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Cover Page Footnote

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FINANCIAL REPRESSION IN CHINA: SHORT-TERM GROWTH BUT LONG- TERM CRISIS?

GUANGDONG XU & MICHAEL FAURE^{*}

I. INTRODUCTION

The relationship between financial development and economic growth has been of high interest for economists over the past three decades. It has attracted numerous empirical studies that use country-level, industry-level, and firm-level data to explore the issue. It appears that the evidence as a whole tends to favor the argument that finance matters for or even causes economic growth.¹ In two survey papers, Levine concludes that the evidence “suggests a positive, first-order relationship between financial development and economic growth,”² and “taken as a whole, the bulk of existing research suggests that countries with better functioning banks and markets grow faster.”³ In a recent survey paper that uses meta-analysis methods, Valickova, Havranek, and Horvath also report that “the literature as a whole documents a moderate, but statistically significant, positive link between financial development

^{*} The authors would like to thank the financial support from the Program for Young Innovative Research Teams of the CUPL (project number 16CXTD 09). We are grateful to Marina Jodogne (Maastricht) for excellent editorial assistance in the preparation of this paper.

1. However, the more recent studies challenge the conventional wisdom that finance unconditionally, linearly, and monotonically contributes to or even causes economic growth. By contrast, the finance-growth nexus is now shown to be non-linear, non-monotonic, but rather context-dependent. *See, e.g.,* Jean L. Arcand, Enrico Berkes & Ugo Panizza, *Too Much Finance?*, 20 J. ECON. GROWTH 105, 107 (2015).

2. *See generally* Ross Levine, *Financial Development and Economic Growth: Views and Agenda*, 35 J. ECON. LITERATURE 688 (1997).

3. Ross Levine, *Finance and Growth: Theory and Evidence*, in 1A HANDBOOK OF ECONOMIC GROWTH 865, 868 (Philippe Aghion & Steven N. Durlauf eds., 2005).

and economic growth.”⁴ A report issued by the World Bank therefore concludes that “finance is central to development.”⁵

However, there are certain apparent anomalies to the “finance matters” hypothesis—the most notable of those anomalies is China, which has experienced remarkable economic growth over the past four decades and has surpassed Japan as the world’s second-largest economy.⁶ However, China’s financial system can hardly be considered a supporting force during this process. According to Allen, Qian, and Qian, “China is an important counterexample to the findings in the law, institutions, finance, and growth literature: neither its legal nor financial system is well developed, yet it has one of the fastest growing economies.”⁷ Similarly, Naughton argues that “the financial system is lagging behind other aspects of China’s economic development and may become a source of economic vulnerability.”⁸

More accurately, China’s financial system is not only weak and underdeveloped, but also repressed. This is evident in how China’s financial system conforms to the stereotype described by the financial repression theory.⁹ The banking sector, which accounts for approximately 90% of China’s financial assets, is still dominated by state ownership; in addition, interest rates are still controlled by the government, and credit allocation is heavily influenced by political factors rather than by commercial motives. All these features will, as suggested by the financial repression theory,¹⁰ contribute to financial resources misallocation, social welfare loss, and growth slowdown or economic recession.

How has China been able to achieve such remarkable success in economic development, despite a repressed financial system, which is suggested to be harmful for economic growth? In earlier literature, the

4. Petra Valickova, Tomas Havranek & Roman Horvath, *Financial Development and Economic Growth: A Meta-Analysis*, 29 J. ECON. SURV. 506, 522 (2015).

5. WORLD BANK, GLOBAL FINANCIAL DEVELOPMENT REPORT 2013: RETHINKING THE ROLE OF THE STATE IN FINANCE 17 (2012), <https://openknowledge.worldbank.org/handle/10986/11848>.

6. David Barboza, *China Passes Japan as Second-Largest Economy*, N.Y. TIMES (Aug. 15, 2010), <https://www.nytimes.com/2010/08/16/business/global/16yuan.html>.

7. Franklin Allen, Jun Qian & Meijun Qian, *Law, Finance, and Economic Growth in China*, 77 J. FIN. ECON. 57, 57 (2005).

8. BARRY NAUGHTON, THE CHINESE ECONOMY: TRANSITIONS AND GROWTH 449 (2007).

9. Guangdong Xu, *Financial Repression, Economic Distortion, and China’s Growth Miracle*, in ECONOMICS & REGULATIONS IN CHINA 11 (Michael Faure & Guangdong Xu eds., 2013). For a description of the concept of financial repression see, e.g., Hiro Ito, *Financial Repression*, in 1 THE PRINCETON ENCYCLOPEDIA OF THE WORLD ECONOMY 430 (Kenneth Reinert & Ramkishan Rajan eds., 2008).

10. The features of financial repression as summarized in the financial repression theory will be presented in the next section. See *infra* Part II.

financial repression in China has been presented as a double-edged sword: on the one hand, it has helped China accomplish extraordinary economic growth in the short run by subsidizing investment and production; on the other hand, it endangers China's long-term economic health by damaging its economic efficiency, slowing job creation, and distorting the country's economic structure.¹¹ It is, therefore, unsurprising to witness the co-existence of a repressed financial system and a fast-growing economy in China, at least in the short run.

In this article, we will explain how the Chinese government uses financial regulation as a tool of China's financial repression. We will analyze the financial repression system as it is characterized by a variety of different regulations. Particular attention will be given to new developments in China's financial regulation since 2008. At that time, the Chinese government adopted an impressive stimulus program as a response to the global financial crisis. We will also identify particular institutional variables, such as the governance strategies of the party state, the political struggles among factions, and the influence of interest groups, which each have an important impact on the development of financial regulation in China. Using political economy theory, we will show how these political underpinnings explain the repressed financial system in China.

That will finally lead us to conclude that these political-institutional variables also are the cause of the difficulties in reforming the financial sector in China. Within the current party state in China, we argue that reform towards a more market-based direction is virtually impossible. A true market-based financial system is only possible if it is accompanied with political reforms that handcuff the grabbing hand of the party state.

We develop this argument as follows: Section II starts by offering a comprehensive overview of the economic theory of financial repression. Next, Section III describes the development of financial repression in China, showing how in various sectors, more particularly banking and financial markets, regulation aims toward financial repression, and describes the features of the repressed financial system. Section IV pays detailed attention to the new development of financial regulation in China since 2008 when a fiscal stimulus package was adopted. Economic

11. For earlier studies, see Xu, *supra* note 9; Guangdong Xu & Binwei Gui, *The Connection Between Financial Repression and Economic Growth: The Case of China*, 12 J. COMP. ASIAN DEV. 385 (2013) [hereinafter Xu & Gui, *The Case of China*]; Guangdong Xu & Binwei Gui, *Does Financial Repression Retard China's Economic Growth? An Empirical Examination*, in THE ROLE OF LAW & REGULATION IN SUSTAINING FINANCIAL MARKETS 73 (Niels Philipsen & Guangdong Xu eds., 2014) [hereinafter Xu & Gui, *An Empirical Examination*].

consequences of the financial repression will be discussed in Section V. Having analyzed the economic consequences of the financial repression, Section VI turns to an analysis based on political economy. It explores the institutional-political factors that may contribute to the distortion of the financial system in China, such as the legitimacy-seeking efforts of the party state, the necessity to subsidize state-owned enterprises (“SOEs”), and the attempt to co-opt private enterprises. Section VII concludes.

II. FINANCIAL REPRESSION: A THEORETICAL FRAMEWORK

Financial repression, according to Ito, refers to “the notion that a set of government regulations, laws, and other non-market restrictions prevent the financial intermediaries of an economy from functioning at their full capacity.”¹² The policies that cause financial repression include interest rate ceilings, liquidity ratio requirements, high bank reserve requirements, capital controls, restrictions on market entry into the financial sector, credit ceilings or restrictions on the direction of credit allocation, and the government’s ownership or control of banks.¹³

Financial repression theory has its origins in the works of McKinnon and Shaw.¹⁴ McKinnon and Shaw argue that many countries, including developed ones but especially developing ones,¹⁵ have historically restricted competition in the financial sector with government interventions and regulations. According to their argument, a repressed financial sector discourages both saving and investment because the rates of return are lower than what could be obtained in a competitive market. In such a system, financial intermediates do not function at their full capacity and fail to channel savings into investment efficiently, thereby impeding the development of the overall economic system. According to Shaw, financial repression reduces “the real rate of growth and the real size of the financial system relative to non-financial magnitudes. In all

12. Ito, *supra* note 9, at 1.

13. Carmen M. Reinhart & M. Belen Sbrancia, *The Liquidation of Government Debt*, 30 ECON. POL’Y 291, 296 (2015).

14. See RONALD I. MCKINNON, MONEY AND CAPITAL IN ECONOMIC DEVELOPMENT 69 (1973); EDWARD S. SHAW, FINANCIAL DEEPENING IN ECONOMIC DEVELOPMENT 80 (1973).

15. Reinhart & Sbrancia, *supra* note 13, at 298, report that, for advanced economies, real interest rates were negative in about half of the years during the 1945-1980 period. As a result of this repression policy, the average annual interest expense savings for their twelve-country sample ranged from 1% to 5% of GDP. The massive stocks of debt that accumulated during World War II were therefore reduced or liquidated: the average annual liquidation effect (debt reduction during years of negative interest rates) ranged from 0.3% to 4% of GDP for their full sample.

cases, this strategy has stopped or gravely slowed the development process.”¹⁶

The most important regulatory tool to reach financial repression is interest rate ceilings, (A); another tool is restrictions on entry into the financial sector, more particularly on banking, (B). One of the conclusions outlined below, urges developing countries to move toward financial liberalization in order to stimulate economic growth, (C). The effects of such liberalization are, however, not always clear. Empirical evidence indicates that financial liberalization only works if it is accompanied with an effective regulation of financial markets, (D).

A. Interest Rate Ceilings

Interest rate ceilings are one of the most commonly used strategies of financial repression. When an interest rate ceiling is set at a level that is below the market-clearing equilibrium rate, the demand for loanable funds will greatly exceed the available supply. This excess demand calls for the rationing of the limited supply and that in turn leads to inefficient economic outcomes:

Rationing is expensive to administer. It is vulnerable to corruption and conspiracy in dividing between borrowers and officers of the intermediary monopoly rent that arise from the difference between low, regulated loan rate and the market-clearing rate. Borrowers who simply do not repay loans and keep their place in the ration queue by extending maturities can frustrate it. The rationing process discriminates poorly among investment opportunities . . . and the social cost of this misallocation is suggested by the high incremental ratios of investment to output that lagging economies report.¹⁷

Interest rate ceilings also distort the economy in other ways.¹⁸ “First, low interest rates produce a bias in favor of current consumption and against future consumption.¹⁹ Therefore, these rates may reduce savings below the socially optimal level. Second, potential lenders may engage in relatively low-yielding direct investments instead of lending by way of depositing money in a bank. Third, bank borrowers who are able to obtain all their desired funds at low loan rates will choose relatively capital-intensive projects. Fourth, the pool of potential borrowers includes

16. SHAW, *supra* note 14, at 3-4.

17. *Id.* at 86.

18. Maxwell J. Fry, *In Favour of Financial Liberalisation*, 107 ECON. J. 754, 755 (1997).

19. The reason is clear: if interest rates are low, consumers will have no incentive to save for future consumption but will rather have the tendency to consume now, given the low gains of saving.

entrepreneurs with low-yielding projects, who would not want to borrow at the higher market-clearing interest rate.”

The influence of interest rate distortion has been tested by numerous empirical studies, many of which have identified a negative association between interest rate repression and certain fundamental macroeconomic variables, such as savings rates, investment, and economic growth.²⁰ For example, Fry tests the validity of the McKinnon-Shaw model for seven less-developed countries in Asia and concludes that the real rate of interest exerts a positive influence on the ratio of domestic savings to GNP: a 10% increase in the real rate of interest would raise the ratio of savings to GNP by approximately 1.4-2.1%.²¹ Fry reports that financial distortions, as measured by the real interest rate squared and the black market exchange rate premium, reduce investment ratios (and export growth),²² which in turn reduce output growth rates.²³ Roubini and Sala-i-Martin show the harmful effects of financial repression on economic growth:²⁴ countries with real interest rates of less than -5% in the 1970s experienced growth rates that averaged 1.4 percentage points less than growth rates in countries with positive real interest rates.²⁵

20. For more general surveys on the role of financial repression (as opposed to financial liberalization) in economic development, see Paul Auerbach & Jalal Uddin Siddiki, *Financial Liberalisation and Economic Development: An Assessment*, 18 J. ECON. SURV. 231, 247 (2004); Konstantinos Loizos, *The Financial Repression-Liberalization Debate: Taking Stock, Looking for Synthesis*, 32 J. ECON. SURV. 440, 445 (2018), <https://doi.org/10.1111/joes.12195>.

21. Maxwell J. Fry, *Money and Capital or Financial Deepening in Economic Development*, 10 J. MONEY, CREDIT & BANKING 464, 469-70, 474 (1978). See also, Maxwell J. Fry, *Saving, Investment, Growth and the Cost of Financial Repression*, 8 WORLD DEV. 317, 317 (1980); Prem S. Laumas, *Monetization, Financial Liberalization, and Economic Development*, 38 ECON. DEV. & CULTURAL CHANGE 377, 385-86 (1990); Ashfaq H. Khan & Lubna Hasan, *Financial Liberalization, Savings and Economic Development in Pakistan*, 46 ECON. DEV. & CULTURAL CHANGE 581, 582 (1998). But see KANHAYA L. GUPTA, FINANCE AND ECONOMIC GROWTH IN DEVELOPING COUNTRIES (1984); Alberto Giovannini, *Saving and the Real Interest Rate in LDCs*, 18 J. DEV. ECON. 197, 198 (1985); Oriana Bandiera, Gerard Caprio, Patrick Honohan & Fabio Schiantarelli, *Does Financial Reform Raise or Reduce Saving?*, 82 REV. ECON. & STAT. 239, 239 (2000). After systematically reviewing the related literature, Loizos, *supra* note 20, at 446, concludes that “the relationship between real interest rates and saving is more complicated than the McKinnon-Shaw model implies.”

22. Fry, *supra* note 18, at 765-67.

23. But see Joshua Green & Delano Villanueva, *Private Investment in Developing Countries: An Empirical Analysis*, 38 IMF STAFF PAPERS 33, 53 (1991) (revealing a negative and significant effect of real interest rates on investment); Mauro Costantini, Panicos O. Demetriades, Gregory A. James & Kevin C. Lee, *Financial Restraints and Private Investment: Evidence From a Nonstationary Panel*, 51 ECON. INQUIRY 248, 257 (2012) (showing that interest rate liberalization has a negative effect on investment).

24. Nouriel Roubini & Xavier Sala-i-Martin, *Financial Repression and Economic Growth*, 39 J. DEV. ECON. 5, 28 (1992).

25. Jose De Gregorio & Pablo E. Guidotti, *Financial Development and Economic Growth*, 23 WORLD DEV. 433, 437 (1995) (claiming that the relationship between real interest rates and

B. Entry Restrictions and State Ownership

Other repression policies are also considered harmful to financial development.²⁶ For example, entry restrictions, despite some possible justifications for their adoption—such as promoting bank stability and protecting the economy from the negative effects of bank failure—may be implemented by regulators in response to the demands of incumbent bankers, who are eager to protect their rents from the competition of new entrants. The adverse effects of regulatory restrictions on competition in banking have been confirmed by empirical evidence from around the world.²⁷ After reviewing literature on the impact of bank competition, Berger, Demirgüç-Kunt, Levine, and Haubrich concluded that “[m]ore regulatory restrictions on bank competition are associated with bad outcomes—such as less favorable prices for customers, less access to credit, and reduced stability of the financial system.”²⁸ Similarly, state ownership in the banking sector is shown to have a detrimental relationship with financial development and economic growth.²⁹ Greater state ownership of banks tends to be associated with higher interest rate spreads, less private credit, less stock exchange activity, less non-bank credit, a higher probability of financial crisis, lower productivity, and slower GDP growth.³⁰

economic growth may resemble an inverted “U” rather than a monotonically increasing or decreasing curve); Fry, *supra* note 18, at 764, (showing that growth is maximized when the real interest rate lies within the range of -5 to 15%).

26. Huang Yiping, Gou Qin & Wang Xun, *Financial Liberalization and then Middle-Income Trap: What Can China Learn From the Cross-Country Experience?*, 31 CHINA ECON. REV. 426, 429, 431 (2014). The authors construct an indicator of financial repression, which captures repressive financial policies in seven dimensions: (1) credit controls and reserve requirements, (2) interest rate controls, (3) entry barriers to the bank industry, (4) state ownership of banks, (5) policies on securities markets, (6) banking regulations, and (7) restrictions on the capital account. They then report that the connection between their financial repression indicator and economic growth in a cross-country sample of 80 economies is non-linear: the growth effect of financial repression is insignificant among low-income economies, significantly negative among middle-income economies and significantly positive among high-income economies.

27. JAMES R. BARTH, GERARD CAPRIO & ROSS LEVINE, *RETHINKING BANK REGULATION: TILL ANGELS GOVERN* 50 (2006).

28. Allen N. Berger, Asli Demirgüç-Kunt, Ross Levine & Joseph G. Haubrich, *Bank Concentration and Competition: An Evolution in the Making*, 36 J. MONEY, CREDIT, & BANKING 433, 445 (2004).

29. WORLD BANK, *FINANCE FOR GROWTH: POLICY CHOICES IN A VOLATILE WORLD* (2001).

30. See Rafael La Porta, Florencio Lopez-de-Silanes & Andrei Shleifer, *Government Ownership of Banks*, 57 J. FIN. 265, 265 (2002) (reporting that “higher government ownership of banks in 1970 is associated with slower subsequent financial development and lower growth of per capita income and productivity.”); William L. Megginson, *The Economics of Bank Privatization*, 29 J. BANKING & FIN. 1931, 1931 (2005) (concluding in a survey paper that “the empirical evidence clearly shows that state-owned banks are less efficient than privately owned banks, and that state domination of banking imposes increasingly severe penalties on those countries with the largest

C. Financial Liberalization

As previously mentioned, McKinnon and Shaw argued that government regulation aimed at suppressing the financial sector discourages both savings and investments and, therefore, stunts economic growth. The McKinnon-Shaw hypothesis has been challenged by a range of critics.³¹ However, its main policy recommendation, financial liberalization,³² has gained momentum among policy makers in developing countries. As a result, the last forty years have witnessed a gradual removal of financial restraints worldwide. As reported by Abiad

state banking sector.”). Privatization is therefore associated with significant performance improvement in divested banks, although the extent of improvement varies by region and the stage of national development. *But see* Alejandro Micco, Ugo Panizza & Monica Yañez, *Bank Ownership and Performance: Does Politics Matter?*, 31 J. BANKING & FIN. 219, 220 (2007) (Reporting that the negative impact of state-owned banks is not universal but dependent on a country’s initial conditions); Tobias Körner & Isabel Schnabel, *Public Ownership of Banks and Economic Growth: The Impact of Country Heterogeneity*, 19 ECON. TRANSITION 1, 5 (2010) (Reporting that the negative impact of state-owned banks is not universal but dependent on a country’s degree of financial development and quality of political institutions).

31. *See, e.g.*, Thomas F. Hellmann, Kevin C. Murdock & Joseph E. Stiglitz, *Financial Restraint: Towards a New Paradigm*, in THE ROLE OF GOVERNMENT IN EAST ASIAN ECONOMIC DEVELOPMENT: COMPARATIVE INSTITUTIONAL ANALYSIS 1, 10, 21, 50 (Masahiko Aoki, Hyung-Ki Kim & Masahiro Okuno-Fujiwara eds., 1997) (Arguing in a study of the financial policies in East Asian economies, that a modest financial repression, or “financial restraint” in their terms, is beneficial to economic growth because under financial restraint, the government can create rent opportunities in the private sector through a set of financial policies. These rents may induce private sector agents to increase the supply of goods and services that might be under-provided in a purely competitive market, such as the monitoring of investments and the provision of deposit collection.) *See also* Thomas F. Hellmann, Kevin C. Murdock & Joseph E. Stiglitz, *Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?*, 90 AM. ECON. REV. 147, 148 (2000) (suggesting that financial liberalization, particularly competition in financial markets, may increase the moral hazard problem of banks by eroding their profits, which in turn undermines their franchise values (the capitalized value of expected future profits) and induce banks to gamble on riskier projects); Joseph E. Stiglitz, *Capital Market Liberalization, Economic Growth, and Instability*, 28 WORLD DEV. 1075, 1076 (2000) (further contending that “it has become increasingly clear that there is not only no case for capital market liberalization, but that there is a fairly compelling case *against* full liberalization.”) (italics in original).

32. John Williamson & Molly Mahar, *A Survey of Financial Liberalization*, 211 ESSAYS INT’L FIN. 1, 2 (1998). The authors characterize financial liberalization as “the process of giving the market the authority to determine who gets and grants credit and at what price,” and full liberalization involves “the government’s also allowing entry into the financial-services industry to any company that can satisfy objectively specified criteria based on prudential considerations (concerning capital, skills, and reputation), giving banks the autonomy to run their own affairs, withdrawal from the ownership of financial institutions, and abandoning control over international capital movements.” This characterization suggests six dimensions of financial liberalization: the elimination of credit controls; the deregulation of interest rates; free entry into the banking sector or, more generally, the financial-services industry; bank autonomy; private ownership of banks; and the liberalization of international capital flows.

and Mody,³³ and Abiad, Detragiache, and Tressel,³⁴ despite stops, gaps, and reversals, financial liberalization advanced across much of the world during the period from 1973 to 2005. Countries in all income groups have liberalized, although higher-income economies have largely remained more liberalized than lower-income economies. However, financial liberalization has proved to be a double-edged sword. On the one hand, financial liberalization can benefit an economy by generating more competition in the financial sector forcing financial institutions to improve their operational efficiency. Additionally, financial liberalization increases the availability of funds, which in turn lowers the cost of capital, stimulates investment, and promotes economic growth. The positive effects of financial liberalization have been confirmed by certain empirical studies. For example, Henry reports that in the late 1980s and early 1990s, when a number of developing countries liberalized their stock markets, thereby opening them to foreign investors, the cost of capital (dividend yields) decreased by an average of 2.4 percentage points, the growth rate of investment increased by 1.1 percentage points, and the growth rate of output per worker increased by 2.3 percentage points.³⁵

33. Abdul Abiad & Ashoka Mody, *Financial Reform: What Shakes It? What Shapes It?*, 95 AM. ECON. REV. 66, 66 (2005).

34. Abdul Abiad, Enrica Detragiache & Thierry Tressel, *A New Database of Financial Reforms*, 57 IMF STAFF PAPERS, 281, 288, 291, 293 (2010). The authors further show that most financial reforms concentrated in the first half of the 1990s, and after peaking in 1995, the liberalization process began to slow down. In addition, financial systems were on average most liberalized in the areas of interest rate controls, bank entry, and financial account restrictions, but bank supervision and regulation lagged behind.

35. See Peter B. Henry, *Capital-Account Liberalization, the Cost of Capital, and Economic Growth*, 93 AM. ECON. REV. 91, 94 (2003). See also Geert Bekaert, Campbell R. Harvey & Christian Lundblad, *Does Financial Liberalization Spur Growth?*, 77 J. FIN. ECON. 3, 13 (2005) (reporting that equity market liberalization, on average, led to a 1% increase in annual real economic growth); Aaron Tornell, Frank Westermann & Lorenza Martinez, *Liberalization, Growth, Financial Crises: Lessons from Mexico and the Developing World*, 34 BROOKINGS PAPERS ON ECON. ACTIVITY 1, 12 (2003) (finding that following financial (stock market) liberalization, growth in GDP per capita increases by 2.4 percentage points a year in their 35 countries sample).

The empirical evidence regarding the impact of capital account liberalization (which is used by most studies as the proxy for financial liberalization) on economic growth is generally more mixed: whereas most of the studies that perform cross-sectional regressions fail to find a significant effect, literature that focuses on the aftermath of a discrete policy change in a given country finds that capital account liberalization generates economically large and statistically significant effects, not only on economic growth but also on the cost of capital and investment. Peter B. Henry, *Capital Account Liberalization: Theory, Evidence, and Speculation*, 45 J. ECON. LITERATURE 887, 900, 915 (2007).

A recent study that conducts a meta-analysis (based on 441 t-statistics reported in 60 empirical studies) shows that on average, there is a positive effect of financial liberalization on growth; however, the significance of this effect is weak. Silke Bumann, Niels Hermes & Robert Lensink,

On the other hand, financial liberalization is blamed for destabilizing an economy by bringing about a greater incidence of crisis. For example, Kaminsky and Reinhart report that in eighteen of the twenty-six banking crises that they studied, the financial sector had been liberalized during the preceding five years.³⁶ A similar association between financial liberalization and financial crisis is further confirmed by Williamson and Mahar,³⁷ Demirguc-Kunt and Detragiache,³⁸ and Tornell, Westermann, and Martinez,³⁹ among others.⁴⁰ Loayza and Ranciere therefore suggest a “dual effect” of financial liberalization; in other words, financial liberalization can generate both instability—in the short run—and higher growth—in the long run.⁴¹

Several macroeconomic and microeconomic factors, such as low GDP growth, high inflation, and poor bank management, can be

Financial Liberalization and Economic Growth: A Meta-Analysis, 33 J. INT'L MONEY & FIN. 255 (2013).

36. Graciela L. Kaminsky & Carmen M. Reinhart, *The Twin Crises: The Causes of Banking and Balance-of-Payments Problems*, 89 AM. ECON. REV. 473, 480 (1999).

37. Williamson & Mahar, *supra* note 32, at 53.

38. Asli Demirguc-Kunt & Enrica Detragiache, *Financial Liberalization and Financial Fragility*, 3 (Int'l Monetary Fund, Working Paper No. 98/83, 1998), <https://www.imf.org/external/pubs/ft/wp/wp9883.pdf>; Asli Demirguc-Kunt & Enrica Detragiache, *The Determinants of Banking Crises in Developing and Developed Countries*, 45 IMF STAFF PAPERS 81 (1998) [hereinafter Demirguc-Kunt & Detragiache, *Financial Liberalization*].

39. Tornell et al., *supra* note 35, at 1.

40. Recent studies find that the relationship between financial liberalization and financial crisis is more complicated. *See*, Romain Ranciere, Aaron Tornell & Frank Westermann, *Decomposing the Effects of Financial Liberalization: Crises vs. Growth*, 30 J. BANKING & FIN. 3331, 3331 (2006) (reporting that financial liberalization has a positive effect on economic growth, which outweighs the increased probability of financial crisis); Graciela Laura Kaminsky & Sergio L. Schmukler, *Short-Run Pain, Long-Run Gain: Financial Liberalization and Stock Market Cycles*, 12 REV. FIN. 253, 18 (2008) (finding that financial liberalization in emerging markets is related to financial instability only in the short run); Apanard Angkinand, Wanvimol Sawangngoenyuan & Clas Wihlborg, *Financial Liberalization and Banking Crises: A Cross-Country Analysis*, 10 INT'L REV. FIN. 263, 263-292 (2010) (showing that there is an inverted U-shaped relationship between financial liberalization and the likelihood of crisis). *See also* Christopher A. Hartwell, *If You're Going Through Hell, Keep Going: Non-linear Effects of Financial Liberalization in Transition Economies*, 53 EMERGING MKT. FIN. & TRADE 250, 250-75 (2017) (reporting a non-linear relationship between financial liberalization and banking crises).

Certain studies refute the connection between financial liberalization and crisis by showing that the indicators of financial liberalization do not trigger banking crises, *see* Helmi Hamdi & Nabila Boukef Jlassi, *Financial Liberalization, Disaggregated Capital Flows and Banking Crisis: Evidence from Developing Countries*, 41 ECON MODELING 124, 124 (2014), or actually reduce the likelihood of systemic crises, *see* Choudhry Tanveer Shehzad & Jakob De Haan, *Financial Reform and Banking Crises*, 2 (CESifo, Working Paper No. 2870, 2009), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1521414.

