internationalization, providing a road map on China's way forward. This study on shadow banking looks at the emergence of shadow banking and its opportunities and challenges for the reform of the financial sector in China.

This book puts recent developments in China's shadow banking sector into perspective. Currently, there is much debate and confusion over the potential risks of Chinese shadow banks, with some commentators even suggesting that it could trigger the next Chinese financial crisis.

Specifically, this study sheds light on the scale of shadow banking in China by clarifying definitional issues to address the problems of double counting and under counting associated with a simplistic aggregation of different products and assets of shadow banking activities, which created errors of double counting and under counting. Working in partnership with Oliver Wyman, the leading global financial and strategic consultant, the FGI has built upon the official definition and estimation of China's shadow banking activities to derive a more realistic estimate of the scale of shadow bank risks.

The book also seeks to identify the Chinese characteristics or factors underpinning the rapid growth of Chinese shadow banks. Chinese shadow banks arose from a market response to limitations in the current

banking business model to meet real sector needs for access to credit, combined with market demand for higher-yielding saving/investment products by China's household and corporate high savers.

The book delves into Chinese data sources and research studies, many not available in English. Using China's recently available national balance sheet and flow of funds data, the authors drill down into the interconnectivity and relationships between the different components of shadow banking and formal banking through a stock-flow approach. Fresh insights on the interconnectivities and vulnerabilities at the sectoral level (external sector, household sector, central government, local government, non-financial corporate, and financial sector) are offered.

The comprehensive assessment of the scale of risks of Chinese shadow banking considers carefully the quality of its assets. The ultimate credit exposures of the Chinese banking system (including shadow banks) fall mainly on four major categories of borrowers: large state-owned enterprises (SOEs); private sector small- and medium-sized enterprises (SMEs); real estate companies; and Local Government Financing Platforms (LGFPs). The authors assess the quality of these four different classes of banking assets to provide an indication of the potential risks of such assets becoming non-performing loans (NPLs), as well as the likely impact on the formal banking sector and broader financial system. China's financial system also suffers a structural maturity mismatch because its long-term investments have been funded largely through short-term borrowing from the banking/shadow banking system. At the same time, there is a structural debt/equity mismatch as most investments are funded by debt rather than equity.

By looking at shadow banking risks at the product, institution and system levels, the authors develop the likely scenarios for shadow banking NPLs for selected industries, based on different assumptions on the level of economy-wide stress. Going a step further, shadow banking is categorized into three different risk layers based on its connection with the formal banking system. Between 20–40 percent of such NPLs could be 'transferable' to the formal banking system and may drive banking NPLs towards ~7 percent under the "disaster" scenario.

With the economy still growing at 6–7 percent per annum, low fiscal deficit, a high savings rate and very large foreign exchange reserves, the book concludes that a systemic financial meltdown is unlikely as China has adequate resources and policy flexibility to address what is essentially a domestic debt problem with no direct global implications.

Nevertheless, the combination of slower world growth and trade, plus the threat of a domestic real estate price adjustment, could create the conditions for an escalation of domestic financial risks, with indirect, contagion effects on foreign banks and investors. All these underscore the need for prompt action to resolve the shadow banking issues to preempt any contagion effects. Whilst the emergence of shadow banks poses some risks, there is a golden opportunity to utilize the time available to implement major structural reforms so that in the long term, China's financial system will be able to support efficiently, stably and equitably, the needs of the real economy.

The book concludes that instead of introducing more regulations and piecemeal reforms, the reform of the shadow banking sector offers the opportunity to expedite financial reform on a system-wide basis. Building on officially announced reforms, it offers a comprehensive financial system blueprint (with detailed immediate, medium- and longer-term policy recommendations) to address the potential risks of shadow banking and diversify China's bank-dominated financial sector to address structural maturity and debt-equity mismatches to promote a more sustainable and inclusive financial system.

It is hoped that the book will be useful for policy makers, investors, analysts and those interested in China's continued transformation and engagement with the global economy.

On July 1, the FGI was inaugurated as the Asia Global Institute at The University of Hong Kong. Its research agenda will continue to focus on global issues with Asian perspectives.