41. Norman Loayza & Romain Ranciere, *Financial Development, Financial Fragility, and Growth*, J. MONEY, CREDIT & BANKING 1, 23 (2006).

identified as responsible for liberalization-led crisis.⁴² A key to understanding the connection between financial liberalization and financial crisis lies in the fact that by giving banks and other financial intermediaries more freedom of action, financial liberalization increases the opportunities to take on risk.⁴³ Moreover, the skills of evaluating and screening risky investment projects, monitoring borrowers, and managing a loan portfolio are scarce resources in a newly liberalized banking system. Such skills can only be acquired gradually through a process of “learning by doing.” In addition, moral hazard problems created by the limited liability of financial institutions, together with the presence of implicit or explicit government guarantees to depositors,⁴⁴ further increase bankers’ preference for risk to a level far greater than what is socially desirable. Unless these perverse incentives are controlled, increased risk taking due to moral hazard can become a powerful source of financial fragility.

D. Effective Regulation of Financial Markets

A well-designed and effective system of prudential regulation and supervision has been advocated as a possible solution to the problem of excessive risk taking by banks in the process of financial liberalization.⁴⁵ Prudential regulation and supervision can limit moral hazard by, for example, mandating a minimum capital requirement, requiring information disclosure, and limiting risk exposure to particular geographical regions, counterparties, instruments and types of business. Prudential regulation and supervision are therefore claimed to be a prerequisite for successful financial liberalization.⁴⁶ Williamson and Mahar further construct an index of the level of prudential regulation and supervision in thirty-four economies for the period of 1973 to 1995,

42. Gerard Caprio Jr. & Daniela Klingebiel, *Bank Insolvency: Bad Luck, Bad Policy, or Bad Banking?*, in ANNUAL WORLD BANK CONFERENCE ON DEVELOPMENT ECONOMICS 1996 79 (Michael Bruno & Boris Pleskovic eds., 1996). See also Demirguc-Kunt & Detragiache, *supra* note 38, at 19.

43. See Frederic S. Mishkin, *Global Financial Instability: Framework, Events, Issues*, 13 J. ECON. PERSP. 3 (1999), for a report stating that with financial restrictions lifted, banks in developing countries expanded their lending by 15% to 30% per year, which was more than double the typical lending growth rate.

44. Charles W. Calomiris & Matthew Jaremski, *Deposit Insurance: Theories and Facts*, 8 ANN. REV. FIN. ECON. 97-112 (2016). After systematically reviewing the literature, the authors conclude that deposit insurance “increases bank risk rather than reducing it. Although insurance is justified economically as a means of limiting liquidity risk, its adverse effect on banks’ fundamental risk taking dominates the reduction in liquidity risk and results in greater overall banking instability.”

45. See Fry, *supra* note 18, at 768.

46. See *id.* at 759.

finding empirical support for the belief that good supervision is a crucial element in avoiding the progression from liberalization to crisis.⁴⁷ Similarly, Noy reports that a combination of domestic financial liberalization and lax supervision by the authorities yields a significant increase in the likelihood of financial crisis;⁴⁸ Angkinand, Sawangngoenyuan, and Wihlborg find that the relationship between financial liberalization and banking crises depends strongly on the strength of capital regulation and supervision;⁴⁹ and Amri and Kocher find a significant and negative relationship between banking crisis probability and the strength of financial sector supervision.⁵⁰

However, it is a very difficult, if not impossible, task to create and maintain an effective regulatory regime in developing countries. As studies have shown, the effectiveness of financial regulation is to a large extent subject to the underlying institutional environment. For example, Demirguc-Kunt, Laeven, and Levine find that when national indicators of economic freedom or property rights protection are controlled for, the effects of bank regulation on the net interest margins and overhead costs of banks become insignificant.⁵¹ Similarly, Chortareas, Girardone, and Ventouri report that the beneficial effects of capital regulation and official supervisory powers on bank efficiency are more pronounced in countries with higher-quality institutions.⁵² In other words, bank regulations cannot be viewed in isolation from the overall institutional framework. However, in many developing countries, political and legal institutions designed to check the abuse of power are weak, and the state is susceptible to capture by powerful elites, thus easily becoming a grabbing hand rather than a helping hand.⁵³ We will examine these political determinants in Section VI.

47. Williamson & Mahar, *supra* note 32, at 61-62.

48. See Ilan Noy, *Financial Liberalization, Prudential Supervision, and the Onset of Banking Crises*, 5 EMERGING MKT. REV. 341, 344 (2004).

49. See Angkinand et al., *supra* note 40. More specifically, with very weak regulation and supervision, the probability of banking crises increases with liberalization, but this relationship reverses as regulation and supervision becomes stricter. *Id.* at 27.

50. See generally Puspa Delima Amri & Brett Matthew Kocher, *The Political Economy of Financial Sector Supervision and Banking Crises: A Cross-Country Analysis*, 18 EUR. L.J. 24 (2011).

51. See Asli Demirguc-Kunt, Luc Laeven & Ross Levine, *Regulations, Market Structure, Institutions, and the Cost of Financial Intermediation*, 36 J. MONEY, CREDIT, & BANKING 1, 27 (2004).

52. Georgios E. Chortareas, Claudia Girardone & Alexia Ventouri, *Bank Supervision, Regulation, and Efficiency: Evidence from the European Union*, 8 J. FIN. STABILITY 1, 32 (2012).

53. See generally ANDREI SHLEIFER & ROBERT W. VISHNY, *THE GRABBING HAND: GOVERNMENT PATHOLOGIES AND THEIR CURES* (1998).

E. Summary

This overview of the literature concerning financial repression shows a balanced picture: McKinnon and Shaw argue that financial repression may slow down economic growth as it will discourage both savings and investments. To an important extent, this hypothesis has been confirmed in empirical studies that have tested the effects of financial repression on economic growth. However, the literature equally indicates that financial liberalization, the seemingly obvious policy recommendation from the McKinnon-Shaw hypothesis, is not unproblematic. Without adequate prudential regulation and supervision of financial institutions, there is a serious risk that financial liberalization could lead to financial instability and potentially to financial crises. The literature therefore advocates that financial liberalization should, especially in developing countries, be accompanied with an effective regulation of financial markets.

Insight into the main findings of the theoretical and empirical literature is of particular importance for the situation of China. The traditional hypothesis that financial repression slows economic growth raises the obvious question as to how, in China, financial repression actually led to a stimulation of economic growth. Likewise, financial liberalization is propagated as the remedy to be implemented by developing countries to stimulate economic growth. Yet, China seems to show the opposite having such effect. Before delving into the precise relationship between financial repression and economic growth in China in Section V, we first provide a more detailed account of the development of financial repression in China through a variety of regulations (Sections III and IV).

III. FINANCIAL REPRESSION IN CHINA

In order to understand the current system of financial repression in China, we first sketch the historical development, (A), and then describe the specific features of the repressed financial system, (B). Recent developments, related to policy reaction to the financial crisis of 2008, will be discussed in Section IV.

A. *The Historical Development*⁵⁴

The best way to sketch the historical development of the system of financial repression in China is by examining the important role of the country's banking sector, (1), and financial markets, (2).

1. The Banking Sector

When economic reform began in the late 1970s, there was hardly a real financial system in China. Prior to 1978, China's financial sector consisted of a single bank, the People's Bank of China ("PBOC"), which was owned and controlled by the central government under the Ministry of Finance ("MOF"). The PBOC served as both a central bank and as a commercial bank, controlling approximately 93% of the total financial assets of the country and handling almost all financial transactions.⁵⁵ However, the PBOC could not have been considered an effective intermediary between savers and investors. First, household savings, the source of bank deposits in developing market economies, were extraordinarily small. Meanwhile, investment was financed predominantly from interest-free budgetary grants and, to a lesser degree, from the retained profits of enterprises. The PBOC concentrated its lending on providing a portion of the working capital needs of enterprises.

The situation has drastically changed since the beginning of the economic reforms in the country. As a virtual mono-bank serving much of the economy, the PBOC was gradually stripped of its corporate finance functions and began operating as the country's central bank.⁵⁶ Four state-owned banks then emerged to function as financial intermediaries and to provide commercial banking services. The first was the Agriculture Bank of China ("ABC"), which was founded in February 1979 to serve all banking business in rural areas. The second was the Bank of China ("BOC"), which was previously subordinate to the PBOC and then became independent and empowered to specialize in transactions related

54. See generally, Franklin Allen, Jun Qian & Meijun Qian, *China's Financial System: Past, Present, and Future*, in CHINA'S GREAT ECONOMIC TRANSFORMATION 506 (Loren Brandt & Thomas G. Rawski eds., 2008), for a more complete history of the entire financial system; NICHOLAS R. LARDY, CHINA'S UNFINISHED ECONOMIC REVOLUTION (1998) (discussing China's financial reform before 1998); CARL E. WALTER & FRASER J.T. HOWIE, RED CAPITALISM: THE FRAGILE FINANCIAL FOUNDATION OF CHINA'S EXTRAORDINARY RISE (2012); JOSEPH P.H. FAN & RANDALL MORCK, CAPITALIZING CHINA (2012) (discussing more recent financial system development).

55. Allen et al., *supra* note 54, at 6.

56. In September 1983, the State Council designated the PBOC as the central bank and decided to establish the Industrial and Commercial Bank of China to assume the deposit taking and lending functions of the PBOC. The central bank role played by the PBOC was ultimately legitimized by the Central Bank Law, which was enacted in 1995.

to foreign trade and investment. The third was the People's Construction Bank of China ("PCBC"), renamed the China Construction Bank, or "CCB," in 1996), which operated as a subsidiary of the MOF since its creation in October 1954 and then was removed from the administrative control of the MOF and tasked to manage transactions related to fixed investment in October 1979. The last was the Industrial and Commercial Bank of China ("ICBC"), which was formed in January 1984 to manage the commercial transactions of the PBOC.

Given their magnitude in China's financial system,⁵⁷ the four state-owned banks, later known as the "Big Four,"⁵⁸ have always been the focus of financial reform, and they appear to undergo an overhaul every ten years.⁵⁹ In 1994, the government created three new policy banks—the Agricultural Development Bank, the China Development Bank, and the Export-Import Bank—which were expected to assume the responsibility for policy lending, relieving the Big Four of the obligation to extend loans for these purposes. In 1995, China enacted the Commercial Bank Law, which laid the legal foundation for the commercialization of state-owned banks by, for example, mandating that banks should be responsible for their own profits and losses, as well as stipulating technical requirements, such as capital-adequacy ratios in line with international banking practice. Another round of banking reforms was launched in 2004, which ultimately led to the limited privatization of the Big Four though the recruitment of strategic investors and listing on stock exchanges.⁶⁰

57. For example, by the end of 1997, the Big Four controlled 70.1% of China's total financial assets. Nicholas R. Lardy, *State-Owned Banks in China*, in *THE FUTURE OF STATE-OWNED FINANCIAL INSTITUTIONS* 93 (Gerard Caprio, Jonathan L. Fiechter, Robert E. Litan & Michael Pomerleano eds., 2004). However, their share has decreased significantly in recent years. By the end of 2015, the Big Four, together with the Bank of Communication, held 39.2% of total assets of China's banking sector. See *THE CHINA BANKING REGULATORY COMMISSION (CBRC), 2015 ANNUAL REPORT* 26 (2016), <http://www.csrc.gov.cn/pub/newsite/zjhjs/zjhnbn/201610/P020161012641106288538.pdf>.

58. The "Big Four" refers to the Agricultural Bank of China, the Bank of China, the China Construction Bank and the Industrial and Commercial Bank of China. Xu & Gui, *An Empirical Examination*, *supra* note 11, at 187.

59. Certainly, the government still enacted important reforms during these ten-year intervals. See, e.g., Lardy, *supra* note 57, at 101. For example, in the wake of the Asian financial crisis, the government undertook a number of organizational and regulatory reforms designed to encourage state-owned banks to operate on a more commercial basis.

60. The CCB was listed on the Hong Kong Stock Exchange in October 2005 and the Shanghai Stock Exchange in September 2007; the BOC was listed on the Hong Kong Stock Exchange in June 2006 and on the Shanghai Stock Exchange in July 2006; the ICBC was listed on the Hong Kong Stock Exchange and the Shanghai Stock Exchange simultaneously in October 2006; the ABC was listed on both the Hong Kong Stock Exchange and the Shanghai Stock Exchange in July 2010. See WALTER & HOWIE, *supra* note 54.

In the mid-1980s, the state began to increase competition in the financial sector by allowing the entry of new financial institutions, including new commercial banks and non-bank financial entities. By the end of 2015, there were twelve so-called joint-stock banks,⁶¹ which controlled 18.6% of China's total banking assets.⁶² Most of these banks, despite their joint-stock status, remained indirectly controlled by the government, as their largest shareholders are usually SOEs. Although most of the large shareholders of joint-stock banks are still SOEs, there is a significant difference in the intensity of state control and the procedure of nominating the governor between joint-stock banks and state-owned banks (Big Four).⁶³ In other words, the two bank types have different governance structures. Empirical evidence shows that between 1998 and 2005, the return on assets ("ROA") and return on equity ("ROE") of joint-stock banks and city commercial banks were always higher than the Big Four; in addition, the former showed consistently higher annual total asset growth rates than the latter.⁶⁴ Jia further shows "that lending by state-owned banks has been less prudent than lending by joint-stock banks."⁶⁵ Other studies, such as Shih, Zhang, and Liu;⁶⁶ Ariff and Can;⁶⁷ Lin and Zhang;⁶⁸ Jiang, Yao, and Zhang;⁶⁹ Berger, Hasan, and Zhou;⁷⁰ and Jiang, Yao, and Feng also confirm the better performance of joint-stock banks (and city commercial banks) relative to state-owned banks.⁷¹ However, more recent research shows that the profit efficiency of state-owned banks improved significantly from 2004 to 2013, and it is

61. See CBRC, *supra* note 57, at 26, 187, 194, 204. The CBRC classifies the Bank of Communication, another joint-stock bank, as a "large commercial bank," similar to the Big Four.

62. See *id.* at 26.

63. Chunxin Jia, *The Effect of Ownership on the Prudential Behavior of Banks—The Case of China*, 33 J. BANKING & FIN. 77, 79 (2009).

64. Giovanni Ferri, *Are New Tigers Supplanting Old Mammoths in China's Banking System? Evidence from a Sample of City Commercial Banks*, 33 J. BANKING & FIN. 131, 133-135 (2009).

65. See Jia, *supra* note 63, at 77.

66. See generally Victor Shih, Qi Zhang & Mingxing Liu, *Comparing the Performance of Chinese Banks: A Principal Component Approach*, 18 CHINA ECON. REV. 15 (2007).

67. See generally Mohamed Ariff & Luc Can, *Cost and Profit Efficiency of Chinese Banks: A Non-Parametric Analysis*, 19 CHINA ECON. REV. 260 (2008).

68. See generally Xiaochi Lin & Yi Zhang, *Bank Ownership Reform and Bank Performance in China*, 33 J. BANKING & FIN. 20 (2009).

69. See generally Chunxia Jiang, Shujie Yao & Zongyi Zhang, *The Effect of Governance Changes on Bank Efficiency in China: A Stochastic Distance Function Approach*, 20 CHINA ECON. REV. 717 (2009).

70. See generally Allen N. Berger, Iftexhar Hasan & Mingming Zhou, *Bank Ownership and Efficiency in China: What Will Happen in the World's Largest Nation?*, 33 J. BANKING & FIN. 113 (2009).

71. See generally Chunxia Jiang, Shujie Yao & Genfu Feng, *Bank Ownership, Privatization, and Performance: Evidence from a Transition Country*, 37 J. BANKING & FIN. 3364 (2013).

actually slightly higher than that of joint-stock banks (and much higher than that of foreign banks).⁷²

The only genuinely private bank among these twelve banks is the China Minsheng Bank.⁷³ In addition, by the end of 2015, there were 133 city commercial banks, converted from urban credit cooperatives that were approaching a systemic bankruptcy in the middle of the 1990s, which held 11.4% of the total banking assets.

Meanwhile, in 2015, China had 859 rural commercial banks, seventy-one rural cooperative banks, 1,373 rural credit cooperatives, one postal savings bank, four banking asset management firms, forty locally incorporated foreign banking institutions, Sino-German Bausparkasse, sixty-eight trust companies, 224 finance companies owned by corporate groups, forty-seven financial leasing companies, five money brokerage firms, twenty-five auto financing companies, twelve consumer finance companies, 1,311 village or township banks, fourteen lending companies, and forty-eight rural mutual cooperatives. Overall, there were 4,262 banking institutions, hiring 3.8 million employees and holding financial assets of CNY 199.3 trillion.⁷⁴ It can therefore be argued that today China's financial system is much more diversified and competitive than it was before.

2. Financial Markets

Compared with its banking sector, China's financial markets, including both stock and bond markets, are far less developed and significant. Following their creation in 1990, China's domestic stock exchanges, the Shanghai Stock Exchange ("SHSE") and the Shenzhen Stock Exchange ("SZSE"), grew quickly but unsteadily.⁷⁵ At the end of

72. See generally Dong, Yizhe, Firth, Michael, Hou, Wenxuan & Weiwei Yang, 2016. "Evaluating the Performance of Chinese Commercial Banks: A Comparative Analysis of Different Types of Banks", *EUROPEAN JOURNAL OF OPERATIONAL RESEARCH* 252: 280-295.

73. By the end of 2015, in addition to the Minsheng Bank, five more private banks had obtained operating permits, and their total asset volume reached CNY 79.432 billion. Furthermore, private capital is reported to account for 53% in city commercial banks, around 90% in rural cooperative financial institutions, and over 72% in village and township banks. See CBRC, *supra* note 57, at 42-44.

74. CBRC, *supra* note 57, at 25-26.

75. The market continued its growth in most of the 1990s and reached a peak by the end of 2000, but then suffered a long-run decline that lasted for more than five years. The subsequent recovery finally led to another boom, culminating in 2007, followed by another bust. The bumpy development of stock markets seems to be at odds with China's continuous and stable economic growth. For example, between mid-2001 and mid-2005, China's GDP increased by more than 50%, but the total stock market capitalization decreased by more than 50%. For a more comprehensive investigation on the growth history of China's stock markets, see Zhong Zhang, *Law and Finance: The Case of Stock Market Development in China*, 39 B.C. INT'L & COMP. L. REV. 283, 304 (2016).

2015, 2,827 companies were listed on the SHSE and the SZSE, and the total market capitalization reached CNY 53.15 trillion, equivalent to 78.54% of GDP in the fiscal year 2015.⁷⁶ By the same year, the SHSE and the SZSE were the fourth and fifth largest exchanges in the world, respectively, in terms of market capitalization.⁷⁷

Stock markets play only a complementary role in financing China's economic growth despite their fast development. For example, according to a recent report issued by the PBOC,⁷⁸ by the end of February 2017, the ratio of non-financial institutions' equity sales to total social financing was 3.7%,⁷⁹ whereas the ratio of domestic bank loans to total social financing was 67.5%. The performance of China's stock markets also seems to be lackluster. Allen and Qian compare the performance, measured by the "buy-and-hold" return in the periods of January 1992 to December 2013, of the major stock exchanges around the world and find that the performance of the value-weighted SHSE index is below that of the DAX (Germany), S&P 500 (US), FTSE (UK), CAC (France), and only slightly better than the Nikkei Index (Japan).⁸⁰ After adjusting for inflation, by the end of 2013, the real return from investing in the value-weighted SHSE index was at about the same level as at the start of 1992. Finally, China's stock markets have always suffered from certain

76. The China Securities Regulatory Commission (CSRC) Annual Report 2015, available at <http://www.csrc.gov.cn/pub/newsite/zjhjs/zjhnbn/201610/P020161012641106288538.pdf> (accessed 18, March, 2017).

77. *Id.*

78. ZHONGGUÓ RENMIN YINHANG (中国人民银行) [PEOPLE'S BANK OF CHINA], 2017 NIAN 2 YUESHEHUI RONGZI GUIMO CUNLIANG TONGJISHUJU BAOGAO (2017年2月社会融资规模存量统计数据报告) [REPORT ON THE STOCKS OF TOTAL SOCIAL FINANCING IN FEBRUARY 2017] (Mar. 9, 2017), <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/3268798/index.html>.

79. Total social financing is an indicator used by the PBOC to measure the total amount of money that the real economy obtains from the financial system in a certain period of time (a month, a quarter, or a year). It mainly comprises CNY loans from banks, foreign currency loans, entrusted loans, trust loans, bank acceptance bills, corporate bonds, non-financial institutions' equity sales, etc. *See, e.g.*, Qiang Xiaoji, *PBOC Plans to Redefine Total Social Financing*, CHINA DAILY (Feb. 10, 2011), http://europe.chinadaily.com.cn/china/2011-02/10/content_11986819_.htm; Lu Jianxin & Pete Sweeney, *FACTBOX – What is China's Total Social Financing Indicator?*, CHICAGO TRIBUNE (Nov. 13, 2012), http://articles.chicagotribune.com/2012-11-13/news/sns-rt-china-ts-factbox13e8m24an-20121112_1_central-bank-yuan-loans-interest-rates.

80. Franklin Allen & Jun "QJ" Qian, *China's Financial System and the Law*, 47 CORNELL INT'L L.J. 499, 526 (2014).

institutional weaknesses, such as large-scale speculative trading,⁸¹ pricing inefficiency,⁸² and pervasive misconduct and law-breaking.⁸³

The underdevelopment of the bond market—especially the corporate bond market—relative to the banking sector, further diminishes the role played by direct financing in serving the economy. The largest component of the bond market is the government bond. Compared to the market for government-issued bonds, the size of the corporate bond market is minuscule: in terms of the amount of outstanding bonds at the end of 2008, the corporate bond market is less than one-fourth the size of the government bond market.⁸⁴ The development of China's bond markets has accelerated since 2008, partly as the aftermath of China's fiscal stimulus package of 2009 (an issue that will be discussed in detail in Section V). However, the relative underdevelopment of the corporate bond market seems to have remained unchanged. For example, by the end of 2015, corporate bonds accounted for only 5.4% of the total volume of bonds that were issued on the inter-bank bond market, which accounted for more than 90% of China's bond issuance, whereas that ratio for government bonds (treasury bonds plus local government bonds) was 34.62%.⁸⁵ In addition, the development of China's bond markets faces other obstacles, such as a lack of sound accounting and auditing systems and high-quality bond-rating agencies, as well as the lack of a well-constructed yield curve.⁸⁶

B. Features of Financial Repression in China

In general, after four decades of reform and development, China's financial system has been fundamentally changed. On the surface, China has virtually all the institutions of a modern financial system: a central bank in charge of setting monetary policy, a diversified banking system

81. See generally Allen & Qian, *supra* note 80.

82. Randall Morck, Bernard Yeung & Wayne Yu, *The Information Content of Stock Markets: Why Do Emerging Markets Have Synchronous Stock Price Movements?*, 58 J. FIN. ECON. 215 (2000); Karen J. Lin, Khondkar E. Karim & Clairmont Carter, *Why Does China's Stock Market Have Highly Synchronous Stock Price Movements? An Information Supply Perspective*, 31 ADVANCES ACC. 68 (2015).

83. Allen et al., *supra* note 54, at 26; William T. Allen & Han Shen, *Assessing China's Top-Down Securities Markets*, in CAPITALIZING CHINA 149, 169 (Joseph P.H. Fan & Randall Morck eds., 2012); Zhang, *supra* note 75, at 286-87.

84. Franklin Allen, Jun "QJ" Qian, Chenying Zhang & Mengxin Zhao, *China's Financial System: Opportunities and Challenges*, in CAPITALIZING CHINA 97, 101 (Joseph P.H. Fan & Randall Morck eds., 2012).

85. See 2015 nian zhongguo zhaiquan shichang gaikuang (2015年中国债券市场概况) [*China's Bond Market Overview 2015*], <https://www.chinabond.com.cn/cb/eng/zqsc/jwtzzzl/scjs/20170615/147550684.shtml>.

86. Allen et al., *supra* note 84, at 101.

that consists of, for example, commercial and policy banks, and a capital market on which over 2,000 companies are listed. However, by nature, China's financial system is heavily repressed. The main features of this financial repression are the following: (1) the banking sector is dominated by state ownership; (2) credit allocation is determined more by political factors than by profitability considerations; and (3) interest rates are controlled by the government.⁸⁷ According to Huang and Wang,⁸⁸ "China's degree of financial repression was higher than not only the average of middle-income countries but also the average of the low-income countries."⁸⁹ In fact, among all ninety-one countries with available data, China ranked fourth in 2005. Consequently, China's financial system is claimed to be "both distorting China's growth and holding it back."⁹⁰ And, it is considered the economy's "Achilles' heel."⁹¹ The three specific features of the financial repression in China will now be reviewed in turn in more detail.

1. Dominance of State Ownership in the Banking Sector

China has the highest level of state ownership of banks of any major economy in the world. For example, Barth, Caprio, and Levine report that by the end of 2001, whereas eighty-seven countries had some government ownership of banks, the percentage of bank assets at government-owned banks exceeded 50% in only fifteen countries, and China was identified as having the highest level of government ownership (98% of banks assets were held by state-owned banks).⁹² This situation has not been significantly changed by China's financial development. Deng et al. claim that eighteen of the twenty largest banks are directly state-

87. In addition to state ownership, credit misallocation, and interest rate controls that will be discussed in this paper, there are other dimensions of China's financial repression policy, which is beyond the scope of this study. For example, China's currency policy has always been criticized for its pursuit of mercantile advantage by devaluing the RMB and hence stimulating exports. MORRIS GOLDSTEIN & NICHOLAS R. LARDY, *DEBATING CHINA'S EXCHANGE RATE POLICY* (2008). An inflexible exchange rate, in turn, requires a large set of distortionary policies for its maintenance over long periods. Eswar S. Prasad, *Is the Chinese Growth Miracle Built to Last?*, 20 CHINA ECON. REV. 103, 114-15 (2009).

88. Yiping Huang & Xu Wang, *Building an Efficient Financial System in China: A Need for Stronger Market Discipline* (JCER AEPR Series, Working Paper No. 2016-2-1, 2016).

89. *Id.*

90. MCKINSEY GLOBAL INSTITUTE, *PUTTING CHINA'S CAPITAL TO WORK: THE VALUE OF FINANCIAL SYSTEM REFORM* (2006), https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/China/Putting%20Chinas%20capital%20to%20work/MGI_Putting_Chinas_capital_to_work_Full_Report.aspx.

91. Wendy Dobson & Anil K. Kashyap, *The Contradiction in China's Gradualist Banking Reforms*, 37 BROOKINGS PAPERS ON ECON. ACTIVITY 103, 103 (2006).

92. BARTH ET AL., *supra* note 27, at 148-149.

controlled and,⁹³ at the end of 2009, accounted for CNY 58.58 trillion, or approximately 73% of total bank assets.⁹⁴ Naughton reports that, by 2014, the Chinese government controlled at least 85% of banking sector assets.⁹⁵

State-owned banks are inherently prone to being unproductive because government ownership tends to politicize resource allocation. In other words, state ownership of banks facilitates the financing of politically attractive projects but does not necessarily do the same for economically efficient projects. In addition, state ownership can lead to a conflict of incentives: governments are exposed to an incentive conflict when they have significant state ownership, as one part of government is then charged with monitoring another, most likely leading to weak official supervision.

China is not an exception to the “bad state-owned bank” story. Notwithstanding some significant institutional changes, such as corporatization and public listings, China’s state-owned banks for the most part continue to be governed as before, by the Chinese Communist Party (hereinafter “the Party”)⁹⁶ acting as the paramount authority with regard to the overall strategic direction and directorate or executive appointments.⁹⁷ With the dominance of state ownership and the omnipresence of the Party’s control, the ostensibly international-rule-based corporate governance mechanisms, such as the board of directors,

93. Yongheng Deng, Randall Morck, Jing Wu & Bernard Yeung, *China’s Pseudo-monetary Policy*, 19 REV. FINANCE 55, 67 (2015).

94. Three policy banks remain fully and directly owned by the state and are intended as tools for state intervention in the economy. The Big Four were corporatized and subsequently listed but have long histories of state control with the MOF and Central Huijin Investment Ltd. holding sufficient equity blocks to lock in state control. A total of eleven of the joint-stock banks have a central SOE, local SOE, or subnational government organization as their largest shareholder. *Id.*

95. Barry Naughton, *Is China Socialist?*, 31 J. ECON. PERSP. 3, 8 (2017).

96. Katharina Pistor, *The Governance of China’s Finance*, in CAPITALIZING CHINA 35, 41-43 (Joseph P.H. Fan & Randall Morck eds., 2012). The author generalizes that, within China, the Party continues to be recognized as an integral part of a dual power structure, where the state apparatus and the Party form two separate but inter-linked hierarchies that use different mechanisms of control. Whereas the state is associated with control rights exercised by way of ownership and administrative lines of control, the Party controls the career paths of individuals in the Party, the state, and organizations that are critical to the Party or the state. More specifically, the Party’s Central Organization Department (“COD”) exercises the power to appoint senior executives of China’s national state supervisory organs, such as the PBOC and the CBRC, and major national financial institutions, such as the Big Four or the three policy banks. For a more detailed discussion on the influence and operational process of the Party, see RICHARD MCGREGOR, *THE PARTY: THE SECRET WORLD OF CHINA’S COMMUNIST RULERS* 140 (2010).

97. Nicholas Calcina Howson, *China’s Restructured Commercial Banks: Nomenklatura Accountability Serving Corporate Governance Reform?*, in CHINA’S EMERGING FINANCIAL MARKETS: CHALLENGES AND GLOBAL IMPACT 123, 141 (Min Zhu, Jinqing Cai & Martha Avery eds., 2009).

cannot be expected to act as independently and professionally as their counterparts in developed economies.⁹⁸ The top executives in Chinese state-owned banks must be confronted with two different and often conflicting missions: to advance the government's political objectives and to optimize the bank's financial performance. When these two missions contradict each other, the former always dominates. Walter, therefore, contends that "to the extent that the banks lend in line with government direction, they should be seen as part of the national fiscal system; they are policy banks, not commercial banks."⁹⁹ Similarly, Gruin argues that "the chairman of the big banks cannot be said to be real bankers. They are politicians."¹⁰⁰

In addition to the aforementioned "policy burden" or "multitasking" problem, China's state-owned banks have been further criticized for a lack of effective internal risk management and control systems, for weakness in information collection, data analysis, and credit assessment, and for their failure to integrate their local branches into unified national systems.¹⁰¹ These weaknesses can be further attributed to the banks' state ownership, which creates a moral hazard problem for the banks, as they ultimately are not accountable for the losses resulting from the loans they have extended and, therefore, have little incentive to develop skills and expertise in credit evaluation.¹⁰²

98. Charles C.L. Kwong, *China's Banking Reform: The Remaining Agenda*, 40 GLOBAL ECON. REV. 161, 168-172 (2011) (arguing that neither independent directors nor foreign investors can play meaningful roles in the corporate governance of the Big Four); Xianhang Qian, Guangli Zhang & Haiming Liu, *Officials on Boards and the Prudential Behavior of Banks: Evidence from China's City Commercial Banks*, 32 CHINA ECON. REV. 84, 89 (2015) (reporting that, in a sample of China's city commercial banks from 2006 to 2010, those banks with officials as directors had higher loan-asset and loan-deposit ratios and lower excess reserve ratios, representing poor prudential behavior). *But see* Qi Liang, Pisun Xu & Pornsit Jiraporn, *Board Characteristics and Chinese Bank Performance*, 37 J. BANKING & FIN. 2953, 2966 (2013) (finding that the number of board meetings and the proportion of independent directors have significant positive impact on both bank performance and asset quality, while board size has a significantly negative impact on bank performance).

99. Carl E. Walter, *China and Its Financial System: What Could Go Wrong?*, 30 CFA INST. CONF. PROC. Q. 18 (2013).

100. Julian Gruin, *Asset or Liability? The Role of the Financial System in the Political Economy of China's Rebalancing*, 42 J. CURRENT CHINESE AFF. 73, 78 (2013).

101. MCKINSEY GLOBAL INSTITUTE, *supra* note 90. It is therefore not uncommon to find misappropriation and fraud in China's banking sector. For example, in June 2006, China's National Audit Office announced that an examination of records at the ABC, one of the Big Four, uncovered 51 cases of criminal wrongdoing involving 157 people in 2004. The state audit also found evidence of \$1.8 billion in improperly handled deposits and \$3.5 billion in illegal loans. *See* Peter S. Goodman, *China Discloses \$1.1 Billion Bank Fraud*, WASH. POST (June 28, 2006), <http://www.washingtonpost.com/wp-dyn/content/article/2006/06/27/AR2006062700584.html?noredirect=on>.

102. Dobson & Kashyap, *supra* note 91, at 115.

The behavior—poor management and operation—of China’s state-owned banks is found to have changed very little after several rounds of reform. For example, using Chinese provincial data from 1991 to 1997, Park and Sehrt find that economic fundamentals, such as industrial growth, agricultural growth, and GDP per capita, have had little effect on total lending by state banks, whereas the responsiveness of lending to policy concerns, such as SOEs’ output, is significant.¹⁰³ Based on data from 1997 to 2004, Podpiera reports that the pricing of credit risk by state-owned banks remains undifferentiated and that bank lending decisions continue to be driven by the availability of funds and do not appear to consider enterprise profitability.¹⁰⁴ The inefficiency, the low profitability, and a lack of caution in credit issuance of state-owned banks is further confirmed by numerous subsequent studies that use more recent data, particularly when compared with the joint-stock banks and city commercial banks.¹⁰⁵

2. Misallocation of Credit

Another serious weakness in China’s banking sector is the failure of financial intermediaries to channel credit to the most productive regions, industries, and enterprises. Scarce financial resources have been systematically and continually allocated to less profitable but more

103. Albert Park & Kaja Sehrt, *Tests of Financial Intermediation and Banking Reform in China*, 29 J. COMP. ECON. 608, 627-632 (2001).

104. Richard Podpiera, *Progress in China’s Banking Sector Reform: Has Bank Behavior Changed?* (Int’l Monetary Fund, Working Paper No. 06/71, 2006), <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Progress-in-Chinas-Banking-Sector-Reform-Has-Bank-Behavior-Changed-18952>.

105. Xiaoqing Fu & Shelagh Heffernan, *Cost X-efficiency in China’s Banking Sector*, 18 CHINA ECON. REV. 35, 47-50 (2007); Shih et al., *supra* note 66; Ariff & Can, *supra* note 67; Ferri, *supra* note 64; Jia, *supra* note 63; Lin & Zhang, *supra* note 68; Jiang et al., *supra* note 69; Berger et al., *supra* note 70; Jiang et al., *supra* note 71. However, there are also studies showing that the performance of state-owned banks has improved after China’s financial reform. *See, e.g.*, Michael Firth, Chen Lin, Ping Liu & Sonia M.L. Wong, *Inside the Black Box: Bank Credit Allocation in China’s Private Sector*, 33 J. BANKING & FINANCE 1145 (2009) (finding that banks tend to allocate loans to firms with higher profitability, more experienced and incentive-compatible CEOs, and more independent corporate boards, which implies that the banks use commercial judgments in loan-extension decisions); Ying-Ju Tsai, Yi-Pei Chen, Chi-Ling Lin & Jung-Hua Huang, *The Effect of Banking System Reform on Investment-Cash Flow Sensitivity: Evidence from China*, 46 J. BANKING & FIN. 166, 172 (2014) (reporting that, after China’s banking system reform, state-controlled listed companies are less likely to rely on bank loans for investment because of the increased monitoring, and non-state-controlled listed companies are able to obtain bank loans more easily because the lending practices of banks have become more commercially-oriented); Cheng Hsiao, Yan Shen & Wenlong Bian, *Evaluating the Effectiveness of China’s Financial Reform-The Efficiency of China’s Domestic Banks*, CHINA ECON. REV. 35: 70, 81 (2015) (showing that the operating efficiency of Chinese domestic banks, including the Big Four, is catching up with that of foreign banks).

politically preferable entities, especially SOEs, whereas private firms, which have become the driving force of China's economic growth, are forced to rely on informal and even underground credit channels to finance their survival. According to Huang,¹⁰⁶ there is "a systemic, pervasive, persistent bias in financial policies in favor of the least efficient firms in the Chinese economy—SOEs—at the expense of the most efficient firms in the Chinese economy—China's small, entrepreneurial, and private enterprises." Similarly, Nee and Oppen argue that "the lending policy and practices of China's formal financial institutions were designed to deter, if not entirely block, the rise of the private enterprise economy."¹⁰⁷

After several decades of economic reform, China's non-state sector has replaced SOEs as the key driver of China's economic growth. However, the non-state sector, especially private enterprises,¹⁰⁸ has been intentionally discriminated against in terms of credit access and availability. For example, Huang uses the World Bank's "World Business Environment Survey ('WBES') 2000"¹⁰⁹ to show that "domestic private firms in China are among the most financially constrained in the world."

¹¹⁰ In response to a survey question that assessed the extent of the "general financing constraint" ("GFC"), a measure of the perception of the severity of credit constraints, WBES found that 66.3% of Chinese firms considered the GFC to be a "major obstacle." That proportion is the highest among Asian countries and exceeds the proportion in most transitional economies, including Russia. A survey conducted by the International Finance Corporation that covered 338 domestic private firms located in Beijing, Chengdu, Shunde, and Wenzhou, reports that approximately 80% of the firms surveyed considered access to financing a moderate or major constraint, while 40% considered it a major constraint.¹¹¹

106. Yashen Huang, *Do Financing Biases Matter for the Chinese Economy?*, 26 CATO J. 283, 289 (2006).

107. VICTOR NEE & SONJA OPPER, CAPITALISM FROM BELOW: MARKETS AND INSTITUTIONAL CHANGE IN CHINA 96 (2012).

108. For the relationship between the non-state sector and the private sector, see Stephan Haggard & Yasheng Huang, *The Political Economy of Private-Sector Development in China*, in CHINA'S GREAT ECONOMIC TRANSFORMATION 337, 339 (Loren Brandt & Thomas G. Rawski eds., 2008).

109. "The survey was carried out in 81 countries and for over 10,000 firms operating in these countries. The survey was designed to capture the firms' views on many aspects of the business environment pertaining to their operations. An important feature of the WBES is its emphasis on entrepreneurial firms. The vast majority of the firms are owned privately." *Id.* at 290-91.

110. Huang, *supra* note 106, at 290.

111. NEIL GREGORY, STOYAN TENEV & DILEEP WAGLE, CHINA'S EMERGING PRIVATE ENTERPRISES: PROSPECTS FOR THE NEW CENTURY 41 (2000).

Regarding the distribution of credit volume, Brandt and Zhu find that from 1998 to 2004, the state sector, defined to include shareholding companies in which governments have significant ownership shares, continued to absorb between half and two-thirds of new bank lending.¹¹² According to the Report on the Development of Private Economy in China 2008-2009, the narrow private sector, i.e., domestic privately owned and individual businesses, accounted for only 7.4% to 13.5% of the total bank loans issued from 2002 to 2008.¹¹³

The argument that the private sector is financially disfavored in China is further supported by certain statistical evidence. For example, Brandt and Li find that compared with township and village enterprises (“TVEs”), which are “set up and owned by local township governments,” private firms (as well as later privatized TVEs) were “significantly less

A survey conducted in 2000 shows a similar picture. “The survey questions were answered by the owners of the private enterprises. Of particular interest to this study is that private entrepreneurs were asked to indicate the degree of difficulty in obtaining bank loans using a scale between 1 and 5, with 1 being the easiest access and 5 the most difficult. In total, 2,854 out of 3,073 entrepreneurs answered this question, and the percentages of entrepreneurs choosing 1, 2, 3, 4 and 5 were 2.59, 12.02, 22.07, 32.13 and 31.19%, respectively.” Chong-En Bai, Jiangyong Lu & Zhigang Tao, *Property Rights Protection and Access to Bank Loans: Evidence from Private Enterprises in China*, 14 ECON. TRANSITION 611, 614 (2006).

112. Loren Brandt & Xiaodong Zhu, *China’s Banking Sector and Economic Growth*, in CHINA’S FINANCIAL TRANSITION AT A CROSSROADS 22, 86 (Charles W. Calomiris ed., 2007).

113. Guangdong Xu & Binwei Gui, *Why are China’s State-Owned Enterprises so Profitable? A Financial Repression Perspective*, in MARKET INTEGRATION: THE EU EXPERIENCE AND IMPLICATIONS FOR REGULATORY REFORM IN CHINA, 150 (Niels Philippen, Stefan E. Weishaar & Guangdong Xu eds., 2016). The financial discrimination against private enterprises appears to have continued or even worsened after 2008, when the Chinese government adopted a gigantic stimulus plan, which favors infrastructural projects as well as other local-government-sponsored projects. See Risto Herrala & Yandong Jia, *Toward State Capitalism in China?*, 14 ASIAN ECON. PAPERS 163, 172 (2015) (reporting that the credit availability of SOEs, particularly those SOEs owned by local governments, increased significantly from 2004 to 2011); Anders C. Johansson & Xunan Feng, *The State Advances, the Private Sector Retreats? Firms Effects of China’s Great Stimulus Programme*, 40 CAMBRIDGE J. ECON. 1635, 1647 (2016) (finding that SOEs are better able to maintain their leverage levels and have better access to both short- and long-term debt compared with private firms after the introduction of the stimulus program); Ivan Roberts & Andrew Zurawski, *Changing Patterns of Corporate Leverage in China: Evidence from Listed Companies*, in 1 CHINA’S NEW SOURCES OF ECONOMIC GROWTH 271 (Ligang Song, Ross Garnaut, Fang Cai, & Lauren Johnston eds., 2016) (showing that the leverage of listed state-owned or state-controlled companies has risen relative to that of private firms after 2008).

But see NICHOLAS R. LARDY, SUSTAINING CHINA’S ECONOMIC GROWTH AFTER THE GLOBAL FINANCIAL CRISIS 35-36 (2012) (reporting that in 2009 and 2010, bank lending to small-scale enterprises expanded by CNY 1.4 trillion and 1.7 trillion, respectively. In 2010, the pace of growth of lending to small firms was more than twice as rapid as the growth of lending to large firms, and the absolute amount of new lending to small firms exceeded that going to large firms. He therefore concludes that “both individual businesses, which are entirely private, and small firms, which are predominately private, were able to access a large share of the expanded supply of bank credit, which was one of the most prominent features of China’s stimulus program starting in late 2008.”).

likely to obtain loans, received smaller loans, and were subject to higher loan standards.”¹¹⁴ Li, Yue, and Zhao report that for unlisted manufacturing firms in China, “state ownership is significantly and positively associated with” a firm’s likelihood of having long-term debt (but not short-term debt), as well as a higher leverage ratio.¹¹⁵ Based on a data set covering more than 20,000 Chinese firms over the 1998 to 2005 period, Poncet, Steingress, and Vandenbussche find that private firms significantly relied on their cash flow to finance their investment,¹¹⁶ which is evidence of credit constraints, whereas SOEs did not.¹¹⁷ Moreover, Boyreau-Debray and Wei show that state-owned financial institutions tended “to allocate capital systematically away from more productive regions toward less productive ones” in favor of inefficient SOEs,¹¹⁸ which played a more important role in the less productive areas.¹¹⁹

114. Loren Brandt & Hongbin Li, *Bank Discrimination in Transition Economies: Ideology, Information, or Incentives?*, 31 J. COMP. ECON. 387, 391, 409 (2003).

115. Kai Li, Heng Yue & Longkai Zhao, *Ownership, Institutions, and Capital Structure: Evidence from China*, 37 J. COMP. ECON. 471 (2009).

116. Sandra Poncet, Walter Steingress & Hylke Vandenbussche, *Financial Constraints in China: Firm-Level Evidence*, 21 CHINA ECON. REV. 411, 416 (2010).

117. Alessandra Guariglia, Xiaoxuan Liu & Lina Song, *Internal Finance and Growth: Microeconomic Evidence on Chinese Firms*, 96 J. DEV. ECON. 79 (2011). The authors use a similar methodology and show that, in addition to private firms’ investment, the growth of their assets is also affected by cash flow (again, SOEs are immune to such constraints). The conclusion reached in Poncet et al., *supra* note 116, is further supported by Sai Ding, Alessandra Guariglia & John Knight, *Investment and Financing Constraints in China: Does Working Capital Management Make a Difference?*, 37 J. BANKING & FIN. 1490, 1498 (2013), where the authors find that, in the presence of cash flow shocks, private firms—but not SOEs—have to adjust their working capital to alleviate the effects of financing constraints on fixed capital investment and therefore exhibit high sensitivities of working capital investment to cash flow. *See also* Minjia Chen & Alessandra Guariglia, *Internal Financial Constraints and Firm Productivity in China: Do Liquidity and Export Behavior Make a Difference?*, 41 J. COMP. ECON. 1123 (2013) (confirming that private firms are financially constrained, and reporting that private (and foreign) firms’ productivities are affected by their cash flow, whereas SOEs’ are not); Kenneth S. Chan, Vinh Q.T. Dang & Isabel K.M. Yan, *Financial Reform and Financing Constraints: Some Evidence from Listed Chinese Firms*, 23 CHINA ECON. REV. 482, 490 (2012) (finding that small firms’ investments display significant sensitivity to internal funds (cash holdings), whereas large firms’ investments do not, which means that small firms face significant credit constraints. Given that most small firms are privately owned, the argument that private firms are financially disfavored is again corroborated).

118. Genevieve Boyreau-Debray & Shang-Jin Wei, *Pitfalls of a State-Dominated Financial System: The Case of China* 3 (Nat’l Bureau of Econ. Res., Working Paper No. 11214, 2005), <http://www.nber.org/papers/w11214.pdf>.

119. *See also* Jahangir Aziz & Christoph Duenwald, *Growth-Financial Intermediation Nexus in China* 9 (Int’l Monetary Fund, Working Paper No. WP/02/194, 2002), <http://www.imf.org/en/Publications/WP/Issues/2016/12/30/Growth-Financial-Intermediation-Nexus-in-China-15571> (showing that provinces with above-average GDP growth had significantly lower bank loan-to-GDP ratios—by up to 36% of GDP—than below-average growth provinces; in addition, provinces

3. Interest Rate Controls

The liberalization of interest rates in China is placed relatively late in the sequence of economic reform, and it follows a gradual approach. “The sequencing of interest rate liberalization was carefully crafted.”¹²⁰ The process involved the lifting of restrictions on wholesale transactions followed by the gradual liberalization of retail transactions. The progression of liberalization was as follows: deposit and lending interest rates on foreign currencies were liberalized before those on the local currency, loan rates were liberalized before deposits, and the liberalization of long-term and large loans and deposits preceded short-term and small loans and deposits. However, the policy of gradually liberalizing interest rates on loans and deposits was largely abandoned after 2004.¹²¹ Fortunately, “[s]ince 2012, interest rate liberalization has been advancing at an accelerated pace.”¹²² “The lending rate floor, which was expanded to 0.7 times the benchmark rate in 2012, was removed” in July 2013. Starting then, “financial institutions could, in theory, independently decide on lending rates based on market forces.” “From November 2014 to October 2015, the deposit rate ceiling was gradually increased three times and finally removed” on October 2015. The IMF,¹²³ therefore, announced that “interest rate liberalization was formally completed. . . . these reforms help move China towards an independent, market-based, monetary policy.”¹²⁴

with above-average concentrations of SOEs had higher loan-to-GDP ratios than provinces with below-average concentrations of SOEs).

120. Bernard J. Laurens & Rodolfo Maino, *China: Strengthening Monetary Policy Implementation*, 12 (Int’l Monetary Fund, Working Paper No. WP/07/14, 2007); Xiaoling Wu, *China’s Monetary Policy: Facing the Challenges of Financial Globalization*, in CHINA’S EMERGING FIN. MKTS.: CHALLENGES & GLOBAL IMPACT 433 (Martha Avery, Min Zhu & Jinqing Cai eds., 2009).

121. LARDY, *supra* note 113, at 2.

122. Yuyan Tan, Yang Ji & Yiping Huang, *Completing China’s Interest Rate Liberalization*, 24 CHINA & WORLD ECON. 1, 11 (2016).

123. INT’L MONETARY FUND, COUNTRY REPORT, NO. 16/270, PEOPLE’S REPUBLIC OF CHINA: STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION (2016) [hereinafter IMF, COUNTRY REPORT NO. 16/270].

124. However, Tan et al., *supra* note 122, at 2, caution that “the de jure completion of interest rate liberalization has generated little impact on the Chinese financial system. First, commercial banks still stick to the official benchmark rates set by the PBOC, although they are not required to do so anymore, at least in theory. Both deposit rates and loan rates have stayed nearly the same as those before reform. Without any real change in the pattern of financial institutions’ behavior, the recent reforms have not yet put an end to financial repression. Second, the financing cost in the informal market is still nearly twenty percent, much higher than the official benchmark rate, and keeps rising even when the PBOC lowers both the benchmark interest rate and the required reserve ratio (“RRR”). Because SOEs still have better access to credit while more efficient private

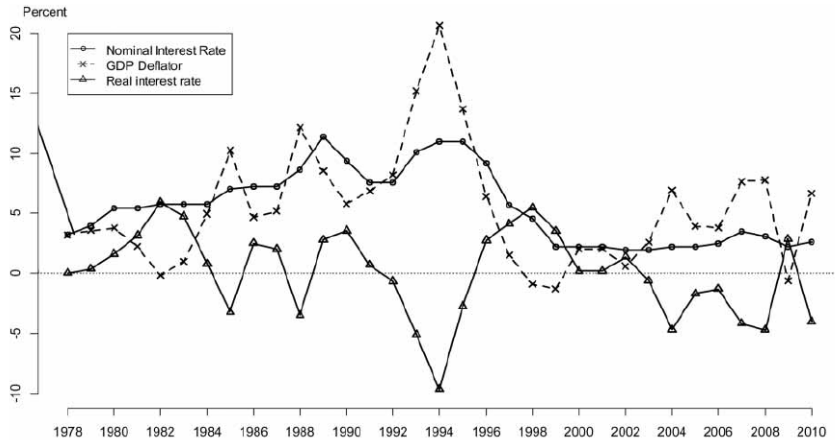


Figure 1: The Nominal Interest Rates, GDP Deflators, and Real Interest Rates in China (1978-2010) (Source: Xu & Gui)¹²⁵

What deserves more attention in this study is that China's central bank appears to adjust the benchmark interest rates asymmetrically in response to inflation.¹²⁶ More specifically, the central bank adjusts deposit and lending rates downward more quickly than they adjust them upward. When inflation increases, the rigidity of interest rates leads to lower or even negative real interest rates (see figure 1). This trend is more evident after 2004. For example, Lardy reports that "beginning in 2004[,] whenever inflation picked up the central bank raised the nominal deposit rates with a lag, and the upward adjustment was substantially less than the increase in inflation. When inflation ebbed[,] the bank adjusted the nominal deposit rate downward rather quickly."¹²⁷

C. Summary

Financial regulation in China shares several features with a financial repression as it has been identified in the theoretical framework presented in Section II. Historically, the grip of the government on the banking system has always been very strong, and, even today, the state is a

enterprises have to incur much higher funding costs, there is no sign of diminishing distortion of capital allocation."

125. Xu & Gui, *The Case of China*, *supra* note 11, at 395; Xu & Gui, *An Empirical Examination*, *supra* note 11, at 82.

126. M.-H. Liu, D. Margaritis & A. Tourani-Rad, *Monetary Policy and Interest Rate Rigidity in China*, 19 APPLIED FIN. ECON. 647 (2009).

127. LARDY, *supra* note 113, at 80.

dominant player in the banking sector. The state-owned banks in China show many inefficiencies, poor management, and poor performance.

Also, the financial market, more particularly stock and bond markets, are relatively underdeveloped in China. Compared to other economies, stock markets in China play a relatively minor role in allocating capital and have shown several institutional weaknesses, such as speculative trading.

A large state involvement in the banking sector also leads to misallocation of credit to the disadvantage of private enterprises. Because private enterprises have difficulties obtaining credit via the regular financial system, a large secondary circuit—shadow banking—has emerged.

Finally, in order to stimulate growth, interest rates have been severely controlled by China's central bank, leading to a relatively low cost of capital in China.

IV. CHINA'S STIMULUS PROGRAM OF 2008

The global financial crisis of 2008 severely impaired China's economy: "The total export dropp[ed] from 136.7 billion USD in Sept[ember] 2008 to 64.86 billion USD in Feb[ruary] 2009";¹²⁸ "given that exports had comprised one-third of China's GDP in value, the sharp downturn in exports exerted a drag on GDP growth that was a stunning negative 41% in 2009."¹²⁹ China's GDP annualized growth rate, therefore, dropped from 9.5% in the third quarter of 2008 to 6.4% in the first quarter of 2009. As a response, the Chinese government announced a tremendous fiscal stimulus program on November 5, 2008. On that date, a State Council (China's cabinet) meeting decided on the "CNY 4 trillion stimulus program," an amount equal to 12.5% of 2008 GDP,¹³⁰ but to be spent from the fourth quarter of 2008 through the end of 2010.

128. Zhuo Chen, Zhiguo He & Chun Liu, *The Financing of Local Government in China: Stimulus Loan Wanes and Shadow Banking Waxes* 6 (NBER, Working Paper No. 23598, July 5, 2017), <http://www.nber.org/papers/w23598.pdf>.

129. Christine Wong, *The Fiscal Stimulus Programme and Public Governance Issues in China*, 11 OECD J. ON BUDGETING 1, 3 (2011).

130. Min Ouyang & Yulei Peng, *The Treatment-Effect Estimation: A Case Study of the 2008 Economic Stimulus Package of China*, 188 J. ECONOMETRICS 545, 548 (2015) ("this package was the biggest stimulus program in the world, equal to about three times size of the US effort."). Wong *supra* note 129, at 13 has reported that the actual implementation size of the Chinese stimulus program was even bigger than the announced value due to the over-lending of the banks to local governments. Wong argues that even a conservative estimate would place the stimulus program at CNY 9.5 trillion, or 27% of GDP over the twenty-seven months from the fourth quarter of 2008 through the end of 2010. *Id.* This was 2.4 times the size of the announced stimulus package.

Table 1. Sectoral Composition of China's Stimulus Investment

transport and power infrastructure (railroads, roads, airports, electric grids)	37.5%
rural village infrastructure	9.3%
environmental investment	5.3%
affordable housing	10.0%
technological innovation and restructuring	9.3%
health and education	3.8%
post-earthquake reconstruction	25.0%

Source: Wong¹³¹

At the core of the stimulus package is an investment program that focuses on “seven priority areas: (1) [t]ransport and power infrastructure (railroads, roads, airports, electricity grids); (2) post-earthquake reconstruction; (3) rural village infrastructure; (4) environment, energy efficiency and carbon emission reduction; (5) affordable housing; (6) technological innovation and restructuring; and (7) health and education.”¹³² “The weighting of these components went through some adjustments during the implementation. Their final distribution is presented in Table 1. For these investments, the central government committed at the outset to funding CNY 1.18 trillion from the budget with the remaining CNY 2.8 trillion to be financed by local governments, enterprises, and banks.”¹³³

The stimulus package seems to have worked effectively in boosting China's economic growth, at least in the short term. For example, Diao, Zhang, and Chen estimate that China's “GDP growth rate in 2009 could have fallen to 2.9% without the stimulus package” and “the cumulative GDP growth difference between the two scenarios”—with versus without the stimulus program—“for 2009-15 is about CNY 76 trillion”—“which

131. Wong, *supra* note 129, at 6.

132. For other dimensions of the package, see Barry Naughton, *Understanding the Chinese Stimulus Package*, 28 CHINA LEADERSHIP MONITOR 1 (2009). See also Wong, *supra* note 129.

133. Wong, *supra* note 129, at 6. See also *id.* at 8 (“the central government input to the stimulus totaled CNY 1.6 trillion (36% larger than the CNY 1.18 trillion envisioned at the start”).

is about three times China's 2007 GDP.”¹³⁴ Similarly, Ouyang and Peng report “the stimulus package had raised the annual real GDP growth in China by about 3.2%, but only temporarily” (for about two years).¹³⁵

Unfortunately, both the liability side and the asset side of the program have significant financial and economic weaknesses, which ultimately led China to a volatile, inefficient, and highly risky growth path. On the liability side, most investment projects were financed by bank loans at the beginning and then by a shadow banking system after 2012, when the Chinese government attempted to control the exposure of Chinese banks to default risks. Consequently, China now faces the problems of extremely high levels of leverage in both corporate and governmental sectors, a massive volume of debt that has been believed to reach a critical point, and the rise and boom of a shadow banking system that acts as a double-edged sword by both (partially) liberalizing the financial sector and endangering the stability of the financial system simultaneously. On the asset side, most investments are carried out by SOEs, particularly by Local Government Financing Vehicles (“LGFVs”), and concentrate mainly on low-yielding projects, such as infrastructure. Therefore, efficiency in the allocation of financial resources is further decreased, the default risks faced by the Chinese bank system have built up in an accelerated speed, and the NPLs problem that troubled China's financial system for the entire 1990s is looming again. In summary, the severity of financial repression in China has been greatly intensified by the stimulus program, so much so that the possibility of a financial or economic crisis has become much more real than ever before.