Dr Victor K. Fung  
*Founding Chairman, Fung Global Institute and  
Chairman, Advisory Board, Asia Global Institute,  
The University of Hong Kong  
October 1, 2015*

## FOREWORD

This book considers the sources of gains, losses and risks associated with the Chinese shadow banking industry from a historical and public policy perspective. While the scale of China's shadow banks is still relatively small by international comparison, their rapid growth in recent years requires careful attention by policymakers and the industry to ensure that the problem is properly managed. In identifying the Chinese characteristics or factors that led to its rapid growth, this book helps to highlight the underlying problems in the shadow banking industry in China.

Mr Andrew Sheng, in his role as former President of the Fung Global Institute (FGI) and the Chief Adviser to the China Banking Regulatory Commission (CBRC), has been doing research on this emerging issue with his FGI team to understand the scope, size and nature of Chinese shadow banks and their complex interconnectedness with and implications on the rest of the financial system and the economy in China. The results of their research are reflected in this book, which offers an objective and comprehensive assessment of the scale and possible impact of China's shadow banks on the domestic and external markets.

The book contends that the best means of responding to the threat represented by shadow banking is to adopt a two-pronged approach with two key procedural mechanisms: (a) careful monitoring and supervision of all shadow banking activities to mitigate their interconnected risks that could lead to unintended consequences, including crisis; and (b) expedite the reform and restructuring of the financial services industry to serve the real economy in a more efficient and effective way.

Given the centrality of financial institutions and markets to real economic growth and societal well being, it is exceedingly important for all of us to act swiftly and decisively, in order to ensure that matters do not take a turn for the worse. The recommended financial reforms will

enable China to face the current environment of increased volatility and uncertainty in financial markets, both in China and abroad, and go a long way toward achieving the dream of a vigorous and successful China.

Liu Mingkang  
*former Chairman, China Banking Regulatory Commission;  
Professor and Distinguished Fellow,  
Institute of Global Economics and Finance,  
The Chinese University of Hong Kong, Hong Kong  
Honorary Dean, Lingnan (University) College,  
Sun Yat Sen University, Guangzhou, China*



## ACKNOWLEDGMENTS

This book had its origins in a board meeting of the Fung Global Institute, when board member Stuart Gulliver, Group CEO of HSBC Holdings PLC, suggested that the FGI should undertake a more comprehensive study of shadow banking in China due to the many divergent guesstimates and forecasts on the size of the shadow banking problem in China. This book could not have been possible without the generous contributions and support from FGI's corporate partners in its financial studies, particularly from HSBC, China Development Bank, Japan Post Bank and AIA. The book also benefited from their helpful comments and insights, but responsibility for the opinions, views and errors and omissions remain solely with the authors and editors.

Oliver Wyman has been a major partner and collaborator on this project, led by Christian Edelmann and Cliff Sheng, with support from their Asia-Pacific Chairman, Rafael Gil-Tienda. Working with their team was a pleasure because the book had the benefit of their global skill sets and on-site China experience.

The book also owes its completion to the unstinting support of FGI Chairman Dr Victor Fung, Academic Council Chairman and Nobel Laureate Michael Spence, Distinguished Fellow Liu Mingkang, President Dr Bill Overholt, Barbara Meynert and other board members who gave their moral and critical support at all stages of its production. Nobel Laureate Myron Scholes, and other anonymous reviewers, gave valuable comments and insights for the improvement of the book. Dr Xiao Geng and Eva Yi also provided helpful comments that kept the book on its focus on ground conditions in China.

The book could not have been completed without the hard work and dedication of its principal contributors, Ms Jodie Hu, Ms Wang Yao, Mr Li Sai Yau and Ms Cathleen Yi Tin. They read all the available literature on the subject, especially original Chinese research and sources

not available in English, and meticulously compiled all the data, tables and drafts. Comments on the Chinese translation were provided by Ms Zhang Liang and Dr Li Chen. Tremendous support was received from Yvonne Mak, Arian Hassani, Galvin Chia, Jenny Chan, Jillian Ng, Warren Lu and Thomson Ng. Sarah Wong provided all the coffee, tea and biscuits to keep the team going.

Events are moving very rapidly following the A-share turmoil in June–September 2015. Whilst recent events did not negate the findings and recommendations of this book, the authors are embarking on a new book on the A-share market and its role in the reform and development of the Chinese economy. This will be forthcoming in 2016.

We would like to acknowledge the unstinting help and comments from various individuals in CBRC, People's Bank of China, universities and other research institutes who provided valuable comments on how to look at these complex issues. Finally, this book benefited from many helpful comments from friends, colleagues and experts in China, Hong Kong and elsewhere. They made this book more meaningful and less incomplete, but responsibility for any errors and omissions remain with the authors and editors.

Andrew Sheng and Ng Chow Soon

## ABOUT THE EDITORS

**Andrew Sheng** is Chief Adviser to the China Banking Regulatory Commission; former Chairman of the Securities and Futures Commission, Hong Kong; and former Deputy Chief Executive in HKMA. Uniquely, he sits on international advisory councils of the China Investment Corporation, China Development Bank, China Securities Regulatory Commission, Securities and Exchange Board of India, and Shanghai Municipality for Shanghai as an International Financial Centre. He is Board Director of Khazanah Nasional Berhad of Malaysia, and adjunct Professor to Tsinghua University School of Economics and Management and the WuDaoKou School.

**Ng Chow Soon** is former Director of the Governor's Office, Bank Negara Malaysia and a Harvard Mason Fellow.

## EXECUTIVE SUMMARY

**W**hile China has weathered the Global Financial Crisis (GFC) with continued economic growth, it now faces new headwinds in the form of a slowing domestic and global economy and weaker world trade. As the economy adjusts to a new normal of slower growth where reliance on export-driven growth may no longer be viable, questions are being raised about the sustainability of the Chinese growth. Some commentators have suggested that China's "Lehman moment" is imminent and that the Chinese shadow banking sector could become the cause of the next systemic global financial crisis.

This book seeks to bring the explosive growth in China's shadow banking credit into the light as there is much confusion over the potential risks of Chinese shadow banks due to definitional, methodology and measurement issues. Using China's national balance sheet data, the study assesses that the size of its shadow banking risk assets (at RMB 30.1 trillion or 53 percent of GDP and 27 percent of formal banking system credit assets in 2013) is still manageable, based on current fairly favorable conditions, as China has adequate resources and policy flexibility to deal with what is an essentially domestic debt problem.

However, time is of the essence in implementing remedial measures. This is because national balance sheet data only provide a top-down, snapshot view of the situation in China and a review of current conditions. They do not attempt to forecast dynamic changes in the Chinese economy and its interactions with global conditions. Conditions could well change dramatically for the worse if growth falters or property prices collapse due to some unforeseen shock. While modeling of these dynamics could offer additional insights and predictive value, such analysis is highly complex and data intensive (which requires the cooperation of regulators) and is beyond the scope of this book.

Nevertheless, this national balance sheet analysis reveals that the problem should not be underestimated, as the nexus of shadow banks, the formal banking system and inter-enterprise credit could be highly vulnerable to further economic slowdown and property price adjustments. This became evident with the turmoil in the A-share stock market in June–September 2015, where shadow banking institutions provided some of the margin financing for investors that made the markets more volatile and fragile.

While China's shadow banking risks are unlikely to trigger a worldwide systemic crisis, any further slowdown could affect market confidence and have indirect, contagion effects on foreign holdings of China's bonds and securities. The risks of contagion will grow as China already plays an increasingly significant role in global growth, trade and investments, as the world's second largest economy. If not properly managed, a series of defaults by shadow banks or their clients can affect domestic as well as foreign confidence.

Hence, prompt policy action is urgently required to preempt any escalation in shadow banking non-performing loans (NPLs) that could trigger wider contagion effects. Given the risks of slower world growth, a property market correction in China, as well as prospects of higher interest rates in the long term, any delays could make the problem more intractable.