These points can be illustrated by focusing on the one hand on the investments made especially by LGFVs, (A); on the other hand on the debts undertaken by these local entities to finance these investments, (B). The results of these increased investments combined with an increasing number of debts by local entities have worsened the consequences of financial repression.

A. Increased Investments by Local Authorities

LGFVs play a crucial role in implementing the stimulus program. Because only 1.18 of 4 trillion comes out of the budget of the central government, there is a huge financing gap for the local governments who are asked to carry out the investment projects. In addition, according to China's Budget Law, local governments are required to keep a balanced

134. Xinshen Diao, Yumei Zhang & Kevin Z. Chen, *The Global Recession and China's Stimulus Package*, 23 CHINA ECON. REV. 1 (2012).

135. Ouyang & Peng, *supra* note 130, at 1.

budget and are prohibited from borrowing by themselves.¹³⁶ If a local government needs to borrow, it has to resort to the MOF who will then borrow and repay the debt on behalf of the local government.¹³⁷ Therefore, local governments are forced and yet simultaneously encouraged by the central government to use LGFVs to finance their investment spending.¹³⁸

The number of LGFVs has increased at an astonishingly high speed. There were only twelve bond-issuing LGFVs before 2009, whereas this number rose to 1,700 in 2013.¹³⁹ If we also include those small LGFVs that have never issued bonds, there were 7,170 LGFVs in June 2013.¹⁴⁰ With the help of LGFVs, local governments now can borrow from banks and invest in specific projects, such as infrastructure, and leave these loans on the off-balance sheet. As reported by China's National Audit Office, most (approximately 60%) of local governments' off-balance-sheet expenditures (through LGFVs) went to infrastructure, including municipal construction and transportation infrastructure.¹⁴¹

China has, therefore, experienced a period of unprecedentedly high infrastructure investment. Shi and Huang report that the total investment in infrastructure in 2009 was CNY 6.18 trillion, and this number rose to

136. China's Budget Law was enacted in 1994 and revised in 2014. See Yusuan Fa (预算法) [Budget Law of the People's Republic of China] (adopted by the Standing Comm. Nat'l People's Cong., Mar. 22, 1994, effective Jan. 1, 1995) 1994 P.R.C. Laws 20 [hereinafter 1994 P.R.C. Budget Law], <http://en.pkulaw.cn/display.aspx?cgid=8925&lib=law>; Yusuan Fa (预算法) [Budget Law of the People's Republic of China] (adopted by the Standing Comm. Nat'l People's Cong., Mar. 22, 1994, amended Aug. 31, 2014, effective Jan. 1, 2015) [hereinafter 2014 P.R.C. Budget Law Amendment], <http://en.pkulaw.cn/display.aspx?cgid=233287&lib=law>.

137. For more detailed discussions on the fiscal relationship between the central government and local governments and the role of the Budget Law, see Chong-En Bai, Chang-Tai Hsieh & Zheng (Michael) Song, *The Long Shadow of China's Fiscal Expansion*, 47 BROOKINGS PAPERS ON ECON. ACTIVITY 129 (2016); Haoyu Gao, Hong Ru & Dragon Yongjun Tang, *Subnational Debt of China: The Politics-Finance Nexus* (May 16, 2018) (unpublished manuscript), <https://ssrn.com/abstract=2801878>; Chen et al., *supra* note 128.

138. See Chen et al., *supra* note 128, at 7 (showing how the central government orchestrated the relaxation of regulation to encourage local governments' investment). Legally, an LGFV is an SOE with the corresponding local government as the only or dominant shareholder. A typical arrangement would be that local governments would transfer ownership of land to an LGFV, and the land would be used as collateral to borrow from banks (or shadow banks) as well as to issue bonds. Bai et al., *supra* note 137, at 130, 142.

139. See Chen et al., *supra* note 128, at 8; Bai et al., *supra* note 137, at 145.

140. Bai et al., *supra* note 137, at 145. As cautioned by Gao et al., *supra* note 137, at 14, there is no consensus regarding the definition of LGFVs or the number of LGFVs, even among different government apartments. For example, the PBOC estimates that there are approximately 10,000 LGFVs nationwide, whereas the CBRC reports that there are 9,828 LGFVs. *Id.* at 15.

141. Bai et al., *supra* note 137, at 132, 149 (also estimating that in 2014 and 2015, the off-balance-sheet spending by local governments accounted for approximately 11% of GDP, of which 2.4% was spent on local infrastructure projects and 8.6% on what are essentially private commercial projects).

CNY 7.2 trillion in 2010; and that “compared with 2008, the total infrastructure investment in 2009 and 2010 increased by 45% and 63%, respectively, higher than the two historical records in China since 1985: 36% in 1992 and 37% in 1998.”¹⁴² Nevertheless, there are concerns that these projects may not be financially viable.¹⁴³ Indeed, Ansar et al. investigated ninety-five road and rail transport infrastructure projects built in China from 1984 to 2008 and found that over half the projects, 55%, have been NPV (Net Present Value) negative.¹⁴⁴ In other words, a majority of the infrastructure projects are value-destroying. Given the greater volume of projects and the undue haste in the process of project approval in the 2008 stimulus program, the situation after 2008 may prove to be worse.¹⁴⁵

Investments by LGFVs may undermine China’s economic efficiency not only directly by wasting resources on unproductive infrastructure projects but also indirectly by crowding out private investment projects that are more productive. For example, Huang, Pagano, and Panizza report that between 2006 and 2013,¹⁴⁶ local government debt was inversely correlated with the city-level investment ratio of domestic private manufacturing firms. In other words, local

142. Hao Shi & Shaoqing Huang, *How Much Infrastructure Is Too Much? A New Approach and Evidence from China*, 5 *WORLD DEV.* 272, 272 (2014).

143. See Wilkins & Andrew Zurawski, *Infrastructure Investment in China*, RES. BANK AUSTL. BULL., June 2014, at 27, 33, <http://www.rba.gov.au/publications/bulletin/2014/jun/pdf/bu-0614-4.pdf> (“around 85 percent of infrastructure investment in China is undertaken by the state—a much higher percentage than is typical in other countries. In the absence of a strong framework of project prioritization and transparent cost-benefit analysis, the reliance on government-directed investment creates the potential for misallocation of resources through inefficient investment. Despite making progress towards broader economic reform, the lack of market price mechanisms in many types of infrastructure industries increases the risk of poor investment decisions.”).

144. Atif Ansar, Bent Flyvbjerg, Alexander Budzier & Daniel Lunn, *Does Infrastructure Investment Lead to Economic Growth of Economic Fragility? Evidence from China*, 32 *OXFORD REV. ECON. POL’Y* 360, 376 (2016).

145. It is, therefore, not surprising to find that the effects of these infrastructure investments on economic growth are mixed. See, e.g., Yingying Shi, Shen Guo & Puyang Sun, *The Role of Infrastructure in China’s Regional Economic Growth*, 49 *J. ASIAN ECON.* 26, 27 (2017) (finding that, for the period 1990–2013, whereas infrastructure has generally played a positive role in China’s rapid economic growth, the contribution varies greatly across types of infrastructure. Certain infrastructure investment, for example in roadways, is shown to have been negatively related to growth in some regions and during some time periods). See also Shi & Huang, *supra* note 142, at 284 (arguing that China’s stimulus program of 2008 has led to a problem of over-investment in infrastructure, particularly in China’s western provinces). China may therefore suffer an economic loss that is equivalent to 3.2% of GDP in 2011.

146. Yi Huang, Marco Pagano & Ugo Panizza, *Public Debt and Private Firm Funding: Evidence from Chinese Cities* 1, 1–2 (Centre for Econ. Pol’y Res., Discussion Paper No. DP11489, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2834826.

government debt crowds out investment by private firms by tightening their funding constraints.

In addition to LGFVs, traditional SOEs are also mobilized to borrow, to invest, and, therefore, to revitalize China's economy. New credit under the stimulus program is allocated noticeably more toward SOEs than to private firms.¹⁴⁷ Cong et al. report that between 2000 and 2008,¹⁴⁸ SOEs experienced between 12% and 50% lower levels of new loans as a share of their revenues as compared with private enterprises; however, after 2009, SOEs experienced, on average, between 10% and 15% higher levels of new loans as a share of their revenues. Herrala and Jia find that the credit availability of SOEs, particularly those SOEs owned by local governments, increased significantly from 2004 to 2011.¹⁴⁹ Shen, Firth, and Poon report that from the fourth quarter of 2008 to the fourth quarter of 2010, the leverage of large firms and SOEs increased by 2.97% and 2.38%, respectively, compared with leverage in the pre-stimulus period.¹⁵⁰ By contrast, the leverage ratios in small firms and non-SOEs dropped by 1.21% and 1.22%, respectively, during the same period.¹⁵¹

Bolstered by new loans, SOEs promptly expanded their fixed asset investment. Whereas before the stimulus program private firms were the major force behind aggregate investment spending in China, this pattern has changed dramatically after 2008.¹⁵² Wen and Wu report that the real growth rate of SOEs' fixed investment spending increased from a normal growth rate of 11.59% in the second quarter of 2008 to 21.09% in the fourth quarter of 2008 and reached an astonishing 45.3% in the second

147. Yasheng Huang, *Rethinking the Beijing Consensus*, 11 ASIA POL'Y 1, 4 (2011) (estimating that 90% of the stimulus funds have been directed toward SOEs. The author, therefore, concludes that "China is now in the midst of one of the most statist periods in its reform era with the massive stimulus package that has poured a huge portion of the country's GDP in financial resources into the state sector.").

148. Lin William Cong, Haoyu Gao, Jacopo Ponticelli & Xiaoguang Yang, *Credit Allocation under Economic Stimulus: Evidence from China* (Buffett Inst. Global Poverty Res. Lab, Working Paper No. 17-108, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3126489.

149. Herrala & Jia, *supra* note 113, at 172.

150. Jianfu Shen, Michael Firth & Winnie P.H. Poon, *Credit Expansion, Corporate Finance and Overinvestment: Recent Evidence from China*, 39 PACIFIC-BASIN FIN. J. 16, 22 (2016).

151. See Johansson & Feng, *supra* note 113, at 1647-1648 (reaching a similar conclusion that, during the first three years after the initiation of the stimulus program, compared with SOEs that were able to maintain their leverage levels, private firms deleveraged significantly more).

152. Deng et al., *supra* note 93, at 71 (reporting that, prior to 2008, nonfinancial SOEs' annualized real growth rate in fixed asset investment typically lagged that of corporations officially classified as non-SOEs by about ten percentage points).

quarter of 2009.¹⁵³ Between the fourth quarter of 2008 and the first quarter of 2010, the actual investment growth rate of SOEs stayed at approximately 20 percentage points above its pre-stimulus average rate for several quarters.

Investment, from both LGFVs and traditional SOEs, has played a key role in reinvigorating China's economy after the shock of the financial crisis. Indeed, investment alone was responsible for approximately 90% of China's GDP growth in 2009.¹⁵⁴ Unfortunately, such a government-directed, SOE-implemented, and credit-driven growth pattern is not sustainable, given the inefficiency of these investment projects.¹⁵⁵ Actually, the current growth model, which relies heavily on investment to push economic growth, is the model that the Chinese government has committed to reform for a decade.¹⁵⁶ Compared to the situation in 2007, when China's former Premier Wen Jiabao first openly admitted that China's economic growth is "unstable, unbalanced, uncoordinated, and unsustainable,"¹⁵⁷ the only difference is that China's economic condition is now much worse, in view of its declining, or even negative, TFP,¹⁵⁸ which is believed to be the only factor that may sustain an economy's long-term growth.

153. Yi Wen & Jing Wu, *Withstanding Great Recession like China* 1, 18 (Fed. Res. Bank St. Louis, Working Paper No. 2014-007A, 2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2407164.

154. Deng et al., *supra* note 93, at 55-56; Wen & Wu, *supra* note 153, at 15.

155. Cong et al., *supra* note 148, at 4-5 (finding that firms with lower initial marginal product of capital, i.e., low productivity, experienced a relatively larger increase in borrowing and capital investment than firms with higher initial marginal product of capital during the stimulus years). They, therefore, conclude that there is an increase in the misallocation of physical capital during the stimulus years. *Id.* at 4. Johansson and Feng examine the performance of both SOEs and private firms after the introduction of the stimulus program and argue that "the overall effect of the directed allocation of capital into the state sector that characterized the 2008 stimulus program has an overall negative effect on productivity in the economy." Johansson & Feng, *supra* note 113, at 1653. Bai et al., *supra* note 137, at 162, similarly claim that, "in sum, the long-run effect of China's temporary fiscal stimulus program appears to have been an increase in the investment rate, a decline in the current account surplus, and a decline in productivity driven by the increased misallocation of resources."

156. See generally Guangdong Xu, *The Institutional Foundations of China's Unbalanced Economy*, 67 EUROPE-ASIA STUD. 1351 (2015) (discussing China's current investment-driven growth model and factors influencing it).

157. Premier: China Confident in Maintaining Economic Growth, CHINA.ORG.CN (Mar. 16, 2007), <http://www.china.org.cn/english/2007lh/203252.htm>.

158. E.g., Pingyao Lai, *Growth Slowdown in China Since 2008: Will There Be a Hard Landing in the Near Future?*, 23 CHINA & WORLD ECON. 42, 43 (2015) (showing that, during the entire period of 2008-2013, the annual average growth rate of TFP decreased by approximately 3.2 percentage points compared to the period of 2003-2007, and, for the years 2012 and 2013, the annual growth rate of TFP declined to negative levels). See also Wojciech Maliszewski & Longmei Zhang, *China's Growth: Can Goldilocks Outgrow Bears?* (Int'l Monetary Fund, Working Paper No. WP/15/113, 2015) <https://www.imf.org/~media/Websites/IMF/imported-full-text-pdf/>

In addition, as a result of China's stimulus program, total industrial production in China nearly doubled between 2007 and 2013, "making China the world's largest manufacturing giant and ending the U.S. dominance it enjoyed for a century."¹⁵⁹ As a result of the rapid expansion of production, capacity utilization in key sectors of the economy has declined significantly from just under 80% before the 2008 financial crisis to approximately 60% in 2011,¹⁶⁰ which suggests that there is substantial excess capacity in the economy.¹⁶¹ The overcapacity problem is more serious in certain industries, such as iron, automobile, coal-to-

external/pubs/ft/wp/2015/_wp15113.ashx; Harry X. Wu, *Sustainability of China's Growth Model: A Productivity Perspective*, 24 CHINA & WORLD ECON. 42 (2016); Harry X. Wu, *China's Institutional Impediments to Productivity Growth*, in STRUCTURAL CHANGE IN CHINA: IMPLICATIONS FOR AUSTRALIA AND THE WORLD 5 (Iris Day & John Simon eds., 2016) (on the decline in China's TFP growth after the stimulus program).

Narrowly speaking, TFP refers to the level of technology. In broad terms, however, TFP is a variable that accounts for effects in total output that are not explained by inputs. See Barry P. Bosworth & Susan M. Collins, *The Empirics of Growth: An Update*, 2 BROOKINGS PAPERS ON ECON. ACTIVITY 113, 115 (2003). The authors differentiate TFP from technological processes by stating that TFP "provides a measure of gains in economic efficiency (the quantity of output that can be produced with a given quantity of inputs), which can be thought of as shifts in the production function. But such shifts reflect myriad determinants, in addition to technological innovation, that influence growth but that the measured increases in factor inputs do not account for. Examples include the implications of sustained political turmoil, external shocks, changes in government policies, institutional changes, and measurement error. Therefore, this residual should not be taken as an indicator of technical change."

Other indicators, such as incremental capital-output ratio ("ICOR") and credit intensity, show a similar pessimistic picture. ICOR refers to the number of additional units of capital input needed for producing one unit of additional GDP. See Huang & Wang, *supra* note 88, at 195 (reporting that the ICOR rose from 3.5 in 2007 to 5.9 in 2015). Credit intensity similarly measures the amount of credit needed for an additional unit of output; Longmei Zhang, *Rebalancing in China-Progress and Prospects* 1, 3, 7 (Int'l Monetary Fund, Working Paper No. WP/16/183, 2016), <https://www.imf.org/external/pubs/ft/wp/2016/wp16183.pdf> (showing that the post-stimulus average of credit intensity (2009-2015) had doubled compared to the pre-stimulus average (1993-2008)). In other words, with the declining economic efficiency, China needs more and more inputs (particularly capital) to produce the same level of outputs.

159. Wen & Wu, *supra* note 153, at 17.

160. HUIHUA NIE, TING JIANG, YUXIAO ZHANG & MINGYUE FANG, CHINA'S ZOMBIE FIRMS: CAUSE, CONSEQUENCE, AND CURE (2018). The authors argue that the most beneficial scope for capacity utilization is between 79% and 83%. A report issued by the Economist Intelligence Unit suggests that a threshold of 75% indicates a balanced relationship between supply and demand. ECONOMIST INTELLIGENCE UNIT, CHINA'S SUPPLY-SIDE STRUCTURAL REFORMS: PROGRESS AND OUTLOOK 1, 5 (2017), https://www.eiu.com/public/topical_report.aspx?campaignid=ChinaSSSR 2017.

161. INT'L MONETARY FUND, COUNTRY REPORT NO. 12/195, PEOPLE'S REPUBLIC OF CHINA: STAFF REPORT FOR THE 2012 ARTICLE IV CONSULTATION, 24-25 (2012) [hereinafter IMF, COUNTRY REPORT NO. 12/195].

gas, and cement,¹⁶² with the capacity utilization of less than 67%, 50%, less than 50%, and 60%, respectively, in 2011. The ratio of so-called “zombie firms” has, therefore, increased significantly,¹⁶³ leading to serious solvency problems in certain industries and exposing Chinese banks to increasing risk of Non-Performing Loans (“NPLs”).¹⁶⁴

B. Financing the Increased Investment

1. Increased Bank Loans

Bank loans played a dominant role in financing LGFVs and other SOEs before 2012. Bai, Hsieh, and Song report that 90% of local governments’ off-balance-sheet spending, through LGFVs, in 2009 was funded by bank loans.¹⁶⁵ Similarly, Zhang and Barnett show that bank loans accounted for approximately 80% of total local government debt by 2010, equivalent to CNY 12.7 trillion.¹⁶⁶ New bank credit to the real economy during the stimulus years actually far exceeds borrowing by LGFVs. Chen, He, and Liu report that, in 2009 alone, abnormal new bank loans to the real economy were around CNY 4.7 trillion,¹⁶⁷ among which LGFVs received around 1.8 trillion, the non-residential non-LGFV sector

162. Other industries, such as household appliances, machine tools, and tobacco, are also shown to be troubled by the overcapacity problem. See ECONOMIST INTELLIGENCE UNIT, *supra* note 160, at 9.

163. NIE ET AL., *supra* note 160, report that around 7.51% of China’s industrial firms are “zombie firms” during the period of 2005-2013. The ratio is much higher for certain industries, such as iron (51.43%) and real estate (44.53%).

164. See ECONOMIST INTELLIGENCE UNIT, *supra* note 160, at 9 (reporting that it would take ninety-five years and seventy-four years, respectively, for the coal and ferrous-metal (including steel) smelting industries to pay back total debts); see also IMF, COUNTRY REPORT NO. 16/270, *supra* note 123, at 9 (reporting that there is approximately 14% of Chinese firms whose profits are less than interest payments). The official figure for the NPL ratio was 1.75% in June 2016. Huang & Wang, *supra* note 88, at 196. Nevertheless, there is widespread suspicion that the official NPL ratio significantly underestimates the situation. *Id.* According to Eswar S. Prasad, the actual ratio of NPLs may range from 6-7% to as much as 20%, with an even higher ratio of around 25% for certain smaller banks. *China’s 13th Five-Year Plan: Hearing Before the U.S.-China Econ. & Sec. Review Comm’n*, 114th Cong. 54 (2016) [hereinafter *China’s Five-Year Plan Hearing*] (statement of Eswar S. Prasad, Tolani Senior Professor of Trade Policy, Cornell University). The IMF estimates that potential losses on bank loans to the corporate sector could amount to 7% of China’s GDP. IMF, COUNTRY REPORT NO. 16/270, *supra* note 123, at 9.

165. Bai et al., *supra* note 137, at 148.

166. Yuanyan Sophia Zhang & Steven Barnett, *Fiscal Vulnerabilities and Risks from Local Government Finance in China* (Int’l Monetary Fund, Working Paper No. WP/14/4, 2014), <https://www.imf.org/external/pubs/ft/wp/2014/wp1404.pdf>.

167. Chen et al., *supra* note 128, at 10. The total abnormal new bank loan is calculated as the difference between the actual 2009 new bank loan (CNY 9.6 trillion) and the estimated 2009 normal new bank loan (CNY 4.9 trillion, which is based on the average ratio of new bank loans over GDP in 2004 to 2008). *Id.* at 51.

received 1.5 trillion, and the residential sector received 1.4 trillion. The aggressive credit growth in China increased the ratio of new bank loans to GDP from approximately 15% in normal years to 27.5% in 2009 and 19.2% in 2010.

Both the Big Four and joint-stock banks reacted enthusiastically to the stimulus program. The Big Four's total loan balance increased by 17.49% (CNY 2.31 trillion) in the first quarter of 2009 compared with the end of 2008, substantially more than the total increase of CNY 1.8 trillion over the entire year of 2008; over the full year of 2009, the growth rate of their total loan balance reached a historic high of 31.03% (or CNY 4.1 trillion), almost twice as much as the growing rate in 2008 (15.78% or CNY 1.8 trillion).¹⁶⁸ China's joint-stock banks likewise increased their loans outstanding by 19.76% (or CNY 1.18 trillion) in the first quarter of 2009 and 37.39% (CNY 2.23 trillion) over that entire year compared with the loan balance at the end of 2008.¹⁶⁹

It is not surprising to find that Chinese banks comply with the will of the party-state wholeheartedly, given that the careers of their CEOs are outright dependent on how well they serve the needs of the party-state. In Deng et al.'s succinct words, "Beijing ordered state-owned banks to lend, and they lent."¹⁷⁰ There is a case vividly showing how the career future of Chinese bankers will be determined by their response to the policy signal of the party-state.¹⁷¹ Mr. Gang Xiao, the governor of the BOC in 2009, asked the BOC to adopt a more aggressive attitude toward credit extension, and he was promoted to be the president of the China Securities Regulatory Commission ("CSRC") in 2013. By contrast, Mr. Jianqing Jiang, the governor of the Industrial and Commercial Bank of China ("ICBC"), was reluctant to support the stimulus program, and he did not receive any political promotion and finally retired and became a professor.

2. Public Bonds

Witnessing the wild surge of bank credit in 2009, the Chinese government realized that the policy-driven credit boom could grow out of control and finally hurt China's economy and, therefore, began to tighten monetary policy and discourage bank lending to LGFVs and

168. Deng et al., *supra* note 93, at 69.

169. *Id.* at 71.

170. *Id.* at 55.

171. Viral V. Acharya, Jun "QJ" Qian & Zhishu Yang, *In The Shadow of Banks: Wealth Management Products and Issuing Banks' Risk in China* (Working Paper, 2016) (unpublished manuscript), http://pages.stern.nyu.edu/~sternfin/vacharya/public_html/pdfs/ShadowBank-China-AQY-20161111_all.pdf.

certain industries.¹⁷² The proportion of local government debt that is financed by bank loans, therefore, dropped from approximately 80% in 2010 to below 60% in 2013.¹⁷³ As a result of this policy change, LGFVs and other firms are forced to turn to other financing vehicles, such as *chengtouzhai* (which literally means Urban Investment Bonds, (“UIBs”)), and perhaps more importantly, a shadow banking system.

UIBs are public bonds issued by LGFVs and can be regarded as quasi-municipal bonds.¹⁷⁴ During 2002 and 2013, 1,807 UIBs (with a value of CNY 2291.59 billion) were issued by Chinese local governments; moreover, the bond issuance after 2009 has become much more aggressive, reaching a peak in 2012,¹⁷⁵ 701 issuances, with a value of CNY 829.84 billion.¹⁷⁶ While the development of UIBs may be considered beneficial in view of its contribution to the regularization and institutionalization of debt issuance by local governments as well as the prosperity of China’s bond market, its dark side, such as its repayment-driven purpose and its intertwining with China’s shadow banking system,¹⁷⁷ is disquieting.¹⁷⁸

172. See Shalendra D. Sharma, *Shadow Banking, Chinese Style*, 34 ECON. AFF. 340, 345 (2014) (certain government regulations, rules, and documents on this objective); see also DOUGLAS ELLIOTT, ARTHUR KROEBER & YU QIAO, BROOKINGS INST., *SHADOW BANKING IN CHINA: A PRIMER* 5 (2015), https://www.brookings.edu/wp-content/uploads/2016/06/shadow_banking_china_elliott_kroeber_yu.pdf. (certain government regulations, rules, and documents on this objective).

173. Chen et al., *supra* note 128, at 19.

174. Fenghua Pan, Fengmei Zhang, Shengjun Zhu & Dariusz Wójcik, *Developing by Borrowing? Inter-jurisdictional Competition, Land Finance and Local Debt Accumulation in China*, 54 URB. STUD. 897, 905 (2017) (clearly stating, “local governments provide hidden guarantees. If there is a risk of defaulting, local governments will step in and offer assistance and bailouts.”).

175. Further, from 2008 to 2014, the UIB market increased by 85% per annum. Andrew Ang, Jennie Bai & Hao Zhou, *The Great Wall of Debt: Real Estate, Political Risk, and Chinese Local Government Credit Spreads*, 1 (Geo. McDonough Sch. Business, Research Paper No. 2603022, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2603022. In 2014, the number of new UIB issuance reached 1,704, with a total amount outstanding of CNY 4.95 trillion. *Id.*

176. Pan et al., *supra* note 174.

177. In 2009 and 2010, almost all UIB issuances were for investment. However, repayment-driven UIB issuance has become more prevalent since 2011. In 2015, almost half of UIB issuances were for repaying maturing bank loans. Chen et al., *supra* note 128, at 20.

178. At the end of 2014, 40% of UIBs were held by Wealth Management Products (“WMPs”), which is considered as the most important form of shadow banking in China. This fraction rose to approximately 50% in mid-2016. *Id.* at 36.

3. Shadow Banking

China's shadow banking system has developed at an astonishing speed since 2008.¹⁷⁹ For example, Du, Li, and Wang reported that the size of China's shadow banking system took fifth place in the world in 2012 and third in 2014;¹⁸⁰ by the end of March in 2014, social financing from shadow banking accounted for 35% of China's GDP, and its growth rate was nearly twice that of bank credit; finally, the value generated in the shadow banking sector was approximately 35% of China's GDP in 2014. Similarly, Sharma estimated the total size of China's shadow banking activities to have been CNY 22.8 trillion or 44% of China's GDP in 2012.¹⁸¹

China's shadow banking system has been described as a "complex, byzantine network of unregulated lenders."¹⁸² At least ten techniques and instruments have been identified to be used by those shadow banking participants: loans and leases by trust companies, entrusted loans, bankers' acceptances, microfinance companies, financial leasing, guarantees, pawn shops and various unofficial lenders, Trust Beneficiary Rights ("TBRs"), Wealth Management Products ("WMPs"), and inter-bank market activities.¹⁸³ Among these instruments, entrusted and trust loans and WMPs are believed to be the most important component.¹⁸⁴

It is beyond the scope of this paper to discuss the details of these shadow banking activities. Rather, we only outline three important

179. As cautioned by Elliott et al., a serious problem here is that, "there is no single agreed definition." ELLIOTT ET AL., *supra* note 172, at 4. We prefer to use the definition of the PBOC, which defines "China's shadow banking [system] as credit intermediation involving entities and activities outside the regular banking system" that serves to provide "liquidity and credit transformation" and "which could potentially" be a source of "systemic risk or regulatory arbitrage." *Id.* For more detailed discussions on the definition of shadow banking, see *id.* and Sharma, *supra* note 172, at 341.

180. Julian Du, Chang Li & Yongqin Wang, *A Comparative Study of Shadow Banking Activities of Non-Financial Firms in Transition Economies*, 46 CHINA ECON. REV. 35, 37 (2017).

181. Sharma, *supra* note 172, at 342. Estimates of the size and exposure of China's shadow banking sector vary considerably. *Id.* The estimates range from approximately CNY 5 trillion to 46 trillion, or roughly 8 to 80% of China's GDP. For more detailed discussions, see Sharma, *supra* note 172, at 342 and ELLIOTT ET AL., *supra* note 172, at 2. A most recent estimate by the Moody's Investor Service is CNY 64.5 trillion, which is equivalent to 87% of China's GDP in 2016. Leng Cheng, *Shadow Banking Assets Estimated to Rise 21%*, SHANGHAI DAILY (May 9, 2017), <http://www.shanghaidaily.com/business/finance/Shadow-banking-assets-estimated-to-rise-21/shdaily.shtml>.

182. Sharma, *supra* note 172, at 342.

183. ELLIOTT ET AL., *supra* note 172, at 1-2.

184. Acharya et al., *supra* note 171, at 6; Franklin Allen, Yiming Qian, Guoqian Tu & Frank Yu, *Entrusted Loans: A Close Look at China's Shadow Banking System*, J. FIN. ECON. (forthcoming Mar. 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2621330; Chen et al., *supra* note 128, at 12.

features of China's shadow banking sector, which we believe to be relevant to the understanding of China's financial condition after 2008. First, the prosperity of China's shadow banking system is the direct result of the stimulus program. In Sharma's words,¹⁸⁵ "the meteoric expansion of shadow banking in China is one of the unintended consequences of the policies Beijing introduced to combat the negative effects of the 2008 global financial crisis."¹⁸⁶ Liang similarly claims that "[t]he sudden reduction in formal banking credit paved the way for the rise of channels of shadow financing."¹⁸⁷ As the title of the paper of Chen, He, and Liu argues,¹⁸⁸ "stimulus loan wanes and shadow banking waxes."¹⁸⁹ Further empirical evidence is offered by Acharya, Qian, and Yan, Chen, Ren, and Zha.¹⁹⁰ Second, the shadow banking system intertwines with the formal banking sector to a dizzying extent. For example, Wang et al. argue that "[b]anks take a leading role in shadow banking, in order to evade regulatory controls over interest rate and loan volume."¹⁹¹ They issue off-balance-sheet wealth management products ("WMPs") to depositors and make trust loans to borrowers. Banks also serve as intermediaries for large corporations, mainly SOEs, to issue entrust loans to mostly private enterprises ("PEs").¹⁹² Indeed, approximately two-thirds of business flow in the shadow banking sector is effectively comprised of "bank loans in disguise."¹⁹² Finally, the development of China's shadow banking system may sow the seeds of financial risk or even crisis in light of its operating pattern, which has been described as "less stringent regulation, lower safety margins, riskier business models, and opaque business

185. Sharma, *supra* note 172, at 344.

186. *Id.*

187. Yan Liang, *Shadow Banking in China: Implications for Financial Stability and Macroeconomic Rebalancing*, 49 CHINESE ECON. 148, 151 (2016).

188. Chen et al., *supra* note 128.

189. *Id.*

190. Acharya et al., *supra* note 171; Kaiji Chen, Jue Ren & Tao Zha, *What We Learn from China's Rising Shadow Banking: Exploring the Nexus of Monetary Tightening and Banks' Role in Entrusted Lending* (Nat'l Bureau Econ. Res., Working Paper No. 21890, 2016), <http://www.nber.org/papers/w21890.pdf>.

191. Hao Wang, Honglin Wang, Lisheng Wang & Hao Zhou, *Shadow Banking: China's Dual-Track Interest Rate Liberalization* 1 (2016) (unpublished manuscript) (on file with authors).

192. ELLIOTT ET AL., *supra* note 172, at 9. *See also* MCKINSEY GLOBAL INSTITUTE, CHINA'S CHOICE: CAPTURING THE \$5 TRILLION PRODUCTIVITY OPPORTUNITY (2016), <https://www.mckinsey.com/~media/mckinsey/featured%20insights/Employment%20and%20Growth/Capturing%20Chinas%205%20trillion%20productivity%20opportunity/Chinas-choice-capturing-the-5-trillion-productivity-opportunity-Executive-summary.ashx> (estimating that "through intermediation and other links, banks are connected to about 60 percent of shadow-banking assets, which could lead to additional losses of 1.6 trillion" for banks).

methods.”¹⁹³ A report issued by Stanford Bernstein Researchers estimates that the exposure of China’s eight major banks to the shadow banking sector would be CNY 15.8 trillion, which may be further translated into a NPL rate of 15%.¹⁹⁴

In summary, it seems that after facing the challenge of an economic downturn in 2008 and thereafter, the Chinese government has once more resorted to financial repression policies, particularly the allocation of credit, without hesitation, and tended to use such policies in a more unscrupulous way.¹⁹⁵ China’s growth pattern has, therefore, become much more credit-driven, SOE-favored, and investment-driven and, hence, less productive, less efficient, more distorting, more volatile, and riskier than before 2008. China’s economy has indeed been rescued from the threat of economic recession with the help of financial repression, but at the cost of the prospect of sustainable growth in the long term.

V. ECONOMIC CONSEQUENCES OF FINANCIAL REPRESSION

The financial repression in China as we sketched it in Section III and more particularly the recent evolutions after 2008 (sketched in Section IV) obviously have economic consequences as well. We first sketch some of the direct effects related to the repressed financial system, (A); next, we indicate a few consequences of a rather macro-economic nature, (B).

A. Direct Effects

In Section III, B, we indicated how regulatory tools are used to repress the financial system. In particular, we pointed at the dominance of the state in the banking sector, at credit misallocation and at interest rate controls. Those mechanisms of financial repression have clear consequences that we will review in turn.

193. DOUGLAS ELLIOT & YU QIAO, BROOKINGS INST., REFORMING SHADOW BANKING IN CHINA 18 (2015), <https://www.brookings.edu/wp-content/uploads/2016/06/Elliott-Shadow-Banking-2.pdf>.

194. ELLIOT ET AL., *supra* note 172, at 15.

195. It seems that it has become a habit for the Chinese government to resort to a stimulus program when facing the pressure of economic downturn since 2008. At least two small-scale stimulus packages have been recorded and discussed in the literature. *See generally* Helmut Wagner, *The Building Up of New Imbalances in China: The Dilemma with ‘Rebalancing’* (Munich Personal Repec Archive, Working Paper No. 71494 2016), https://mpira.ub.uni-muenchen.de/71494/1/MPRA_paper_71494.pdf; Bin Zhang, *China’s Economic Transition Syndrome*, 23 CHINA & WORLD ECON. 59 (2015).

1. State Ownership in the Banking Sector

Above we already indicated that the state's large involvement in China's banking sector has led to a lack of effective internal risk management and control and to a relatively poor performance of the state-owned banks.¹⁹⁶ There are, however, additional consequences related to the inefficiency of the large state involvement in China's banking sector. One problem is that, historically, China's state-owned banks accumulated a vast number of Non-Performing Loans ("NPLs"), which drove the banking sector to the verge of bankruptcy by the end of the 1990s. According to Lardy, "China's four major banks as a group have a negative net worth and thus are insolvent."¹⁹⁷ Using official figures, Allen, Qian, and Qian compare NPLs in China, the United States, and other major Asian economies from 1998 to 2006.¹⁹⁸ They report that, measured as a fraction of GDP, China's NPLs were the highest in the group from 2000 to 2006, reaching levels as high as 20.0% to 22.5% of GDP (in 2000 and 2001).¹⁹⁹ Moreover, these numbers may substantially underestimate the actual amount of NPLs within China's banking system due to their exclusion of bad loans that have been transferred from banks to four state-owned asset management companies ("AMCs") and the problematic classification of NPLs in China.²⁰⁰ If these factors are considered, the amount of NPLs (and as a percentage of GDP) may be twice as large as the official figures reported.

Another consequence of the state's significant involvement in China's banking sector is that tremendous fiscal and financial resources have been consumed to save China's banking system by recapitalizing the state-owned banks and by reducing NPLs. According to Ma,²⁰¹ by early 2006, estimated payments toward China's bank restructuring bill (recapitalization plus writing off NPLs) had approached nearly CNY 4 trillion,²⁰² or 22% of the revised 2005 GDP. Taxpayers, shareholders, and

196. See *supra* Section III.B.1.

197. Lardy, *supra* note 57, at 119.

198. Allen et al., *supra* note 7, at 76.

199. *Id.*

200. *Id.* at 75-77.

201. Guonan Ma, *Who Pays China's Bank Restructuring Bill?*, 6 ASIAN ECON. PAPERS 1, 22 (2007).

202. *Id.* This figure is obviously an underestimation because the most troubled one of the Big Four, the ABC, had not been restructured when the study was conducted. The ABC concluded its reform by listing on both the Hong Kong Stock Exchange and the Shanghai Stock Exchange on July 2010. The reorganization costs of the ABC were estimated to be approximately CNY 1.4 trillion. Wu Weijun (吴卫军), *Suansuan Nonghang de Gaige Dazhang* (算算农行的改革大账) [Calculation of Reorganization Costs of ABC], FINANCE.IFENG.COM (July 19, 2010), http://finance.ifeng.com/a/20100719/2422099_0.shtml.

bank customers all funded the restructuring. The problem of NPLs appears to have been mitigated, and China's banking sector has thus been strengthened since 2006, at least according to the officially reported figure.²⁰³ However, this improvement should be primarily attributed to aid from the government, such as the recapitalization of bad loans, the transfer of bad loans from banks to asset management companies, and the rapid expansion in bank lending as a response to recent economic prosperity.

2. Misallocation of Credit

As far as the misallocation of credit, the second feature of financial repression, is concerned, there are clear negative economic consequences. Above we already indicated the private sector in China largely disfavors allocating credit, whereas state-owned enterprises are financially benefited. This obviously has had an important economic consequence. Private enterprises did not have the same opportunities to develop and invest as state-owned enterprises did. Moreover, private enterprises had to look for other forms of finance as the banking sector was often largely unavailable to them. As a result, internal and informal finance, such as retained earnings,²⁰⁴ trade credit, and private loans, have played a more important role in financing the growth of private firms.²⁰⁵

203. For example, the CBRC reports that by the end of 2010, the outstanding balance of NPLs in China's banking sector stood at CNY 1.24 trillion, and the NPL ratio of all banking institutions was found to be 2%, representing a decrease of 4.7 percentage points from the 2006 figure (7.1%). See CHINA BANKING REG. COMM'N, 2010 ANNUAL REPORT, <http://zhuanli.cbrc.gov.cn/subject/nianbao2010/english/5.pdf>. By the end of 2015, after a huge volume of credit had been issued for several years, the outstanding balance of NPLs in China's banking sector stood at only CNY 1.96 trillion, and the NPL ratio of all banking institutions was reported to be 1.94%, even lower than that in 2009 and 2010. See CBRC, *supra* note 57. However, the reliability of such information is questioned by a recent report issued by OECD. ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT [OECD], 2017 ECONOMIC SURVEY OF CHINA 26 (Mar. 21, 2017), <https://www.oecd.org/eco/surveys/economic-survey-china.htm>.

204. See, e.g., Guariglia et al., *supra* note 117, at 90 (concluding that "Chinese [private] firms manage to invest and grow despite the significant financial constraints that they face, because their high productivity enables them to generate large amounts of internal funds, which they then use to invest and grow.") and Carlo Milana & Harry X. Wu, *Growth, Institutions, and Entrepreneurial Finance in China: A Survey*, 21 STRATEGIC CHANGE 83 (2012) (arguing that families and friends are the most important source of financing for establishing new firms in China; at subsequent stages of growth of entrepreneurial firms, retained earnings account for the second most important source of financing).

205. Certainly, there is still a proportion of private firms that can obtain credit from the banking sector. However, evidence shows that the main reason why these private firms receive formal credit is their political affinity with the Chinese party-state rather than their growth prospects. We will return to this topic in Section VI. Unfortunately, the real effects may not be favorable, even for these private firms that have access to formal finance. See, e.g., Zhiyuan Chen, Yong Li & Jie Zhang, *The Bank-Firm Relationship: Helping or Grabbing?*, 42 INT'L REV' ECON. & FIN. 385

Allen, Qian, and Qian report that the most important source of financing for the private sector is self-fundraising, which includes retained earnings, capital raised from family and friends of the founders and managers, and funds raised in the form of private equity and loans.²⁰⁶ This category of funds amounted to almost 60% of all funds raised for the private sector.²⁰⁷ Lu and Yao claim that there are several channels through which financial resources can be transferred from the state sector to the private sector,²⁰⁸ such as trade credit,²⁰⁹ the diversion of assets and bank credits from the former to the latter, and even direct managerial “tunneling.”²¹⁰ Credit discrimination may also force private firms to seek foreign investors; by establishing cross-border relationships with foreign firms, private domestic firms can bypass the financial and legal obstacles they face at home.²¹¹ Foreign direct investment (“FDI”) can thus be relied upon to finance the growth of credit-disfavored private enterprises, a claim that has been confirmed by empirical evidence offered by Héricourt and Poncet,²¹² and also Poncet, Steingress, and Vandenbussche.²¹³

As a consequence, a large informal lending market has emerged in China to fill the gap left by the formal system in providing funding to the private sector. Li estimates that the total volume of informal lending in 2003 ranged from CNY 740.5 billion (\$91.42 billion) to CNY 816.4

(2016) (arguing that there is a detrimental effect of bank loans on private firms’ performance, showing that the interest payment (as the proxy for bank loans) of private enterprises is negatively related to the return on sales (“ROS”) and asset growth (whereas this linkage is significantly positive for SOEs)).

206. Allen et al., *supra* note 7.

207. See Meghana Ayyagari, Asli Demirguc-Kunt & Vojislav Maksimovic, *Formal versus Informal Finance: Evidence from China*, 23 REV. FIN. STUD. 3049 (2010). Using the same classification, the authors find that Chinese firms source 20% of their funds from banks and 80% from self-fundraising.

208. See generally Susan Feng Lu & Yang Yao, *The Effectiveness of Law, Financial Development, and Economic Growth in an Economy of Financial Repression: Evidence from China*, 37 WORLD DEV. 763 (2009).

209. See Robert Cull, Lixin Colin Xu & Tian Zhu, *Formal Finance and Trade Credit during China’s Transition*, 18 J. FIN. INTERMEDIATION 173 (2009). The authors “find that poorly performing SOEs were more likely to redistribute credit to firms with less privileged access to loans via trade credit[,] which can therefore be considered a substitute for loans that these target firms were unable to obtain from formal credit markets.” *Id.* at prologue.

210. Simon Johnson, Rafael La Porta, Florencio Lopez-de-Silanes & Andrei Shleifer, *Tunneling*, 90 AM. ECON. REV. 22 (2000). The authors use the term “tunneling” to refer to “the transfer of resources out of a company to its controlling shareholder (who is typically also a top manager).”

211. YASHENG HUANG, *SELLING CHINA: FOREIGN DIRECT INVESTMENT DURING THE REFORM ERA* (2003).

212. See generally Jérôme Héricourt & Sandra Poncet, *FDI and Credit Constraints: Firm-Level Evidence from China*, 33 ECON. SYSTEMS 1 (2009).

213. Poncet et al., *supra* note 116, at 412, 419, 422.

billion (\$100.79 billion), which on average represents 28.07% of the total scale of lending by formal financial institutions.²¹⁴ A World Bank-PBOC survey on informal finance estimated the annual scale of informal lending to be CNY 950 billion (\$118 billion), or 6.96% of the country's GDP.²¹⁵ Whereas internal finance and informal lending can be expected to help private entrepreneurs start their businesses, the continued development of private firms will finally outgrow the support offered by these informal financial mechanisms.²¹⁶ "Without access to formal finance, private firms will be inevitably trapped in an inefficient state of small, simple and outmoded technologies, and short life span[.]"²¹⁷

As we have sketched in Section IV, the problem of credit misallocation has accumulated after the stimulus program of 2008. State-owned Chinese banks have to comply with the demands of the party state more strongly, and as a result, bank loans have poured into low-yielding projects, credit misallocation has worsened, and a huge shadow banking system has developed.

An important consequence of the credit boom and the subsequent rise of the shadow banking sector after 2008 is that China's debt accumulation has reached a stunning level. Debt held by LGFVs is

214. JIANJUN LI (李建军等著), *ZHONGGUO DIXIA JINGRONG GUIMO YU HONGGUAN JINGJI YINKGXIANG YANJIU* (中国地下金融规模与宏观经济影响研究), [RESEARCH ON THE SCALE OF UNDERGROUND FINANCING AND ITS MACROECONOMIC EFFECTS] (2005) (China).

215. Ayyagari, Demircuc-Kunt & Maksimovic, *supra* note 207, at 3059. *See also* KELLE S. TSAI, BACK-ALLEY BANKING: PRIVATE ENTREPRENEURS IN CHINA 1497 (2002); Kellee S. Tsai, *Imperfect Substitute: The Local Political Economy of Informal Finance and Microfinance in Rural China and India*, 32 *WORLD DEV.* 1487 (2004); Allen et al., *supra* note 7, at 79; MCKINSEY GLOBAL INSTITUTE, *supra* note 90, at 65; NEE & OPPER, *supra* note 107, at 98. All on the connection between informal lending and the development of the private sector in China.

216. *See, e.g.*, Ayyagari et al., *supra* note 207, at 3051 (showing that Chinese firms that use formal bank financing grow faster and experience higher profit reinvestment rates than those that are financed from alternative channels). *See also* Julian Du, Yi Lu & Zhigang Tao, *Bank Loans vs. Trade Credit: Evidence from China*, 20 *ECON. TRANSITION* 457, 459, 460-62, (2011) (finding that bank loans have a positive and significant impact on Chinese manufacturing firms' labor productivity, return on assets ("ROA"), and reinvestment rate, whereas trade credit does not have any significant impact on firms' performance and growth). They, therefore, conclude that "informal finance cannot fill the gap left by the formal finance." *Id.* at 459.

However, the situation is different for microenterprises. *See, e.g.*, Thorsten Beck, Liping Lu & Rudai Yang, *Finance and Growth for Microenterprises: Evidence from Rural China*, 67 *WORLD DEV.* 38, 38 (2015), (reporting that "use of informal finance, especially financing from friends and family, is positively associated with sales growth of microenterprises with employees, but not of self-employed."). This study does "not find any significant relationship between the use of formal finance and firm growth." *Id.* But *see* Hans Degryse, Liping Lu & Steven Ongena, *Informal or Formal Financing? Evidence on the Co-funding of Chinese Firms*, 27 *J. FIN. INTERMEDIATION* 31, 44 (2016) (reaching a more balanced conclusion, showing that formal finance is important for the sale growth of both small firms and large firms, whereas informal finance matters only for small firms).

217. Xu, *supra* note 9, at 32.

reported to be 31% of China's GDP in 2015.²¹⁸ The augmented government debt, including both the central government and local governments,²¹⁹ is estimated to be from 45% of China's GDP in 2012 to 55% of China's GDP in 2014.²²⁰ Total debt held by the non-financial corporate sector doubled from 68% of China's GDP in 2007 to 136% in 2015.²²¹ Altogether, China's total debt (including the debt of the financial sector) has nearly quadrupled since 2007, rising from \$7.4 trillion to \$28.2 trillion by the second quarter of 2014 (158% of GDP to 282%).²²² This ratio is higher than the aggregate ratio for advanced economies (279.2%) and far above the average of emerging markets—excluding China (186.5%).²²³ China's debt increase also contributes to the global accumulation of debt. For example, Dawson, Etra, and Rosenblum report that the increase in debt in China accounts “for roughly one-half of all new credit created globally since 2005 [and t]he country's share of total global credit is nearly 25 percent by 2017,” “up from 5 percent ten years ago.”²²⁴

3. Interest Rate Controls

Turning finally to the third aspect of regulatory financial repression, interest rate controls, a few clear economic consequences can also be indicated.

218. MCKINSEY GLOBAL INSTITUTE, *supra* note 192. However, the magnitude estimated by Bai et al., *supra* note 137, at 147, is much higher. They report that by the end of 2015, the debt held by LGFVs is CNY 45 trillion, or 66% of China's GDP. *Id.*

219. Jian Chang, Lingxiu Yang & Yiping Huang, *How Big Is the Chinese Government Debt?*, 6 CHINA ECON. J. 152, 160 (2013). However, the authors estimate that if the contingent liabilities, such as the pension gap, liabilities of the Ministry of Railway, liabilities of policy banks, and the writing-off of bad loans of state-owned banks, are all included, the ratio might go up to 70-100% in 2012. *Id.* at 166. For a more detailed discussion on different estimates on China's government debt, see generally Zhang & Barnett, *supra* note 166.

220. Chang, Yang & Huang, *supra* note 219, at 160; MCKINSEY GLOBAL INSTITUTE, DEBT AND (NOT MUCH) DELEVERAGING (Feb. 2015), <http://www.mckinsey.com/global-themes/employment-and-growth/debt-and-not-much-deleveraging>.

221. MCKINSEY GLOBAL INSTITUTE, *supra* note 192, at 5.

222. *Id.*

223. ECONOMIST INTELLIGENCE UNIT, *supra* note 160, at 15; INVESTMENT MGMT. DIV., GOLDMAN SACHS, WALLED IN: CHINA'S GREAT DILEMMA 22 (Jan. 2016), <http://www.goldman Sachs.com/what-we-do/investment-management/private-wealth-management/intellectual-capital/isg-china-insight-2016.pdf>. (concluding that “China's debt burden is very high relative to its low GDP per capita and is an outlier relative to countries with similar GDP per capita levels . . . Comparing the magnitude and pace of the increase in China's debt-to-GDP ratio to those of other countries, we see that China's increase is among the highest in recent history.”).

224. DAWSON, JEFF, ETRA, ALEX, AND AARON ROSENBLUM (2017) “CHINA'S CONTINUING CREDIT BOOM”, LIBERTY STREET ECONOMICS, FEDERAL RESERVE BANK OF NEW YORK. Available at: <http://libertystreeteconomics.newyorkfed.org/2017/02/chinas-continuing-credit-boom.html>.

The direct result of the central bank's approach to setting nominal interest rates "is that household interest earnings on average have been far less than they would have been in a more liberalized financial environment, where market forces play a major role in determining interest rates."²²⁵ Lardy reports that whereas from 1997 through 2003, the real return on a one-year bank deposit was consistently positive and averaged 3.0%, since the beginning of 2004, the real return on a one-year deposit has been in negative territory for approximately half the time and has averaged -0.5%.²²⁶ By contrast, the corporate sector benefits greatly from such a monetary policy. There was a marked decline in real lending rates after 2003. Whereas "[i]n 1997-2003[,] the real rate on a one-year loan averaged 6.8 percent . . . But since the beginning of 2004[,] the real interest rate on a one-year loan has averaged only 1.7 percent, thus artificially lowering the cost of capital and "encouraging investment in projects that have much lower returns[.]"²²⁷

The low cost of capital in China has made it an anomaly when compared with other countries, developed or developing. For example, "based on data for 30,000 firms across 53 economies," Geng and N'Diaye "show that the real cost of capital—defined as a weighted average of the real cost of bank loans, bonds, and equity—faced by Chinese listed firms" is below the global average.²²⁸ The authors further argue that when compared with its high productivity, China's capital appears to be particularly cheap. "[A]n estimate of the marginal product of reproducible capital (i.e., capital adjusted for land) shows China's return to capital is well above" its real loan rate, which makes China an outlier in an international comparison.

4. Summary

To summarize, one can argue that China's repressed financial policies have severely undermined the prospect of the country's economic growth by misallocating financial resources and damaging economic efficiency. On the micro level, certain studies report that financial resources are allocated in a highly inefficient manner. For example, Bailey, Huang and Yang report that firms with poor performance, as measured by ROA, are more likely to receive bank loans, and these loans appear intended to keep troubled firms afloat as their

225. LARDY, *supra* note 113, at 80.

226. *Id.* at 85.

227. *Id.* at 86.

228. Nan Geng & Papa N'Diaye, *Determinants of Corporate Investment in China: Evidence from Cross-Country Firm Level Data* 10 (Int'l Monetary Fund, Working Paper, WP/12/80, 2012).

subsequent long-run performance is typically poor.²²⁹ Tan, Huang, and Woo report that there is a positive relationship between the concentration of state-owned banks and the number of “zombie firms”²³⁰—the higher the degree of concentration of state-owned banks in a Chinese province, the more zombie firms in that area.²³¹ It is, therefore, unsurprising to find that financial repression in China has led to a serious NPLs problem in the past and may generate similar troubles in the future again.

Inefficient loan decisions on the firm level are further translated into significant losses in productivity, total factor productivity (“TFP”),²³² and revenues on the aggregate level. For example, Bas and Causa find that aligning financial policies in China to the average level observed in OECD countries would bring labor productivity gains of 6.5 percent in the manufacturing sector.²³³ Brandt, Tombe, and Zhu find that between 1985 and 2007, capital and labor misallocation lowered aggregate non-agricultural TFP by an average of 20%, with capital misallocation accounting for more than half of the total loss.²³⁴ Wu reports a higher estimation, showing that policy distortions in financial markets caused an aggregate TFP loss of 19.2%.²³⁵ Song and Wu estimate the effect of financial market distortions on aggregate revenue in China’s manufacturing sector and find that the loss could be 40%.²³⁶

B. Macro-economic Effects

The regulation aimed at financial repression in China has not only the adverse economic consequences at the micro-level, as we just

229. Warren Bailey, Wei Huang & Zhishu Yang, *Bank Loans with Chinese Characteristics: Some Evidence on Inside Debt in a State-Controlled Banking System*, 46 J. FIN’L & QUANTITATIVE ANALYSIS 1795, 1813 (2011).

230. They classify a firm as a zombie by combining two criteria: (1) whether the firm receives subsidized credit and (2) whether the firm’s profits are smaller than the interest subsidy. Yuyan Tan, Yiping Huang & Wing Thye Woo, *Zombie Firms and the Crowding-Out of Private Investment in China*, 15 ASIAN ECON. PAPERS 32, 33 (2016).

231. They further show that after the exit of zombie firms, annual output growth could be lifted by 2.12%, capital growth would increase by 1.4%, growth of employment would rise by 0.84%, and TFP growth could be lifted by 1.06%. *See id.*

232. *See supra* note 158 and accompanying text for a more detailed discussion on TFP.

233. Maria Bas & Orsetta Causa, *Trade and Product Market Policies in Upstream Sectors and Productivity in Downstream Sectors: Firm-Level Evidence from China*, 41 J. COMP. ECON. 843, 845 (2013).

234. Loren Brandt, Trevor Tombe & Xiaodong Zhu, *Factor Market Distortions across Time, Space, and Sectors in China*, 16 REV. ECON. DYNAMICS 39, 52 (2013).

235. Guiying (Laura) Wu, *Capital Misallocation in China: Financial Frictions or Policy Distortions?* 130 J. DEV. ECON. 203, 214 (2018), <https://doi.org/10.1016/j.jdeveco.2017.10.014>.

236. Zheng (Michael) Song & Guiying (Laura) Wu, *A Structural Estimation on Capital Market Distortions in Chinese Manufacturing 2* (Nanyang Tech. Univ., Econ. Growth Cent., Working Paper No. 1306, 2013).

indicated. At the macro-level, financial repression also leads to (1) a lack of balance between investments and consumption, which (2) in the long run, even endangers the sustainability of economic growth in China.

1. Economic Growth Based on Investment, not Consumption

On the macro level, financial repression also contributes to the formation and maintenance of China's unbalanced economic structure, i.e., the imbalance between investment and consumption. Theoretically, in all economies, output expansion is the sum of growth in consumption, investment, and net exports of goods and services. A key feature of China's growth pattern is that expanding investment, rather than increasing consumption, which is the most significant factor to GDP growth in other major economies, has been a major and increasingly important driver of its economic growth. Therefore, China can be described as following an investment-driven growth pattern.