The book concludes that introducing more regulations and piecemeal reforms is not enough and calls for a comprehensive financial system blueprint to diversify China's bank-dominated financial sector, in order to address structural maturity and debt–equity mismatches to improve financial intermediation and stability in China. As the current financial system provides short-term debt when the real sector needs long-term finance, especially equity to reduce leverage risks, the development of the capital/equity markets and institutional investors as a more sustainable source of long-term finance has become more urgent and critical. The immediate-term priority is to enhance transparency and address the moral hazard and bundling of risks between the shadow banks and the formal banking sector. There is also a need to untangle the inter-enterprise credit, which, bundled with shadow banking debt, increases contagion risks through evergreening and cross-guarantees.

This calls for speedy implementation of the legal entity identifier initiative (LEI), a bank resolution/exit mechanism, and greater clarity of regulatory roles and cooperation, as well as rapid implementation of the deposit insurance scheme announced in 2014. Early restructuring of

failing enterprises and problem debt situations will prevent recurrent worsening of contagion effects. Development of a strong credit culture and discipline is essential for a more modern and resilient financial system that is market-based and globally integrated. Equally important are measures to further enhance corporate governance and corporate social responsibility as the basis of a sound and more inclusive financial services industry.

The present financial system was designed to serve a largely state-owned production environment – based on investment and manufactured exports – that has reached its limits due to excess capacities, pollution and rising labor costs. The financial system needs to reform to meet China's changing needs as it rapidly shifts to a mass consumption and service-driven and market-led economy that is closely integrated with the world economy. Financial reforms are particularly important as China is undergoing profound change, moving into middle-income, urbanized consumption and production that is not only more broad-based, but is technologically knowledge-based and services-driven, mobile Internet friendly, more inclusive and ecologically green.

There is global concern that China may experience its own subprime crisis through the explosive growth in shadow banking credit. This was predicated on Chinese debt/GDP ratio of over 200 percent, rising more than 70 percent since 2008.

China's shadow banks comprise non-bank financial intermediaries (NBFIs) that came into prominence when they packaged wealth management products (WMPs) in order to sell to investors at higher than official interest rates, whilst at the same time fulfilling credit demand at non-official lending rates. In the last ten years, two broad groups of NBFIs began to perform bank-like activities in fund raising and lending. One group, commonly called Chinese shadow banks, comprising trust companies, moneylending and microfinance entities, served both depositors seeking higher returns and small borrowers who had limited access to bank funding. Internet financial platforms, on the other hand, used the gap between logistics and e-commerce business and the payments function to enter into funds transfer, wealth management and, increasingly, lending business.

These two groups responded to fundamental changes in the Chinese supply chain production, distribution and consumption and savings patterns, whilst addressing the genuine needs of the real sector and exploiting regulatory and interest rate arbitrages not addressed by the official banking system.

While the explosive growth in new and less understood products gives rise to regulatory concerns, it is important to recognize that they represent opportunities to reform processes and systems made obsolete by technology and market competition. However, closer regulatory attention is warranted to curb shadow banking activities that involve significant moral hazard, especially where the promoters are merely looking for quick profits (for example, in “Ponzi” or “get-rich-quick” schemes), exploit the poor and hide risks. Hence, the challenge for policy makers is to promote orderly financial market innovations to improve the allocation of capital and meet real sector needs while controlling the negative effects of shadow banking.

## KEY FINDINGS AND POLICY RECOMMENDATIONS

---

1. Shadow banks or NBFIs are not fearsome, toxic creations that must be regulated out of existence. Globally, they are an integral part of the financial system, providing financial services to underserved sectors. While advanced country shadow banks contributed to the global financial crisis (GFC), those in China are smaller and less complex, with lower risk. However, some Chinese shadow banks share the weaknesses of their foreign counterparts in promoting opaque, usurious lending, financialization and Ponzi schemes that complicate credit risks due to the moral hazards of linkages with the formal banking system. Whilst not all of the international experience is applicable, there can be no complacency in dealing with the emerging shadow banking risks that have unique Chinese characteristics. An example is the under-regulated P2P platforms that provided margin finance credit to stock market speculators, which contributed to the A-share market vulnerabilities.
2. The rapid growth of Chinese shadow banks can be seen as part of a market response to circumvent tight bank lending quotas and interest rate regulations to meet a real sector (especially SMEs) need for access to credit, and a concurrent demand for higher-yielding saving/investment products by China’s household and corporate savers. Shadow banks also expanded because the formal banking model is skewed toward short-term lending, whilst structural issues create demand for liquidity where enterprises are willing

to pay higher interest rates than official rates. Under these circumstances, shadow banks can be seen as a “roundabout” channel for financial innovation and development that regulators did not initially discourage.