In the 1990s, China's average investment rate was roughly in line with the historical high levels seen in newly industrializing economies. However, investment since 2003 has consistently exceeded 40% of GDP, which is higher even than the highest levels seen by China's East Asian neighbors during their respective periods of high investment rates. Dollar and Jones show that in terms of the average investment rate (ratio of investment to GDP) from 2000–2010, China “outpaced all other countries save two—Bhutan and Equatorial Guinea.”²³⁷ Similarly, Nabar and N'Diaye show that the investment share of GDP in China was higher than that in any industrial country or emerging market from 2006 to 2012.²³⁸

There is also evidence at both macro and micro levels showing that China's investment is excessive. For example, Lee, Syed, and Liu conclude that “investment in China may currently be around 10 percent of GDP higher than suggested by fundamentals[.]”²³⁹ Using data on more than 100,000 Chinese firms during the 2000 to 2007 period, Ding, Knight, and Zhang calculate investment efficiency measures and find evidence of overinvestment by firms that either invested much more than industry median or more than optimal investment.²⁴⁰ In general, as Prasad

237. David Dollar & Benjamin F. Jones, *China: An Institutional View of an Unusual Macroeconomy* 5 (Nat'l Bureau of Econ. Research, Working Paper No. 19662, 2013).

238. Malhar Nabar & Papa N'Diaye, *Enhancing China's Medium-Term Growth Prospects: The Path to a High-Income Economy* 1, 4 (Int'l Monetary Fund, Working Paper No. WP/13/204, 2013).

239. Il Hwang Lee, Murtaza Syed & Xueyan Liu, *Is China Over-Investing and Does it Matter?* 1, 12 (Int'l Monetary Fund, Working Paper No. WP/12/277, 2012).

240. Sai Ding, John Knight & Xiao Zhang, *Does China Overinvest? Evidence from a Panel of Chinese Firms*, EUR. J. FIN. 1 (2016), <http://dx.doi.org/10.1080/1351847X.2016.1211546>.

concludes, “investment has been a major contributor to growth during this decade[.]”²⁴¹

As a result of interest rate controls, household interest earnings have on average been “less than [they] would have been in a system with market-determined interest rates.”²⁴² Reduced interest income may contribute to the decline in consumption through two channels. First, decreased interest income means that there is less household disposable income, which leads to lower consumption expenditures. Second, as the real return on savings declines, households may save more (or consume less) of their current income to achieve target saving levels. The consequence of interest rate controls is substantial. According to the estimate by Lardy,²⁴³ if deposit rate controls were eliminated, the share of private consumption in GDP would increase by as much as 5 percentage points. That alone would reverse approximately two-fifths of the long-term decline in the share of household consumption in China’s GDP.

By contrast, enterprises—particularly SOEs—may be the major beneficiaries of interest rate controls. For example, Ma and Yi find that net interest payments as a share of GDP by the non-financial corporate sector dropped by 50% between 1992 and 2007.²⁴⁴ “The low cost of financing has led to a significant increase in the profitability of enterprises since the early 1990s.”²⁴⁵ “The ratio of profits to industrial

241. Prasad, *supra* note 87, at 106; See Xu, *supra* note 156 for a more detailed discussion on this issue.

242. LARDY, *supra* note 113, at 86.

243. *Id.* at 88.

244. Guonan Ma & Wang Yi, *China’s High Saving Rate: Myth and Reality*, 122 INT’L ECON. 5, 15 (2010).

245. Xu & Gui, *An Empirical Examination*, *supra* note 11, at 105. A series of studies conducted by Yiping Huang and his colleagues provides crude estimates of the implicit subsidy (in the form of the artificially low cost of capital) received by the Chinese enterprise sector via financial repression. See, e.g., Yiping Huang, *China’s Great Ascendancy and Structural Risks: Consequences of Asymmetric Market Liberalization*, 24 ASIAN-PAC. ECON. LITERATURE 65, 78 (2010). Huang shows that the subsidy amounted to CNY 607 billion, or 2% of GDP, in 2008. This conclusion is further confirmed by Yiping Huang & Kunyu Tao, *Factor Market Distortion and the Current Account Surplus in China*, 9 ASIAN ECON. PAPERS 1, 26 (2010). They extend the period to include the nine years from 2000 to 2008 and show that distortions vary from year to year; they also report that the highest subsidy caused by capital distortion occurred in 2000 (equivalent to 4.1% of GDP).

In particular, SOEs benefit disproportionately from such financial repression policies. E.g., Giovanni Ferri & Li-Gang Liu, *Honor Thy Creditors Beforan Thy Shareholders: Are the Profits of Chinese State-Owned Enterprises Real?*, 9 ASIAN ECON. PAPERS 50, 67 (2010) (showing “that the costs of financing for SOEs are significantly lower than for other companies[.]” especially private enterprises; if SOEs were made to pay the same interest rates as private enterprises, their existing profits would be entirely wiped out).

value added rose from an average rate of 22.6 percent over 1995-1999 period to 34.4 percent in 2008. The share of enterprise income in the GDP rose from 14.2 percent in the second half of the 1990s to 22.9 percent in 2008.”²⁴⁶ The lack of attractive financial investments implies that firms will either choose to spend their retained earnings on investment projects to expand capacity or put them in a low-yielding bank deposit. Thus, the implication of the distorted interest rate structure is that firms face a very low hurdle when deciding whether to pursue a given investment project. In summary, restricted bank lending rates and retained earnings have kept the cost of investment funds very low and, thus, have encouraged enterprises in China to invest excessively.²⁴⁷

2. Investment-based Growth Inherently Unsustainable

An investment-driven growth pattern is inherently unsustainable. The Solow model²⁴⁸ shows that without technological progress, an economy has a limited ability to raise output per capita by means of capital accumulation. Following the principle of diminishing returns, the impact of capital accumulation on GDP growth will continually decline. China’s investment efficiency has deteriorated over the past two decades in view of an increasing incremental capital-output ratio, which means that a greater share of GDP must be invested to maintain a fixed economic growth rate.²⁴⁹ In fact, as Kuijs and Wang demonstrate,²⁵⁰ if China’s current economic growth pattern continues, it will require an investment-to-GDP ratio of an unprecedented level of 55% on average between 2014 and 2024 to maintain GDP growth at 8% per year. It is impossible to

246. Dennis Tao Yang, *Aggregate Savings and External Imbalances in China*, 26 J. ECON. PERSP. 125, 134 (2012).

247. Xu, *supra* note 9, at 39. The connection between financial repression and investment has been empirically examined by Xu & Gui, *The Case of China*, *supra* note 11, at 393. The authors find that a decrease in the real interest rate will stimulate investment. *Id.* at 401. This is consistent with the argument that the lower the cost of capital (real interest rate), the stronger the firms’ incentive to undertake capital accumulation (investment). *Id.* at 392. In addition, more credit extended to SOEs is also associated with a higher investment level, which may be attributed to the stronger tendency of SOEs to invest as they usually face “soft budget constraints.” *Id.* at 401.

248. The Solow model is a standard neoclassical model of economic growth. Developed by Robert Solow, it attempts to explain long-run economic growth by looking at capital accumulation, labor, or population growth and increases in productivity, commonly referred to as technological progress. According to the Solow model, without technological progress, an economy will end up at a steady state that represents the long-run equilibrium. In the steady state, unfortunately, there is no per capita growth.

249. Steven Barnett & Ray Brooks, *What’s Driving Investment in China?* 6 (Int’l Monetary Fund, Working Paper No. WP/06/265, 2006).

250. Louis Kuijs & Tao Wang, *China’s Pattern of Growth: Moving to Sustainability and Reducing Inequality*, 14 China & World Econ. 1, 11 (2006).

finance such a high level of investment in the long run; thus, under these circumstances, the investment-driven economy will ultimately reach a dead end.

After the adoption of the stimulus program of 2008, the Chinese economy became even more investment-driven, as numerous financial resources have been poured into low-yielding investment projects. The combination of rapid growth in credit and worsening performance on the asset side of the economy has generated numerous worries regarding China's financial stability and economic growth prospects. For example, based on the so-called credit-to-GDP gap, which is defined by the Bank for International Settlements ("BIS") as the difference between the credit-to-GDP ratio and its long-run trend and is usually used to predict the probability of a financial crisis,²⁵¹ the IMF has warned several times that China's financial stability may face a serious threat in the near future.²⁵² A similar pessimistic perspective,²⁵³ toward China's financial security, is

251. See *Credit-to-GDP Gaps*, BIS.ORG, http://www.bis.org/statistics/c_gaps.htm (last visited May 30, 2017).

Previous literature shows that a credit-to-GDP gap above 4% is a good predictor of financial crisis. See Claudio Borio & Philip Lowe, *Assessing the Risk of Banking Crises*, BIS Q. REV., Dec. 2002, at 43; Claudio Borio & Mathias Drehmann, *Assessing the Risk of Banking Crises-Revisited*, BIS Q. REV., Mar. 2009, at 29. *But see* Highlights of Global Financial Flows, BIS. Q. REV., Mar. 2017, at 21 (estimating the threshold to be 10% and argues that "in the past, two-thirds of banking crises were preceded by credit-to-GDP gaps breaching this threshold during the three years before the event.").

This ratio for China was 20-25% by the end of 2015, which is comparable to countries that experienced painful deleveraging, such as Spain, Thailand, or Japan. Wojciech Maliszewski et al., *Resolving China's Corporate Debt Problem 2* (Int'l Monetary Fund, Working Paper No. WP/16/203, 2016), <https://www.imf.org/external/pubs/ft/wp/2016/wp16203.pdf>. By the first quarter of 2016, this ratio rose to 30.1% before it declined to 26.3% by the third quarter of 2016. *International Banking and Financial Market Developments*, BIS Q. REV., Sept. 2016, at 1.

252. IMF COUNTRY REPORT NO. 15/234, (IMF, 2015. People's Republic of China: Staff Report for the 2015 Article IV Consultation. IMF Country Report, No.15/234.) (warning that "the high level of credit could weigh on China's growth and financial stability. Cross-country evidence suggests that episodes of similar credit booms often ended abruptly, accompanied by financial crises or prolonged slowdowns in GDP growth."). Therefore, "vulnerabilities have reached the point that addressing them is an urgent priority." *Id.* at 8, 30. The IMF further warns that, if there is no serious reform in China's financial system and the credit-to-GDP ratio continues to rise, there will be an "increasing risk of a disruptive adjustment." *Id.* at 10. A working paper issued by the IMF also claims that "China's credit expansion has been very fast by international comparisons. Cross-country experience suggests that this increases the risk of disruptive adjustment, either a banking crisis or sharply slower growth or both." Maliszewski et al., *supra* note 251, at 1. Finally, the IMF states that "China faces mounting risks to financial stability as credit continues to rise rapidly." INT'L MONETARY FUND, GLOBAL FINANCIAL STABILITY REPORT OF 2017: GETTING THE POLICY MIX RIGHT (2017).

253. For certain optimistic perspectives, see, e.g., Nicholas R. Lardy, *China's Economic Reforms and Growth Prospects*, 8 CHINA ECON. J. 95, (2015); Liang, *supra* note 187, at 143.

also shared by Goldman Sachs,²⁵⁴ BIS,²⁵⁵ OECD (2017),²⁵⁶ and also the Chinese authority itself.²⁵⁷

Financial repression therefore has significant implications for China's GDP growth. Several theoretical studies²⁵⁸ show that financial repression has been harmful to China's economic growth.²⁵⁹ For example, Boyreau-Debray finds that the ratio of state-owned bank credit to GDP has a negative impact on provincial economic growth and that this negative impact is largely a consequence of the burden of supporting the state-owned sector.²⁶⁰ Similarly, Guariglia and Poncet report that the

254. INVESTMENT MGMT DIV., GOLDMAN SACHS, *supra* note 223 at 22 (concluding that "comparing the magnitude and pace of the increase in China's debt-to-GDP ratio to those of other countries, we see that China's increase is among the highest in recent history. Every major country with a rapid increase in debt has experienced either a financial crisis or a prolonged slowdown in GDP growth. History suggests that China will face the same fate.").

255. See Ambrose Evans-Pritchard, *China facing full-blown banking crisis, world's top financial watchdog warns*, TELEGRAPH (Sep. 18, 2016), <http://www.telegraph.co.uk/business/2016/09/18/bis-flashes-red-alert-for-a-banking-crisis-in-china> (stating that "the Bank for International Settlements warned in its quarterly report that China's 'credit to GDP gap' has reached 30.1, the highest to date and in a different league altogether from any other major country tracked by the institution.").

256. OECD, *supra* note 203, at 16 (warning that "the rapid accumulation of corporate debt combined with a slowdown in economic activity and some of the practices of financial institutions have significantly heightened systemic risks.").

257. On May 9, 2016, an article was published in The People's Daily, which is known as the mouthpiece of the party-state. The article cited an "authoritative person" (believed to be Liu He, the right-hand man of Chinese president Xi Jinping), who claimed that "it is neither possible nor necessary to force economic growing by leveraging up" and warned that there might be a possibility of systemic financial crisis if the process of leveraging up finally gets out of control. See Wen Gong (龚雯), Zhifeng Xu (许志峰) & Qiuyu Wu (吴秋余), *Kaiju Shouji Wen Dashi: Quanwei Renshi Tan Dangqian Zhongguo Jingji* (开局首季问大势权威人士谈当前中国经济) [*Inquiring the Trend at the First Year of China's 13th Five-Year Plan: Authoritative Person on China's Current Economic Situation*] (May 9, 2016) PEOPLE'S DAILY, http://paper.people.com.cn/rmrb/html/2016-05/09/nw.D110000renmrb_20160509_6-01.htm (China).

258. For theoretical models on the connection between China's financial distortion and economic growth, see generally Zheng Song et al., *Growing Like China*, 101 AM. ECON. REV. 196 (2011), and Zheng Song et al., *Growing (with Capital Controls) Like China*, 62 IMF ECON. REV. 327 (2014).

259. However, certain studies find that the role of financial repression is more complicated. See Yiping Huang & Xun Wang, *Does Financial Repression Inhibit or Facilitate Economic Growth? A Case Study of Chinese Reform Experience*, 73 OXFORD BULL. ECON. & STAT. 833 (2011) (show that the connection between financial repression and economic growth is changeable: financial repression initially promoted economic growth in the 1980s and 1990s but has inhibited economic growth over the past decade.); see also Xu & Gui, *An Empirical Examination*, *supra* note 11, at 1144 (demonstrating that China's repressed financial system acts as a double-edged sword: on the one hand, interest rate controls contribute to economic growth by lowering the cost of capital, and exchange rate distortion promotes economic growth by stimulating exports; on the other hand, credit misallocation and state ownership in the banking sector retards economic growth by damaging economic efficiency).

260. Genevieve Boyreau-Debray, *Financial Intermediation and Growth: Chinese Style* (World Bank, Working Paper No. 3027, 2003).

indicators measuring the level of state interventionism in China's finance sector—such as the share of state-owned banks in total bank credit or the ratio of total state-owned bank credit to GDP—are negatively associated with GDP growth, physical capital accumulation, and productivity growth, while indicators measuring the degree of market-driven financing in the economy are positively associated with them.²⁶¹ Therefore, one may argue that financial reform that intends to (gradually) liberalize China's financial sector and, hence, improve the allocation efficiency of financial resources will contribute to China's GDP growth. Indeed, this is confirmed by empirical evidence. For example, Peng et al. construct an index of financial liberalization to combine eight aspects of China's financial reform process between 1978 and 2004,²⁶² and they report significant positive effects of liberalization on growth in the short-run and on accumulated growth in the long run. Similarly, Anzoategui, Chivakul, and Maliszewski show that China's GDP may be boosted by approximately 4% by liberalizing interest rates and removing credit discrimination.²⁶³

VI. A POLITICAL ECONOMIC ANALYSIS

The lessons from the economic analysis so far are clear: the Chinese party state has used financial regulation as a tool of financial repression, largely disfavoring the private sector—leading to a misallocation of credit, controlling interest rates—leading to an artificially low cost of capital, and a large intervention of the state in the banking sector—leading to large inefficiencies in banking management. We equally argued that in the long run financial repression has been harmful to the economic growth of China, which has been confirmed by the various economic studies we quoted, and that obviously leads to the question of why the Chinese government is using these various mechanisms of financial repression if they can ultimately harm economic growth. In this section we will argue that the underdevelopment of the financial sector cannot be fully understood without considering political factors, such as the nature of a regime, social ideology, and the influence wielded by

261. Alessandra Guariglia & Sandra Poncet, *Could Financial Distortions Be No Impediment to Economic Growth after All? Evidence from China*, 36 J. COMP. ECON. 633 (2008).

262. Jiangang Peng, Nicolaas Groenewold, Xiangmei Fan & Guanzheng Li, *Financial System Reform and Economic Growth in a Transition Economy: The Case of China, 1978-2004*, 50 EMERGING MKT. FIN. & TRADE (SUPP. 2) 5 (2014).

263. Diego Anzoategui, Mali Chivakul & Wojciech Maliszewski, *Financial Distortions in China: A General Equilibrium Approach* (Int'l Monetary Fund, Working Paper No. WP/15/274, 2015).

interest groups. Politics may determine financial development directly by influencing the direction of credit allocation and the access to equity finance on the micro level and the performance of the financial sector on the macro level,²⁶⁴ and indirectly by distorting the design and operation of financial regulatory institutions.²⁶⁵ In one word, “political choices deeply affect the development and operations of the financial system.”²⁶⁶ We therefore explore the relationship between politics and financial repression in the Chinese context in this section.

In Part A, we explain the orientation on economic growth as a strategy to improve the legitimacy of the Party. In Part B, we discuss how financial repression also allows for a system of patronage through which loyalty and support can be bought. In Part C, we explore the tools of financial repression which equally allow a strategy of co-optation of the Party with private entrepreneurs. Finally, in Part D, we discuss, to an important extent, how the contents of the regulations aimed at financial repression are also the result of struggles between different elites within the party system.

264. See generally Simon Johnson & Todd Mitton, *Cronyism and Capital Controls: Evidence from Malaysia*, 67 J. FIN. ECON. 351 (2003); Paola Sapienza, *The Effects of Government Ownership on Bank Lending*, 72 J. FIN. ECON. 357 (2004); Asim Ijaz Khwaja & Atif Mian, *Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market*, 120 Q. J. ECON. 1371, 1371 (2005); Michael D. Bordo & Peter L. Rousseau, *Legal-Political Factors and the Historical Evolution of the Finance-Growth Link*, 10 EUR. REV. ECON. HIST. 412, 421 (2006); Christian Leuz & Felix Oberholzer-Gee, *Political Relationships, Global Financing, and Corporate Transparency: Evidence from Indonesia*, 81 J. FIN. ECON. 411 (2006); Sourafel Girma & Anja Shortland, *The Political Economy of Financial Development*, 60 OXFORD ECON. PAPERS 567, 569 (2007); Stijn Claessens, Erik Feijen & Luc Laeven, *Political Connections and Preferential Access to Finance: The Role of Campaign Contributions*, 88 J. FIN. ECON. 554 (2008); Yongfu Huang, *Political Institutions and Financial Development: An Empirical Study*, 38 WORLD DEV. 1667 (2010); Marc Quintyn & Genevieve Verdier, *Mother, Can I Trust the Government? Sustained Financial Deepening-A Political Institutions View* 1, 1 (Int'l Monetary Fund, Working Paper No. WP/10/210, 2010); Benhua Yang, *Does Democracy Foster Financial Development? An Empirical Analysis*, 112 ECON. LETTERS 262, (2011); Nauro Campos & Fabrizio Coricelli, *Financial Liberalization and Reversals: Political and Economic Determinants*, 27 ECON. POL'Y 483, 488 (2012); Victor Menaldo & Daniel Yoo, *Democracy, Elite Bias, and Financial Development in Latin America*, 67 WORLD POL. 726, 727 (2015).

265. Randall S. Kroszner & Philip E. Strahan, *What Drives Deregulation? Economics and Politics of the Relaxation of Bank Branching Restrictions*, 114 Q. J. ECON. 1437, 1438 (1999). See generally Barth et al., *supra* note 27; Efraim Benmelech & Tobias J. Moskowitz, *The Political Economy of Financial Regulation: Evidence from U.S. State Usury Laws in the 19th Century*, 65 J. FIN. 1029 (2010); JAMES R. BARTH, GERARD, JR. CAPRIO & ROSS LEVINE, *GUARDIANS OF FINANCE: MAKING REGULATORS WORK FOR US* (2012); NOLAN MCCARTY, KEITH T. POOLE & HOWARD ROSENTHAL, *POLITICAL BUBBLES: FINANCIAL CRISES AND THE FAILURE OF AMERICAN DEMOCRACY* (2013).

266. Stephen Haber & Enrico Perotti, *The Political Economy of Financial Systems*, (Tinbergen Inst., Discussion Paper No. 045/2, 2008).

A. Financial Repression within the Party's Growth Orientation

It is hard to understand the emergence and continuation of financial repression in China without considering the survival strategy of the Party, particularly its “pro-growth” or “growth-oriented” strategy, which has been adopted since the reform era began at the end of the 1970s. Economic growth has been made a top priority in the Party's agenda because of the simple fact that the Party lacks legitimacy in the classic democratic sense, and it therefore has instead been forced to seek performance-based legitimacy by continuously improving the living standards of Chinese citizens. For example, Perry concludes that “without democratic institutions capable of conferring procedural legitimacy, the ability of the PRC [People's Republic of China] to meet its pressing policy challenges will depend to some degree upon continued economic expansion capable of generating adequate employment opportunities and financing critical redistributive and other government-led programs.”²⁶⁷ Perry's view is shared by most of the scholars who study contemporary China across disciplines and seems to be common sense. Chenggang Xu even claims that “in the post-Mao era, China's central leadership sees economic growth as a life and death matter for the regime.”²⁶⁸ However, there are dissidents who claim that in addition to economic growth, other factors, such as ideology (Marxism, Maoism, nationalism, etc.), morality of political elites, and other values and beliefs, are equally or even more important in shaping the Party's legitimacy.²⁶⁹ Certain recent empirical studies also show that economic development is not a significant predictor of regime support (and rising prosperity may even delegitimize rather than legitimize the rule of the Party).²⁷⁰ Dickson finds that whereas GDP per capita and GDP growth over the previous three years are not correlated with trust and support towards the Party,²⁷¹ both the level of

267. Elizabeth Perry, *Growing Pains: Challenges for a Rising China*, 143 DAEDALUS 5, 8 (2014).

268. Chenggang Xu, *The Fundamental Institutions of China's Reforms and Development*, 49 J. ECON. LITERATURE 1076, 1088 (2011).

269. See generally Bruce Gilley & Heike Holbig, *The Debate on Party Legitimacy in China: A Mixed Quantitative/Qualitative Analysis*, 18 J. CONTEMP. CHINA 339, 340 (2009); Heike Holbig & Bruce Gilley, *Reclaiming Legitimacy in China*, 38 POL. & POL'Y. 395, 396 (2010); Yanqi Tong, *Morality, Benevolence, and Responsibility: Regime Legitimacy in China from Past to the Present*, 16 J. CHINESE POL. SCI. 141 (2011); Yun-han Chu, *Sources of Regime Legitimacy and the Debate over the Chinese Model*, 13 CHINA REV. 1, 5 (2013).

270. Bruce J. Dickson, *Public Goods and Public Support in China*, AM. POL. SCI. ASS'N 2010 ANN. MEETING PAPER (2010), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1642972; Chu, *supra* note 269, at 1.

271. BRUCE J. DICKSON, *THE DICTATOR'S DILEMMA: THE CHINESE COMMUNIST PARTY'S STRATEGY FOR SURVIVAL* (2016).

family incomes and the increase in family incomes, which are the logical consequences of economic growth, have statistically significant positive impacts on regime support. The efforts of the Party to claim legitimacy seem to be paying off: the majority of Chinese people show a certain degree of support for the current political regime and do not favor a fundamental regime change.²⁷² China is, therefore, being classified as a “high legitimacy” state.²⁷³

Economic growth may help to maintain the Party’s dominance not only by improving its legitimacy, but also by strengthening its capacity of repression, as well as by addressing certain challenges toward political stability, such as unemployment. Repression has been identified as one of the keys to the Party’s survival.²⁷⁴ With the help of economic growth, China’s spending on public security rose 93% between 2008 and 2013.²⁷⁵ It was reported that China’s spending on internal public security (CNY 549 billion) overtook national defense (CNY 533.4 billion) in 2010.²⁷⁶ Economic growth is certainly the most effective tool that can be used to address the unemployment problem.²⁷⁷ Workers, particularly those migrant workers who can barely access China’s welfare system,²⁷⁸ have

272. Bruce Gilley, *The Meaning and Measure of State Legitimacy: Results for 72 Countries*, 45 EURO. J. POL. RES. 499 (2006); Jie Chen & Bruce J. Dickson, *Allies of the State: Democratic Support and Regime Support among China’s Private Entrepreneurs*, 196 CHINA Q. 780 (2008); Yang Zhong & Yongguo Chen, *Regime Support in Urban China*, 53 ASIAN SURV. 369 (2013).

273. Gilley & Holbig, *Reclaiming Legitimacy*, *supra* note 269, at 398.

274. E.g., Minxin Pei, *How China Is Ruled*, 3 AM. INT. 44 (2008) [hereinafter Pei, *How China Is Ruled*] (arguing that “the current Chinese political order rests on four pillars: an alliance among political, social and economic elites; the control and use of economic patronage to distribute the benefits of authoritarian rule among the elites; the application of selective repression against potential organized opposition and mass unrest; and the adoption of tactical policy tools to respond to public demands”); Minxin Pei, *Is CCP Rule Fragile or Resilient?*, 23 J. DEMOCRACY 27 (2012) (similarly claiming that “the three keys to the CCP’s survival are refined repression, economic statism, and political cooptation.”). See also DICKSON, *supra* note 271, at 31 (contending that “repression has been a key part of the survival strategy of the CCP, as it is for all authoritarian regimes.”).

275. DICKSON, *supra* note 271. See also Pei, *How China Is Ruled*, *supra* note 274, at 7 (stating that “enormous resources have been invested in the manpower and technology required to maintain effective surveillance groups and individuals suspected of anti-government inclinations.”)

276. See *Beijing Raises Spending on Internal Security*, FIN. TIMES, <https://www.ft.com/content/f70936b0-4811-11e0-b323-00144feab49a> (last visited June 15, 2017).

277. As the well-known Okun’s law shows, an increase in output growth corresponds to a decline in the unemployment rate. See Arthur M. Okun, *Potential GNP, Its Measurement and Significance*, in PROCEEDINGS BUS. & ECON. STAT. SECTION, AM. STAT. ASS’N 98, 103 (1962). W. Raphael Lam, Xiaoguang Liu & Alfred Schipke, *China’s Labor Market in the ‘New Normal,’* (IMF, Working Paper No. 151, 2015) (showing that this law also applies to China, as a one percentage point increase in unemployment after 1993 is associated with a reduction in the growth rate by approximately 0.8-1.0 percentage points).

278. Lam et al., *supra* note 277, at 3 (showing there were approximately 270 million migrant workers in China in 2013, which was equivalent to approximately one-third of the total labor force

to rely on their job-related incomes to support their (and their family members') lives. An economic recession that usually wipes out millions or even tens of millions of jobs will place workers in a desperate situation, and they will then become a threat to social stability.²⁷⁹ It is, therefore, understandable that the Chinese government responded to the financial crisis of 2008 with such speed and scale.

Whereas the empirical evidence regarding the connection between financial repression and China's economic growth is mixed,²⁸⁰ it is logically understandable that the Party attempted to boost economic growth by implementing a financial repression policy.²⁸¹ The contributing impact of financial repression on economic growth can be illustrated by referring to the production function, $Y = AF(K, L)$, where Y is the output, K is capital, L is labor, and A is a productivity parameter. Obviously, *ceteris paribus*, the lower the cost of capital, the stronger is the incentive to undertake capital accumulation (investment, $I = \Delta K$), and the more capital accumulation is undertaken, the greater is the potential for economic growth. Therefore, financial repression may arguably promote economic growth by lowering the cost of capital (through, for example, interest rate control), which therefore encourages investment conducted by the corporate sector.

Indeed, certain previous studies found that financial repression (measured by interest rate control, credit misallocation, dominance of state-owned banks, and exchange rate manipulation) is generally beneficial to China's economic growth. Xu and Gui find that a decrease in the real interest rate and an increase in credit extended to SOEs will stimulate investment.²⁸² Moreover, Xu and Gui report that despite the fact that the effects of more credit extended to SOEs and a higher ratio of assets of state-owned banks on economic growth are harmful, other dimensions of financial repression, such as a low interest rate and

and half of urban employment). For a more detailed discussion on this issue, see Xu, *supra* note 156, at 1359.

279. See, e.g., Ray Yep, *Economic Downturn and Instability in China: Time for Political Reform?*, in BROOKINGS EAST ASIA COMMENTARY (2009), <https://www.brookings.edu/opinions/economic-downturn-and-instability-in-china-time-for-political-reform/> (statements of Ray Yep) ("[I]t is the migrant workers, who receive no systematic support in times of need, who are the most at risk from the economic downturn", and "the combination of presence of tens of millions of frustrated, jobless, and landless people and the disposition of public security forces to sometimes employ excessive violence toward complainants appears to be the perfect recipe for confrontation and disturbance.").

280. See our discussion *infra* Section V.B, particularly note 260.

281. *Id.*

282. Xu & Gui, *An Empirical Examination*, *supra* note 11, at 393.

devaluation, help to promote economic growth.²⁸³ Xu and Gui therefore conclude that “on the one hand, interest rate controls contribute to economic growth by lowering the cost of capital, and exchange rate distortion promotes economic growth by stimulating exports; on the other hand, credit misallocation and state ownership in the banking sector retards economic growth by damaging economic efficiency. *The apparent puzzle that a repressed financial system has not retarded China’s economic growth can therefore be solved: when the pro-growth effects of financial repression outweigh its anti-growth effects, the overall influence of financial repression may be beneficial, rather than harmful, to economic growth*” (italics added).²⁸⁴

Certain other economies, particularly East Asian economies, have reportedly followed a similar growth path during their development.²⁸⁵ For example, Wade reports that in Taiwan, the government used concessional credit to lower the costs of production and thereby drive investment, first in heavy and chemical industries, and, more recently, in electronics and machinery.²⁸⁶ Cho shows that in Korea, government intervention in the financial market was extensive in the 1960s and 1970s: the government owned the banking institution, controlled its interest rates, and directed a substantial portion of its loans.²⁸⁷ This strategy of financial repression arguably helped Korea achieve fast industrialization. Hellmann, Murdock, and Stiglitz, therefore, argue that a modest financial repression, or “financial restraint” in their terms, is beneficial to economic growth.²⁸⁸

Such a growth pattern, however, has been shown to be unsustainable in both theory and practice. Theoretically, as we have argued,²⁸⁹ there are diminishing returns associated with the addition of any one factor of production: without technological progress, the economy will finally end up at a steady state in which there is no per capita growth. The East Asian financial crisis of 1997-98, which brought growth in many countries to an abrupt halt, can be cited as the strongest evidence for the unsustainable

283. *Id.* at 92.

284. *Id.*

285. For a more detailed discussion on this topic, see Guangdong Xu, *Is China an Anomaly for the ‘Law Matters’ Hypothesis?*, 1 ASIAN J.L. & SOC’Y 339, 343 (2014).

286. ROBERT WADE, *GOVERNING THE MARKET: ECONOMIC THEORY AND THE ROLE OF GOVERNMENT IN EAST ASIAN INDUSTRIALIZATION* (1990).

287. YOON JE CHO, *Government Intervention, Rent Distribution, and Economic Development in Korea*, in *THE ROLE OF GOV’T IN EAST ASIAN ECON. DEVELOPMENT: COMPARATIVE INSTITUTIONAL ANALYSIS* (Masahiko Aoki, Hyung-Ki Kim & Masahiro Okuno-Fujiwara eds., 1998).

288. Hellmann et al., *Financial Restraint*, *supra* note 31, at 48.

289. See *infra* Section V.B.

nature of the East Asian “miracle.”²⁹⁰ Whether China can escape this destiny is a question that can only be answered by time. But as long as economic growth is still relied on by the Party as the basis for achieving legitimacy, its control over financial resources, which is believed to matter for economic growth, will hardly be expected to loosen.

B. Financial Repression and the Party's Patronage System

Pursuing legitimacy through economic growth is certainly not the only survival strategy of the Party. It also adopts other strategies, such as establishing a patronage system through which loyalty and support can be bought by material and non-material benefits, as well as co-opting new social groups (such as private entrepreneurs) whose economic power and social influence may become a threat to the dominance of the Party if they are free from the Party's control. Both strategies in turn demand an economic system in which economic rents can be created continually, distributed selectively, and protected effectively. Financial repression policies are part of this story.

State-related institutions, particularly SOEs, are perhaps the most important mechanism through which economic rents and loyalty can be exchanged.²⁹¹ In Pei's words, “without its ability to hand out economic rents, the Party would surely lose the loyalty of its supporters and its ability to retain power. Thus, the Party keeps extensive and tight control over China's state-owned enterprises so that it can dole out political patronage.”²⁹² Similarly, Naughton shows that the Party has successfully recreated a system of political patronage when the process of economic reform and market transition took away the monopoly over the distribution of patronage resources that political elites had enjoyed before 1978.²⁹³ SOE-related jobs and incomes constitute an important component of this new system.

290. Nicholas Crafts, *Implications of Financial Crisis for East Asian Trend Growth*, 15 OXFORD REV. ECON. POL'Y 110, 110 (1999); Stephan Haggard, *Governance and Growth: Lessons from the Asian Economic Crisis*, 13 ASIAN PACIFIC ECON. LITERATURE 30 (1999).

291. The role of SOEs in maintaining the communist regime is so important that they are identified as belonging to the core of the Party-state complex of elite institutions. Barry Naughton, *Inside and Outside: The Modernized Hierarchy that Runs China*, 44 J. COMP. ECON. 404, 410 (2016). See also Kellee S. Tsai & Barry Naughton, *Introduction*, in *STATE CAPITALISM, INSTITUTIONAL ADAPTATION, AND THE CHINESE MIRACLE* (Barry Naughton & Kellee S. Tsai eds., 2015) (arguing that “state-owned firms have emerged as a crucial component of a revitalized Communist Party system, and SOEs are looked on with renewed favor as one of the pillars of this revitalized but still authoritarian and hierarchical system.”).

292. Pei, *CCP Rule*, *supra* note 274, at 33-34.

293. Barry Naughton, *A Political Economy of China's Economic Transition*, in *CHINA'S GREAT ECONOMIC TRANSFORMATION* 91, 91-136 (Loren Brandt & Thomas G. Rawski eds., 2008).

On the management level, CEOs of SOEs, particularly of SOEs controlled by the central government (the so-called central SOEs-CSOEs),²⁹⁴ are rewarded with high income and elite positions inside the party-state for their loyalty and support. In terms of income, an article on the Xinhua news agency website, the mouthpiece of the Chinese government, claims that “statistics showed the average annual salary of executives at centrally administered SOEs ranged from 650,000 to 700,000 yuan in 2010 and 2011. These salaries were significantly higher than ordinary employees and those of government civil servants. In addition to high salaries, many top executives at major SOEs carry a vice-ministerial or ministerial level ranking that brings them so-called ‘invisible income’ such as transportation and communication allowances and other material benefits.”²⁹⁵ In terms of position, a number of positions in several elite government and party bodies are reserved for leaders of the CSOEs: twenty-two managers were nominated as representatives to the Eleventh National People’s Congress and ninety-nine managers to the Eleventh Chinese People’s Political Consultative Conference (“CPPCC”),²⁹⁶ more importantly, a significant number of leaders from CSOEs are represented in important party platforms, such as the Central Committee.²⁹⁷ For workers of SOEs, compared with their counterparts in the private sector, their average wage level is much higher, CNY 23,565 versus CNY 14,096 in 2007, and the growth rate of their average wage is also faster, 259.8 percent between 1992 and 2007 versus 178.2% between

294. These SOEs are supervised by the State-owned Assets Supervision and Administration Commission (SASAC), an authority that was established by the State Council in 2003 to undertake the government’s functions as investor and owner of state assets. The other SOEs are supervised by local SASACs. For more details, see Xu & Gui, *supra* note 113, at 144.

295. *China Orders Pay Cuts for SOEs Executives*, NEWS.XINHUANET.COM, http://news.xinhuanet.com/english/china/2014-08/29/c_133606542.htm (accessed June 16, 2017).

296. According to the Chinese government, the CPPCC “is an organization of the patriotic United Front of the Chinese people” and “conducts political consultations on major state policies and important issues concerning the well-being of the people, and exercises democratic supervision through proposals and criticisms.” See *Chinese People’s Political Consultative Conference: Process of Founding and Key Achievements in History*, CHINA.ORG, <http://www.china.org.cn/english/archiveen/27750.htm> (last visited June 16, 2017).

However, the CPPCC and its local branches are commonly viewed as a “flower vase” or rubber-stamp organization with no real power but to window dress. For a more detailed discussion on the role of the CPPCC, see Minglu Chen, *From Economic Elites to Political Elites: Private Entrepreneurs in the People’s Political Consultative Conference*, 24 J. CONTEMP. CHINA 613 (2015); Li-Wen Lin & Curtis J. Milhaupt, *We Are the (National) Champions: Understanding the Mechanisms of State Capitalism in China*, 65 STAN. L. REV. 697 (2013).

297. Kield Erik Bredsgaard, *Politics and Business Group Formation in China: The Party in Control?*, 211 CHINA Q. 624, 639 (2012).

the same period.²⁹⁸ It is, therefore, not surprising to find that employees in the state sector show more support for the party-state than their counterparts in the private sector.²⁹⁹

In addition to distributing political and economic rewards, the Party also exercises firm control over SOEs. More specifically, a SOE is controlled by the Party-state through the following four mechanisms:³⁰⁰ (1) the fundamental discipline of the Party requires all Party members to comply with the Party line;³⁰¹ (2) the Party decides the appointment and promotion of the top executives of SOEs;³⁰² (3) Party cells within the SOEs convene meetings to make important decisions for the company and to ensure that the operation of the company is consistent with the Party line;³⁰³ and (4) SOE executives accused of wrongdoing are investigated by the Party and punished under Party discipline.³⁰⁴ Motivated by the economic and political benefits, and constrained by the control and discipline from the Party, SOEs serve the interests of the Party enthusiastically and effectively. For example, they are shown to

298. Sugin Ge & Dennis Tao Yang, *Changes in China's Wage Structure*, 12 J. EUR. ECON. ASS'N 300 (2014); As of 2010, it is also reported that 23 of China's 31 provinces had governors or vice governors who had worked as SOE executives. For these former executives, the new positions "greatly extend their career ladders in the party-state hierarchy, bringing them more prestige and a higher political status." Jianyu Wang, *The Political Logic of Corporate Governance in China's State-Owned Enterprises*, 47 CORNELL INT'L L.J. 631, 660 (2014).

299. Jie Chen & Chunlong Lu, *Democratization and the Middle Class in China: The Middle Class's Attitude toward Democracy*, 64 POL. RES. Q. 705, 715 (2011), (reporting that "there was a significant, negative correlation between employment in the state apparatus and support for democracy and democratization within the general population. In other words, those who were employed by the state sector (government and party agencies, state-owned enterprises, and public organizations) were less likely to support democracy than those who worked outside of the state sector." Given the authoritarian nature of the current regime, rejection of democracy seems to imply consent for the status quo.).

300. For more detailed discussions on the control of the Party, see BRUCE ARONSON AND JOONGI KIM, *CORPORATE GOVERNANCE IN ASIA: A COMPARATIVE APPROACH* 261 (2019); Pistor, *supra* note 96; Lin & Milhaupt, *supra* note 296.

301. All or most of the top executives and many other employees at SOEs are Party members.

302. The personnel of the CSOEs, ranked at either the ministerial level or vice-ministerial level in the political system, is under the jurisdiction of the Party's Central Organization Department. The Central Organization Department directly appoints all of the top leaders of CSOEs, including the chairman of the board of directors, chairman of the supervisory board, the general manager, and other senior executives.

303. According to the Party's notice, "the board of directors or general manager is required to 'consult and respect the opinion of the Party organization' before making any important decisions, and brief the Party organization on the implementation of said decision." Wang, *supra* note 298, at 656.

304. *Id.* at 652.

help achieve social stability by maintaining employment and helping rehabilitate the economy by conducting massive investment projects.³⁰⁵

Given the inherent inefficiency and heavy policy burden, such as maintaining employment,³⁰⁶ it is hard for SOEs to survive without certain governmental support, not to mention profiting. Indeed, China's SOEs were so inefficient that almost half were running losses in the 1990s. Subsequent divestment and/or closure of thousands of small and medium-size SOEs improved the situation, although 30% of the surviving SOEs remained in the red in 2002.³⁰⁷ The situation has changed drastically during the past decade, and the profitability of China's SOEs has

305. Alexander Ljungqvist, Donghua Chen, Dequan Jiang, Haitian Lu & Mingming Zhou, *State Capitalism Vs. Private Enterprise* 22 (Nat'l Bureau of Econ. Res., Working Paper No. 20930, 2015) (showing that chairmen of state-owned enterprise groups "are rewarded for avoiding mass layoffs: doing so significantly increases the chance of promotion . . . and reduces the risk of demotion" As a result, capital allocations inside these groups are used to prop up their members who are located in high-unemployment areas and provinces that experience unusually large inflows of young men into the local labor market). Xianfeng Huang, Ping Li & Richard Lotspeich, *Economic Growth and Multi-tasking by State-owned Enterprises: An Analytic Framework and Empirical Study Based on Chinese Provincial Data*, 34 ECON. SYS. 160, 161 (2010) (reporting that SOEs contribute to economic growth by sustaining social stability (through maintaining employment and offering material support for former employees)). For an early study that builds models to explain the role of SOEs in maintaining social stability, see Chong-En Bai, David D. Li, Zhigang Tao & Yijiang Wang, *A Multitask Theory of State Enterprise Reform*, 28 J. COMP. ECON. 716, 716-738 (2000). Deng et al., *supra* note 93, at 71, report that SOEs responded to the Chinese government's stimulus program "with prompt and substantial hikes in investment." Their growth rate in fixed asset investment was accelerated from 21.09% in the fourth quarter of 2008 to 38.50% in the first quarter of 2009 and 45.30% in the fourth quarter of 2009. Their annualized growth rate in fixed asset investment then surpassed that of private enterprises by about 10 percentage points, whereas prior to 2008, they lagged private enterprises by about 10 percentage points in terms of this indicator.

306. For a general discussion on the inefficiency of SOEs, see JANOS KORNAI, *THE SOCIALIST SYSTEM: THE POLITICAL ECONOMY OF COMMUNISM* (1992) and Andrei Shleifer, *State versus Private Ownership*, J. ECON. PERSP. 133 (1998). See also William L. Megginson & Jeffrey M. Netter, *From State to Market: A Survey of Empirical Studies on Privatization*, 39 J. ECON. LITERATURE 321, 48 (2001). After surveying the literature, the authors conclude that "[r]esearch now supports the proposition that privately owned firms are more efficient and more profitable than otherwise-comparable state-owned firms."

In the Chinese context, see Martin Hovey & Tony Naughton, 31 *A Survey of Enterprise Reforms in China: The Way Forward*, ECON. SYS. 138 (2007) (concluding that the "ownership structure does significantly influence the performance and value of Chinese firms" and that "state ownership is generally negatively correlated to performance."). See also SHAHID YUSUF, KAORU NABESHIMA & DWIGHT H. PERKINS, *UNDER NEW OWNERSHIP: PRIVATIZING CHINA'S STATE-OWNED ENTERPRISES* 14 (2006). In a review of state-enterprise reform in China beginning in the early 1980s, the authors posit that "[s]tudies extending back into the latter half of the 1980s . . . have repeatedly shown that the efficiency and productivity of SOEs lag behind COEs [collectively owned enterprise], TVEs [township and village enterprises], and joint ventures."

307. YUSUF, NABESHIMA & PERKINS, *supra* note 306, at 14.

increased impressively.³⁰⁸ However, an increasing amount of evidence shows that the major driving force behind the profitability of China's SOEs consists of certain distorted economic policies that favor SOEs at the expense of private enterprise development and the greater social welfare.³⁰⁹ Financial repression policies are part of the explanation.

In 2011, the Unirule Institute of Economics, a Beijing-based independent think tank, issued a report systematically examining the subsidies enjoyed by SOEs during the 2001 to 2009 period.³¹⁰ According to this report, from 2001 to 2009, SOEs paid CNY 305.98 billion less, on average, than what they should have paid out as interest rates annually.³¹¹ In total, from 2001 to 2009, CNY 2,753.85 billion was not paid out as interest rates but was instead appropriated by SOEs and included in their nominal profits. Xu and Gui attempted to estimate the scale of subsidies that flowed to SOEs from China's banking sector, or more precisely, from Chinese citizens through the banking sector. They found that subsidies (rents) from financial repression are greater than the profits earned by SOEs in most years from 1978 to 2012, if we assume that the real market

308. The reported average return on equity ("ROE") of an SOE in China "jumped from only 2.2 percent in 1996 to 15.7 percent in 2007, before sliding back . . . to 10.9 percent in 2009[.]" THE WORLD BANK & DEV. RES. CENT. OF THE STATE COUNCIL, THE PEOPLES REPUBLIC OF CHINA, CHINA 2030: BUILDING A MODERN, HARMONIOUS, AND CREATIVE HIGH-INCOME SOCIETY 104-05 (2013) [hereinafter CHINA 2030: BUILDING A MODERN, HARMONIOUS, AND CREATIVE HIGH-INCOME SOCIETY]. From 2003 to 2011, the net profits of China's SOEs increased from CNY 320 billion to CNY 1.9 trillion, based on average annual growth of 25.2%. *China SOEs Report Surge in Profits*, CHINA DAILY (Oct. 24, 2012), http://www.chinadaily.com.cn/china/2012-10/24/content_15843885.htm.

309. E.g., Xi Li, Xuewen Liu & Yong Wang, *A Model of China's State Capitalism* 4 (Hong Kong Univ. Sci. & Tech., Working Paper No. 12, 2012), <http://dx.doi.org/10.2139/ssrn.2061521>; Julian Du & Yong Wang, *Reforming SOEs under China's State Capitalism*, in *Unfinished Reforms in the Chinese Economy* 30 (Jun Zhang ed., 2013) (arguing that Chinese SOEs have been highly profitable over the past decade because they enjoy monopolies in upstream industries such as energy, raw materials, banks, and telecommunications, whereas the downstream industries such as manufacturing and other tradable sectors are largely liberalized. As a consequence, in this vertical structure, upstream SOEs are able to accumulate profits by extracting monopoly rents from the downstream private sector businesses).

310. TIANZE JINGJI YANJIUSUO(天则经济研究所) [UNIRULE INSTITUTE OF ECONOMICS], GUOYOU QIYE DE XINGZHI, BIAOXIAN, YU GAIGE (国有企业的性质、表现与改革) [THE NATURE, PERFORMANCE, AND REFORM OF THE STATE OWNED ENTERPRISES] (2011), <http://english.unirule.cloud/publication/2017-03-03/718.html>.

311. In addition to lower interest rates, SOEs also received other subsidies, including unpaid rents for nationally owned lands that were given to SOEs at no cost or very low prices, unpaid rents for nationally owned natural resources (such as oil, natural gas and coal) that were extracted by SOEs at very low prices, and direct governmental fiscal subsidies. From 2001 to 2009, the total subsidies directed to SOEs were CNY 6,144.3 billion. If the benefits derived from governmental policies favoring SOEs were deducted from their nominal profits, the real profits of Chinese SOEs were in fact negative in five years from 2001 to 2009.

interest rate is 10%.³¹² Even if we follow Caprio, Atiyas, and Hanson,³¹³ who argue that financial repression would most likely drive down interest rates by two percentage points, and, therefore, use 2% as the interest rate spread in most years, the financial repression rents remain more than 30% of the profits earned by SOEs.³¹⁴

C. Financial Repression and the Party's Co-optation Strategy

The attitude of the Party towards entrepreneurs and their private enterprises seems to be contradictory. On the one hand, as Haggard and Huang argue,³¹⁵ “despite the well-documented process of economic reform in China, the domestic private sector remains relatively small and subject to a variety of policy and economic constraints[.]”³¹⁶ or as McGregor states,³¹⁷ entrepreneurs “were more like valued foster-children than part of the family.”³¹⁸ On the other hand, as argued by Dickson,³¹⁹ when Leninist parties, such as the Communist Party of China, “abandon class struggle for the sake of economic modernization, [they] typically switch from an exclusionary to an inclusionary, or cooptive” strategy. In the post-Mao period, intelligentsia, technocrats, and particularly private entrepreneurs are brought into the party-state system because they have the skills and resources desired by the Party to accomplish its new policy agenda (economic growth, technological improvement, etc.). In addition, it is safer for the Party to place these newly emerging classes under its

312. For a discussion on the reason for choosing 10% as the real market interest rate, see Haibing Gu, Hongyan Shi & Wei Liu, *Woguo Yinhang Daikuan Lili De Jiegouxing Fenxi* [A Structural Analysis of the Banks' Lending Rates in China], 3 XUESHU YANJIU [ACADEMIC RESEARCH] 62 (2006) (China).

313. GERARD, JR. CAPRIO, IZAK ATIYAS & JAMES A. HANSON, FINANCIAL REFORM: THEORY AND EXPERIENCE, 379 (1996).

314. Xu & Gui, *supra* note 113, at 154.

315. Haggard & Huang, *supra* note 108, at 338.

316. NEE & OPPER, *supra* note 107, at 5-7, report that “during the first decade of reform, though the central government encouraged household businesses (*geti hu*), it explicitly sought to restrict private commercial activities to a peripheral role . . . Through the decade of the 1990s, the central government's policy sought to contain the private enterprise economy as a peripheral, subordinate sector of the Chinese economy . . . Although in 2004 the government amended the constitution to confer to private firms equality with state-owned enterprises and formally guaranteed to ‘protect the lawful rights and interests of the private sector’, private property remained vulnerable.” In general, “the political logic of reform in China was aimed at safeguarding and protecting the public ownership economy.” NEE & OPPER, *supra* note 107, at 8.

317. McGregor, *supra* note 96, at 228.

318. A plausible explanation for this phenomenon is that the Party might reason that entrepreneurs endowed with economic power and wealth today will gain political power in the future and therefore pose a threat to the supremacy of the Party. HUANG, *supra* note 211.

319. Bruce J. Dickson, *Cooptation and Corporatism in China: The Logic of Party Adaptation*, 115 POL. SCI. Q. 517, 519 (2001).

direct oversight rather than leaving them to grow into certain independent powers and finally become a threat to the dominance of the Party.³²⁰

Private entrepreneurs can be incorporated into the party-state system through several channels. The first is to recruit private entrepreneurs into the Party who then become so-called “red capitalists.” For example, Dickson reports that “in the late 1990s, approximately 20 percent of entrepreneurs were Party members, and by 2004, that number had grown to almost 35%.”³²¹ This ratio has been shown to have remained between 30% and 35% between 2002 and 2012.³²² In addition to recruiting private entrepreneurs, the Party also extends its tentacles to the grass-roots level of private enterprises by recruiting technicians and ordinary workers and establishing Party branches in private enterprises. Sun reports that by 2009, there were 3.58 million Party members in private enterprises,³²³ with ordinary workers accounting for 46% and management staff and technicians accounting for 54%.

320. E.g., Ling Chen & Barry Naughton, *A Dynamic China Model: The Co-Evolution of Economics and Politics in China*, 26 J. CONTEMP. CHINA 18, 21 (2017). The authors conclude that inclusiveness is one of the pillars of the Party’s claim to legitimacy. More specifically, they argue that “[w]hen a new social group emerges, the Party begins a political process to incorporate that group into its governance structure. ‘Inclusiveness’ means that the Party has an obligation to listen to and respond to the interests of new social groups, and also that it seeks to ensure that no social group can have an independent power base to challenge the regime from the ‘outside.’” *Id.*

321. Bruce J. Dickson, *Integrating Wealth and Power in China: The Communist Party’s Embrace of the Private Sector*, 192 CHINA Q. 827, 837 (2007).

322. Xuan He & Jun Ma, *Zhizhengdang Dui Siying Qiye De Tonghe Celve Jiqi Xiaoying Fenxi* [An Analysis on the CCP’s Co-opting Strategy towards Private Enterprises and Its Effects], 36 SHEHUI [SOCIETY] 175 (2016). It is worth noting that certain (or even most) private entrepreneurs with Party membership actually joined the Party before they started their business; they used to be affiliated with the party-state in one way or another, such as being an official or a manager in an SOE. Peng Lv (吕鹏), *Siying Qiye Zhu Ren Renda Daibiao Huo Zhengxie Weiyuan De Yinsu Fenxi* (私营企业主任人大代表或政协委员的因素分析) [An Empirical Analysis on the Impact Factors of Being Representatives in the People’s Congress and People’s Political Consultative Conference for Private Entrepreneurs], 4 SHEHUIXUE YANJIU (社会学研究) [SOCIOLOGICAL STUDIES] 154 (2013); Xiangpeng Jin (金祥鹏), *Chushi Zhengzhi Ziben, Renli Ziben, yu Siying Qiyejia Canzhengyizheng* [Initial Political Capital: Human Capital, and Private Entrepreneurs’ Participation in Politics], 55 ZHONGSHANDAXUE XUEBAO SHEHUIKEXUEBAN (中山大学学报社会科学版) J. SUN YAT-SEN U. SOC. SCI. EDITION, 152 (2015). These veteran Party members seem to be more favored politically than their neophyte counterparts. For example, Lv, *supra* note 322, reports that veteran Party members are more easily selected as delegates of the People’s Congress at different levels. It is also worth noting that for those private entrepreneurs who are not Party members, they can still reach the party-state through their relatives, friends, classmates, etc., who are themselves Party members and/or officials. Christopher A. McNally & Teresa Wright, *Sources of Social Support for China’s Current Political Order: The ‘Thick Embeddedness’ of Private Capital Holders*, 43 COMMUNIST & POST-COMMUNIST STUD. 189, 194 (2010).

323. Yingshuai Sun, *Zhongguo Gongchandang Dangyuan Shuliang Yu Jiegou Bianhua Ji Fazhan Qushi* [The Change in Quantity and Structure of CCP Members and Their Trend], 5 BEIJING XINGZHENGXUEYUAN XUEBAO [J. BEIJING ADMINISTRATIVE COLLEGE] 28 (2009).

The second channel is to elect private entrepreneurs to the People's Congress ("PC") and the People's Political Consultative Conference ("PPCC") at different levels. Dickson reports that by 2004, nationwide, over 9,000 entrepreneurs had been elected to the PC and 30,000 to the PPCC at the county level and above.³²⁴ Jin finds that 52% of private entrepreneurs participate in China's political process by acting as delegates of the PC, the PPCC, or the Party's congresses.³²⁵ Zhou similarly reports that 37.47% of private entrepreneurs are either PC delegates or PPCC delegates (with an additional 16.68% who are Party members, but not delegates of the PC or the PPCC).³²⁶ Finally, private entrepreneurs may join government-sponsored associations, such as the Private Enterprises' Association and the All-China Industrial and Commercial Federation. A 2002 to 2004 study of rural private entrepreneurs reports that more than 70% were members of at least one government-sponsored association.³²⁷

Co-opted entrepreneurs are rewarded for their loyalty to and cooperation with the party-state with certain economic benefits,³²⁸ such as valuable financial resources.³²⁹ Numerous empirical studies confirm

324. Dickson, *supra* note 321, at 843.

325. Jin, *supra* note 322.

326. Lvjun Zhou, *Fuhao Fenceng: Siying Qiyezhu De Zhengzhi Qianru Moshi Jiqi Diwei Rentong Chayi* [Symbolic Stratification: The Pattern of Private Entrepreneurs' Political Embeddedness and the Difference of Their Status Identification], 3 SHEHUI FAZHAN YANJIU [CHINESE J. SOC. DEV.] 27 (2016).