3. Unfortunately, like elsewhere, financial innovations are sometimes accompanied by greed and motivation for quick profits through financialization, usurious lending, Ponzi schemes, fraud and outright abuse of controls and regulations. The Ponzi aspects in China involve cross-guarantees and tying shadow banking credit with formal bank involvement so that the credit quality of the formal system may be called into question. It is these areas that demand closer and immediate regulatory attention to curb their negative effects and moral hazard issues.
4. There is much debate (and confusion) about the potential risks in China’s shadow banks, due to a lack of clarity in definition, terminology and measurement. Market estimates of the size of Chinese shadow banking assets range from 14 to 70 percent of GDP. Apart from definitional differences, the wide range of estimates also reflects the problems associated with a simplistic addition of different products and assets of shadow banking activities with specific characteristics, which introduces an element of under counting, as well as double or even triple counting. Adding banks’ WMPs to other shadow banking assets held by other financial intermediaries (OFIs) results in double counting when banks package OFI assets, for example trust loans, as their off-balance sheet WMPs and the trust company still reports the loan as a trust loan on their balance sheet. However, if both the bank and trust company treat the loan off-balance sheet, the loan is not reported and there is under counting.
5. To address this problem, FGI has adopted the PBOC’s definition of China’s shadow banking activities, supplemented by the three criteria in Yan and Li (2014) to arrive at a more realistic estimate (with a focus on systemic risks). Specifically, our estimate of the scale of China’s shadow banking sector is based on our calculations of the scale of trust companies, microcredit companies, pawnshops, private/informal lending, P2P Internet lending and guarantors, banks’ WMPs and two kinds of interbank assets (entrusted loans and undiscounted bankers acceptances).
6. After netting out possible double counting, our study suggests that at the end of 2013, the scale of Chinese shadow banking risk assets



was RMB 30.1 trillion<sup>1</sup> or 53 percent of GDP and 27 percent of formal banking system credit assets. Based on latest published stock data on PBOC's Total Social Financing, our estimates suggest that the total shadow bank risk assets rose to RMB 32.2 trillion or 51 percent of GDP at the end of 2014. At this level, Chinese shadow banks have not yet reached crisis proportions, but the speed of recent growth and the complicated interrelationships leave no room for complacency. Some commentators have suggested that it could take at least ten years to resolve losses of this scale if problems break out into wider defaults.

7. Placed within the global context, shadow banking in China appears small relative to the global average of 120 percent of GDP. It has no direct global systemic implications, since China is a net lender to the world and very few foreigners hold Chinese shadow banking assets. However, any deterioration in shadow banking problems could undermine market confidence, with possible contagion effects on foreign holdings of China's bonds and securities. As shadow banks are also driven by a rush for quick profits, they warrant closer regulatory oversight to curb exploitation and excessive financialization that do not serve the needs of the real sector.
8. China's national balance sheet showed that at the end of 2013, China's public sector had net assets of RMB 103 trillion (162 percent of GDP), even after taking into consideration gross liabilities of RMB 124 trillion or 195 percent of GDP. With the economy still growing at 6–7 percent per annum, low fiscal deficit and a high savings rate, a financial meltdown on the scale of the GFC is unlikely as China has adequate resources and policy flexibility to address what is essentially a domestic debt problem. Nevertheless, the combination of slower world growth and trade, plus the threat of domestic real estate price adjustment, could create conditions for an escalation of domestic financial risks, with indirect, contagion effects on foreign banks and investors. All these underscore the need for prompt action to resolve the shadow banking issues to preempt any contagion effects.

<sup>1</sup>FGI and Oliver Wyman jointly published a report on shadow banking in January 2015, in which estimates were slightly higher at RMB 31.2 trillion, based on earlier PBOC data. Details on the differences are explained in Chapter 4 (section 4.2).