327. McNally & Wright, *supra* note 322, at 192.

328. Political connections may not only bring material benefits to private entrepreneurs but may also protect them from public enforcement of certain laws and regulations. *See, e.g.*, Henk Berkman, Rebel A. Cole & Lawrence J. Fu, *Political Connections and Minority-Shareholder Protection: Evidence from Securities-Market Regulation in China*, 45 J. FIN. & QUANTITATIVE ANALYSIS 1391 (2010) (discussing securities market regulation); Xin Sun, *Selective Enforcement of Land Regulations: Why Large-Scale Violators Succeed?*, 74 CHINA J. 66 (2015) (discussing land regulation); Wenfeng Wu, Chongfeng Wu, Chunyang Zhou & Jun Wu, *Political Connections, Tax Benefits and Firm Performance: Evidence from China*, 31 J. ACC. & PUB. POL'Y 277 (2012) (discussing tax benefits); Yang Song, Jidong Yang & Qijing Yang, *Do Firms' Political Connections Depress the Union Wage Effect? Evidence from China*, 38 CHINA ECON. REV. 183 (2016) (showing how political connections undermine the role of unions in increasing wages); Yuen Yuen Ang & Nan Jia, *Perverse Complementarity: Political Connections and the Use of Courts among Private Firms in China*, 76 J. POL. 318 (2014) (reporting that private enterprises with political tie resort to court more frequently in dispute resolution).

In summary, McNally & Wright, *supra* note 322, at 196, conclude that, "for private entrepreneurs, close ties to the party-state, such as strong personal *guanxi* or kinship ties with power-brokers in the Party or membership in the Party and/or one of its affiliated organizations, facilitate their ability to gain information, access credit, procure licenses, avoid onerous taxes and obtain land."

329. For those private entrepreneurs who lack such political connections, they may still access bank credit by bribing bank officials. *See, e.g.*, Yunling Chen, Ming Liu & Jun Su, *Greasing the*

that political connections, particularly membership in the PC,³³⁰ help private entrepreneurs access bank credit more easily and at a better price. For example, Bai, Lu, and Tao find that “access to bank loans is significantly easier for entrepreneurs who are members of the Chinese People’s Congress, but membership of the Chinese People’s Political Consultative Conference has a limited effect.”³³¹ This conclusion is further supported by subsequent studies, such as Zhou;³³² Sun, Zhu, and Wu;³³³ Yang, Lu, and Luo;³³⁴ Feng, Johansson, and Zhang;³³⁵ and Zhao and Lu.³³⁶ In addition to bank loan accessibility, political connections are also shown to affect private enterprises’ access to China’s stock markets.³³⁷

With the help of certain economically distorting policies, such as the financial repression policies through which the party-state can influence the direction of financial resources, the Party’s co-optation strategy seems to work considerably well. Co-opted entrepreneurs show strong support

Wheels of Bank Lending: Evidence from Private Firms in China, 37 J. BANKING & FIN. 2533 (2013).

330. Studies use different proxies for political connections, such as Party membership of entrepreneurs, government intervention in CEO appointments, and top managers (or board members) as officials at certain levels, also confirm the importance of political connections in helping private entrepreneurs address financial constraints. *See, e.g.,* Hongbin Li, Lingsheng Meng, Qian Wang & Li-An Zhou, *Political Connections, Financing and Firm Performance: Evidence from Chinese Private Firms*, 87 J. DEV. ECON. 283 (2008); Di Guo, Kun Jiang, Byung-Yeon Kim & Chenggang Xu, *Political Economy of Private Firms in China*, 42 J. COMP. ECON. 286 (2014); Robert Cull, Wei Li, Bo Sun & Lixin Colin Xu, *Government Connections and Financial Constraints: Evidence from a Large Representative Sample of Chinese Firms*, 32 J. CORP. FIN. 271 (2015); Zhong-qin Su & Hung-Gay Fung, *Political Connection and Firm Performance in Chinese Companies*, 18 PAC. ECON. REV. 283 (2013).

331. Bai et al., *supra* note 111, at 623.

332. Wubiao Zhou, *Bank Financing in China’s Private Sector: The Payoffs of Political Capital*, 37 WORLD DEV. 787 (2009).

333. Xin Sun, Jiangnan Zhu & Yiping Wu, *Organizational Clientelism: An Analysis of Private Entrepreneurs in Chinese Local Legislature*, 14 J. E. ASIAN STUD. 1 (2014).

334. Deming Yang, Zhengfei Lu & Dangling Luo, *Political Connections, Media Monitoring and Long-term Loans*, 7 CHINA J. ACCT. RES. 165 (2014).

335. Xunan Feng, Anders C. Johansson & Tianyu Zhang, *Mixing Business with Politics: Political Participation by Entrepreneurs in China*, 59 J. BANKING & FIN. 220 (2015).

336. Hongxin Zhao & Juangyong Lu, *Contingent Value of Political Capital in Bank Loan Acquisition: Evidence from Founder-controlled Private Enterprises in China*, 31 J. BUS. VENTURING 153 (2016).

337. *See, e.g.,* Qigui Liu, Jonghua Tang & Gary Gang Tian, *Does Political Capital Create Value in the IPO Market? Evidence from China*, J. CORP. FIN. 395 (2013); Guoping Li & Hong Zhou, *Political Connections and Access to IPO Markets in China*, 33 CHINA ECON. REV. 76 (2015); Bill B. Francis, Iftexhar Hasan & Xian Sun, *Political Connections and the Process of Going Public: Evidence from China*, 28 J. INT’L. MONEY & FIN. 696 (2009) (finding that firms with political connections reap other preferential benefits in the process of going public, such as a relatively higher offering price, lower underpricing, and lower fixed costs during the going-public process).

toward the status quo in which the Party enjoys monopolized political power. For example, Chen and Dickson report that private entrepreneurs with Party membership (including those who have applied to join the Party, those who were formerly cadres, and those who were formerly SOE managers) have significantly higher levels of regime support than entrepreneurs who have no political affiliations with the party-state.³³⁸ Similarly, Dickson finds that private entrepreneurs, particularly co-opted entrepreneurs, share similar viewpoints on a range of political, economic, and social issues with communist officials.³³⁹ Dickson concludes that “China’s private entrepreneurs and red capitalists in particular are not only increasingly integrated into the political system, they have views that are increasingly similar to those of local Party and government officials, making them unlikely agents of political change.”³⁴⁰ Dickson and Ma also report that private entrepreneurs with Party membership show a much higher evaluation on the Party’s policies than entrepreneurs without such status.³⁴¹

Co-opted entrepreneurs, however, may not be as reliable an ally as expected by the Party. As cautioned by Pei, “[t]he long-term effectiveness of political cooptation is also limited by the questionable loyalty of those social elites being targeted for recruitment into the Party and its patronage system. To the extent that these individuals join the Party or support its policies chiefly out of pecuniary interests, the CPC may not be able to count on their loyalty if its ability to satisfy their material interests declines, due to poor economic performance or constraints on the state’s fiscal capacity.”³⁴² In other words, their support for the Party is contingent upon the Party’s ability to provide favors and grant privileges. Even worse, their close connections with the party-state in general and certain officials in particular may breed corruption and rent-seeking behaviors,³⁴³

338. Chen & Dickson, *supra* note 272, at 780.

339. Dickson, *supra* note 321, at 852.

340. *Id.* at 847.

341. He & Ma, *supra* note 322 at 177-178.

342. Pei, *CCP Rule*, *supra* note 274, at 37.

343. See, e.g., Joseph P.H. Fan, Oliver Meng Rui & Mengxin Zhao, *Public Governance and Corporate Finance: Evidence from Corruption Cases*, 36 J. COMP. ECON. 343 (2008) (finding “that being connected with corrupt bureaucrats provides firms with a comparative advantage in obtaining access to debt, and in particular long-term debt.”); Charles J.P. Chen, Zengquan Li, Xijia Su & Zheng Sun, *Rent-seeking Incentives, Corporate Political Connections, and the Control Structure of Private Firms: Chinese Evidence*, 17 J. CORP. FIN. 229 (2011) (reporting that private firms are more likely to establish political connections in regions in which the local economy is less market-oriented or in which the government has more discretion in allocating economic resources (and therefore opportunities for rent-seeking are rife); Xuesong Tang, Yan Lin, Qing Peng, Jun Du & Kam C. Chan, *Politically Connected Directors and Firm Value: Evidence from Forced Resignations in China*, 37 N. AM. J. ECON. & FIN. 148 (2016) (showing “that the value of firms

distort the level-playing field,³⁴⁴ trigger social discontent,³⁴⁵ and finally endanger the Party's rule.³⁴⁶

D. Financial Repression and Intra-Elite Struggles inside the Party-State

As a Leninist organization, the Party is supposed to maintain an extremely high level of solidarity and unity with the help of severe discipline, clear hierarchical structure, and, more importantly, the so-called principle of “democratic centralism.”³⁴⁷ This is far from the truth, however. As numerous studies have shown, intra-elite struggles and factional politics are prevalent in the entire history of the Party.³⁴⁸ In Nathan and Tsai's words,³⁴⁹ “[f]or twenty-two years scholars have found the factionalism model useful as a starting point for analy[z]ing how

with politically connected directors drops significantly” after their directors' resignations. This effect is more pronounced for firms in a regulated industry and for private firms).

344. See generally the literature discussed in footnote 329.

345. President Xi admitted that “corruption has played a big role in conflicts that grew over lengthy periods, and it has led to popular discontent, social unrest and the overthrow of the political power.” See Zachary Keck, *China's Corruption Problem: A Catch-22*, THE DIPLOMAT (Aug. 19, 2014), <https://thediplomat.com/2014/08/chinas-corruption-problem-a-catch-22/>.

346. Xie Yu, *Poll: Corruption, Public Discontent Most Worrisome*, CHINA DAILY (July 9, 2010), http://www.chinadaily.com.cn/china/2010-07/09/content_10084440. This article reports that, in a survey conducted in 2010, more than half of the respondents said that “wide-spread corruption and public discontent” were the major threats faced by the Chinese society. See Robert Hamel & Yao-Yuan Yeh, *Corruption and Government Satisfaction in Authoritarian Regimes: The Case of China*, 2011 AM. POL. SCI. ASS'N ANN. MEETING PAPER, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1899973. Using data from a 2008 nationwide survey in China, the authors find that “whether asked about corruption generally or about local cadre corruption more specifically” nearly two-thirds of respondents “considered corruption to be a ‘serious problem.’” They further report, “that perceived corruption (whether general or location-specific) is negatively—and significantly so—correlated with citizens' satisfaction with all levels of government.” See also DICKSON, THE DICTATOR'S DILEMMA, *supra* note 271 (showing that attitudes about corruption are closely correlated with regime support: the more prevalent that people think corruption is among central and local officials, the lower their regime support is).

347. The core of “democratic centralism”, as defined by the Party's Constitution, is “individual Party members are subordinate to the Party organization, the minority is subordinate to the majority, the lower Party organizations are subordinate to the higher Party organizations, and all the constituent organizations and members of the Party are subordinate to the National Congress and the Central Committee of the Party.” See Chapter 2, Article 10 of the Party's Constitution, available at <http://english.cpc.people.com.cn/206972/206981/8188092.html> (accessed 21 June 2017).

348. Andrew Nathan, *A Factionalism Model for CCP Politics*, 53 CHINA Q. 33 (1973); Tang Tsou, *Prolegomenon to the Study of Informal Groups in CCP Politics*, 65 CHINA Q. 98 (1976). For more recent studies, see JING HUANG, *FACTIONALISM IN CHINESE COMMUNIST POLITICS* (2000); JOSEPH FEWSMITH, *ELITE POLITICS IN CONTEMPORARY CHINA* (2001); ZHIYUE BO, *CHINA' ELITE POLITICS: POLITICAL TRANSITION AND POWER BALANCING* (2007). See also VICTOR SHIH, *FACTIONS AND FINANCE IN CHINA: ELITE CONFLICT AND INFLATION* (2008).

349. Andrew Nathan & Kellee S. Tsai, *Factionalism: A New Institutional Restatement*, 34 CHINA J. 157 (1995).

Chinese elite politics work.” Similarly, Dittmer³⁵⁰ argues that factionalism “constitutes a central, even modal, pattern of Chinese political behaviour deeply rooted in cultural and psychological security drives.”³⁵¹

Shih, Shan, and Liu use a database that tracks the biographies of all Central Committee members of the Party from 1921 to 2007, to show that even Chairman Mao Zedong, the charismatic and all-powerful leader, could not maintain a commanding presence within the Party elite after the establishment of the People’s Republic.³⁵² The best survival strategy for the Party’s top leaders is, therefore, to try to “eliminate challengers and to bolster their own faction through promotions and political struggle.”³⁵³ Factional politics reached a new level after 1978, when China began to gradually move away from rule by a single leader (such as Chairman Mao) and toward a collective form of leadership.³⁵⁴ Recent leaders such as Jiang Zemin and Hu Jintao were, to a large extent, merely “first among equals” in their respective generations of collective leadership, and could hardly wield the sort of power enjoyed by Mao or Deng Xiaoping.³⁵⁵ Rather, newer leaders have had to govern the Party through coalition building and political compromise. As a result, factional politics prevails in the political arena.³⁵⁶

350. Lowell Dittmer, *Chinese Informal Politics*, 34 CHINA J. 1, 5 (1995).

351. According to Dittmer, *id.* at 2, a faction is “a vertically organized patron-client network linked by personal (face-to-face) ‘connections’ (*guanxi*).” He further offers an explanation for the existence and prevalence of factionalism in the Chinese political system, particularly at the highest level: “[a]t the highest level, because the task to be performed are relatively unstructured, the area of discretion large, personal judgment crucial, the demand for quick decisions great, and secrecy imperative, informal politics prevails.” *Id.* at 17.

352. Victor Shih, Wei Shan & Mingxing Liu, *Gauging the Elite Political Equilibrium in the CCP: A Quantitative Approach Using Biographical Data*, 201 CHINA Q. 79 (2010).

353. *Id.* at 80.

354. According to the 2007 Party Congress Communiqué, “collective leadership” is “a system with division of responsibilities among individual leaders in an effort to prevent arbitrary decision making by a single top leader.” Cheng Li, *The End of the CCP’s Resilient Authoritarianism? A Tripartite Assessment of Shifting Power in China*, 211 CHINA Q. 595, 608 (2012).

355. However, since he became the general secretary of the Party in 2012, Xi Jinping has changed the political status quo to a certain extent with his bold anti-corruption campaign and his aggressive consolidation of power. It remains to be seen whether the form of collective leadership can be maintained in the future. For more detailed discussions on this issue, *see* CHENG LI, CHINESE POLITICS IN THE XI JINPING ERA: REASSESSING COLLECTIVE LEADERSHIP (2016), and SEBASTIAN HEILMANN & MATTHIAS STEPAN, CHINA’S CORE EXECUTIVE: LEADERSHIP STYLES, STRUCTURES AND PROCESSES UNDER XI JINPING (2016).

356. Joseph Fewsmith, *The New Shape of Elite Politics*, 45 CHINA J. 83, 89 (2001) (arguing that factional politics is more important in the reform era than before because “[a]s revolutionary legitimacy declines, as ideology loses its power to persuade, much less mobilize, and as Party discipline declines, there appears to be a marked increase in the importance of personal power and personal ties.”).

Factional factors play an essential role in selecting and promoting officials within the Chinese political system. Earlier studies, such as Li and Zhou,³⁵⁷ showed that the likelihood of promotion of provincial leaders was positively correlated with their economic performances (measured by GDP growth); Shih, Adolph, and Liu challenge this conclusion.³⁵⁸ They report that factional ties with various top leaders of the party-state, rather than strong economic performance, boost the officials' chances of climbing higher in the Party's upper echelons through much of the reform period. Shih, Adolph, and Liu's conclusion is further supported by subsequent studies, such as Jia, Kudamatsu, and Seim (2015);³⁵⁹ Opper, Nee and Brehm;³⁶⁰ and Francis, Trebbi and Xiao.³⁶¹

Factional politics not only determine the promotion chances of Chinese officials but also influence the design and implementation of economic policies,³⁶² including financial policies. Shih argues that the

357. Hongbin Li & Li-An Zhou, *Political Turnover and Economic Performance: The Incentive Role of Personnel Control in China*, 89 J. PUB. ECON. 1743, 1744 (2005).

358. Victor Shih, Christopher Adolph & Mingxing Liu, *Getting Ahead in the Communist Party: Explaining the Advancement of Central Committee Members in China*, 106 AM. POL. SCI. REV. 166, 167 (2012).

359. Ruixue Jia, Masayuki Kudamatsu & David Seim, *Political Selection in China: The Complementary Roles of Connections and Performance*, 13 J. EUR. ECON. ASS'N 631, 633 (2015). The conclusion can be said to support both Li & Zhou, *supra* note 357, and Shih et al., *supra* note 358, because the authors show that connections and performance are complements in the Chinese political selection process. More specifically, "[w]eakly performing provincial leaders are unlikely to be promoted irrespective of their connections, while connections increase the likelihood of promotion for strongly performing provincial leaders." Jia et al., *supra* note 359, at 633.

360. Sonja Opper, Victor Nee & Stefan Brehm, *Homophily in the Career Mobility of China's Political Elite*, 54 SOC. SCI. RES. 332, 343-52 (2015). They develop a homophilic index focusing on joint provincial origin, joint school experience, and joint work experience between provincial leaders and members of China's supreme decision-making body, the Politbureau's Standing Committee, and empirically confirm a positive association between homophily and promotion chances.

361. Patrick Francis, Francesco Trebbi & Kairong Xiao, *Factions in Nondemocracies: Theory and Evidence from the Chinese Communist Party* (Nat'l Bureau Econ. Research, Working Paper No. 22775, 2016). Similarly to Cheng Li, *China's Team of Rivals*, 171 FOREIGN POL'Y 88-93 (2009) and Li, *supra* note 354, the authors identify two main factions inside the Party: *tuanpai* (a faction of Communist Youth League of China (CYLC), an ancillary organization to the Party responsible for the youth), which is led by the former President Hu Jintao, and Shanghai Gang, a group of Party officials who are connected to the Shanghai municipal administration and close to former President Jiang Zemin. They then report that, on average, *tuanpai* and Shanghai Gang members exhibit promotion rates that are higher by ten percentage points relative to neutral members.

362. Hongbin Cai & Daniel Treisman, *Did Government Decentralization Cause China's Economic Miracle?*, 58 WORLD POL. 505, 507 (2006) (arguing, "faction leaders sought supremacy within the Party by demonstrating the effectiveness of their chosen policies across the chessboard of China's territorial administration."). We, therefore, can witness "the temporal pattern of reform, which ebbed and flowed with shifts in the factional balance of power . . ." *Id.* See also Wing-

path of Chinese financial reform in the mid-1990s was shaped by a series of short-term political calculations aimed at strengthening the power of individual leaders,³⁶³ or more specifically, the former Premier Zhu Rongji (and his faction).³⁶⁴ The core of Zhu's reform strategy was to centralize power in financial resource allocation. By consolidating financial power at the central level (and depriving local officials of access to cheap credit from banks), Zhu could use the distribution of financial resources as a political bargaining chip at the Politburo level. With control over financial resources, he could bargain either for political support in the event of a setback or for the promotion of a close protégé,³⁶⁵ which would increase his post-retirement influence. In addition, Zhu and his followers had a strong disincentive to carry out fundamental financial reforms that may have benefited China's economy in the long-term but may have potentially jeopardized short-term stability or prevented solutions to more pressing issues: after all, his performance was evaluated by short-term results.³⁶⁶ The real consequence of the so-called "financial reform" in the Zhu era was actually a consolidation of financial power and a covering up of the fundamental problems (such as the NPLs problem), rather than conducting a market-oriented financial overhaul.

Thanks to the factional conflict, it became even more impracticable to conduct serious financial reform in the Hu Wen era (2002-2012). As Li has described, policy making and implementation became

Chung Ho, *What Analyses of Factional Politics of China Might Miss When the Market Becomes a Political Battlefield: The Telecommunication Sector as a Case in Point*, 13 CHINA REV. 7, 85 (2013) (concluding that "particular reform policies, anti-corruption measures, and even corporate decisions in specific markets are increasingly used as political weapons in high-level political struggles.").

363. Victor Shih, *Dealing with Non-Performing Loans: Political Constraints and Financial Policies in China*, 180 CHINA Q. 922 (2004).

364. SHIH, *supra* note 348. Compared with Zhu's faction (and factions with similar preference, i.e., central control over policy tools, including financial resources), which Shih has defined as the "technocratic faction" (they are mainly central bureaucrats who have ranks of vice minister or above); there is another faction he termed the "generalist faction," which consists of provincial leaders who have the strongest control over the Party apparatus and prefer to decentralize financial power so that their followers at local levels may access bank loans to boost local economic development. *See also* Victor Shih, *Factions Matter: Personal Networks and the Distribution of Bank Loans in China*, 13 J. CONTEMP. CHINA 3, 19 (2004); SHIH, *supra* note 348 (reporting that factional ties have had a significant positive effect on the distribution of bank loans to provinces during the reform era).

365. His disciples, such as Lou Jiwei and Guo Shuqing, still play important roles in China's economic decision-making. Lou was China's Minister of Finance between 2013 and 2016 and is now the Chairman of the National Council of Social Security Fund. Guo was the Governor of Shandong Province between 2013 and 2017 and is now the Chairman of the CBRC. Guo is believed to be a potential candidate for the position of Governor of the People's Bank of China (PBOC).

366. Victor Shih, *Partial Reform Equilibrium, Chinese Style: Political Incentives and Reform Stagnation in Chinese Financial Policies*, 40 COMP. POL. STUD. 1238, 1246 (2007).

considerably more difficult in the Hu-Wen era, particularly when there was disagreement or controversy among factions. Scissors argues further that since Hu Jintao and Wen Jiabao took power, market-oriented liberalization had been “minor.”³⁶⁷ Therefore, the United States should be wary of “fake Chinese economic reform.”³⁶⁸ As a matter of fact, Hu and Wen’s administration record on reforming China’s economic and financial system is so disappointing that some prominent Chinese public intellectuals openly refer to the two five-year terms of the Hu–Wen leadership as “the lost decade.”

Factional politics seems to have continued to dampen the outlook of China’s financial liberalization in the Xi-Li era since 2012. It has been argued that market-oriented reform has found new momentum after the Third Plenum of the 18th Party Congress in November 2013.³⁶⁹ A recent estimation of the reform performance of the new generation of leaders concludes that “it is impossible to resist the conclusion that the reform process overall has stumbled and is in serious trouble.”³⁷⁰ A plausible explanation lies in the fact that there are two camps inside the decision-making circle, which disagree on certain fundamental economic issues such as the priority of economic growth (speed vs. efficiency), the risk of

367. Derek Scissors, *Deng Undone: The Costs of Halting Market Reform in China*, 88 FOREIGN AFF. 24 (2009).

368. DEREK SCISSORS, THE HERITAGE FOUNDATION, THE U.S. SHOULD BE WARY OF FAKE CHINESE ECONOMIC REFORM (2013), <https://www.heritage.org/asia/report/the-us-should-be-wary-fake-chinese-economic-reform>.

369. Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform (adopted by the Communist Party of China Cent. Comm., Nov. 12, 2013), http://english.court.gov.cn/2015-10/08/content_22130532.htm. According to the decision reached by this conference, for the first time, market forces are acknowledged to play a “decisive” role in resource allocation rather than the “basic” role admitted by previous Party decisions. The to-do list laid out by the decision is extraordinarily ambitious, comprising 60 articles and because each article contains several specific policy initiatives, over 300 different policy initiatives. Basically, every important economic issue is addressed by the decision, including the liberalization of interest and exchange rates, the assignment of expenditure responsibilities between the central and local governments, and the dividend policy of state-owned enterprises.

370. Barry Naughton, *Xi Jinping’s Economic Policy in the Run-up to the 19th Party Congress: The Gift from Donald Trump*, 52 CHINA LEADERSHIP MONITOR 3 (2017). More specifically, the author argues that “the prospect of a large package of interrelated reforms achieving success together has disappeared, and many complex multi-stage reforms are in limbo... A number of individual reforms have been watered down... Most tellingly, financial reforms of the stock market and capital account liberalization have been spectacular failures.” In another article, he states that “Xi Jinping’s support for market-oriented economic reforms has been disappointing. Since the Third Plenum of 2013, Xi has failed to give strong or consistent backing to any of the most important market-oriented reforms.” Barry Naughton, *The Regulatory Storm: A Surprising Turn in Financial Policy*, 53 CHINA LEADERSHIP MONITOR 9 (2017).

accumulating debt, and the model of SOE reform.³⁷¹ The conflict between these two groups has become public after the publication of a May 9, 2016, People's Daily article.³⁷² The author of the People's Daily article is believed to be the right-hand man of President Xi. The article openly criticizes Premier Li Keqiang's policies,³⁷³ and this conflict is described as "a severe policy split in the leadership between Xi Jinping, who favors pressing forward with reform now, despite the sagging growth rate of China's economy, and Premier Li Keqiang, who is perceived to be pressing for short-term stimulus measures to sustain higher growth rates and postponing reform."³⁷⁴ The aftermath of such factional conflict on China's financial landscape remains to be seen.

VII. CONCLUDING REMARKS

In this article, we explained the importance of regulation aimed at financial repression by explaining what is sometimes referred to as the "Chinese economic miracle." We started by presenting the classic economic view (mostly represented by McKinnon and Shaw) that a repression of the financial sector would slow down economic growth. The traditional remedy for financial repression, especially addressed at developing countries, was, therefore, financial liberalization. However, both theoretical and empirical literature indicated that financial liberalization will only have beneficial effects on economic growth if it is accompanied with an effective system of prudential regulation and supervision.

Against this background, we examined the details of the regulation of financial markets in China and found that there is (1) a large state ownership in the banking sector; (2) a severe misallocation of credit, disfavoring the private sector; and (3) strong interest rates controls, leading to an artificially low cost of capital. These features of the financial repression system in China were only reinforced with the stimulus

371. Barry Naughton, *Supply-Side Structural Reform: Policy-makers Look For a Way Out*, 49 CHINA LEADERSHIP MONITOR 1 (2016) ("economic policy over the past year has been inconsistent, ineffective, and on occasion entirely counterproductive," and the reason is that there are "deep divisions about the appropriate relationship between reform and growth or macroeconomic policy, and uncertainty and confusion about the channels of policy-making and who is in charge of economic policy on a day-to-day basis."); See also Barry Naughton, *Two Trains Running: Supply-Side Reform, SOE Reform and the Authoritative Personage*, 50 CHINA LEADERSHIP MONITOR 1 (2016).

372. See Gong et al., *supra* note 257.

373. President Xi and Premier Li are believed to be affiliated with different factions.

374. Alice Miller, *'Core' Leaders, 'Authoritative Persons', and Reform Pushback*, 50 CHINA LEADERSHIP MONITOR 9 (2016).

program of 2008, which aimed to boost China's economic growth through Local Government Financing Vehicles. We showed that there are several important micro- and macro-economic effects of the financial repression. Micro-economic effects are, *inter alia*, resources misallocation and efficiency loss. At the macro-level, China's growth pattern has become more credit-driven, favoring state-owned enterprises and based on investments rather than consumption. Such an investment-based economic growth will potentially be unsustainable in the long run.

We argue that the system of financial repression is deeply rooted in the party state's essence. Given the importance of financial resources for boosting growth, rewarding loyalty, buying stability, and maintaining the Party's rule, it is not surprising that the Party has never loosened its control over the financial industry and may not loosen it in the future. China's financial repression is, therefore, not a result of market evolution or regulatory design; rather, it is an intentional artifact used to maximize the opportunities of survival of the Party (or certain factions or certain leaders inside the Party). In Shih's words, "the Chinese case reveals that the process of reforms is necessarily a political one, not a simple policy exercise by insulated, beneficent social planners."³⁷⁵ It is therefore impossible to understand the nature of China's financial development without understanding the intentions, capabilities, and constraints of the Party. In Minxin Pei's succinct words, "[i]t's politics, stupid."³⁷⁶

375. Shih, *supra* note 366, at 1239.

376. Minxin Pei, *The root of China's economic troubles? It's politics, stupid*, NIKKEI ASIA REV. (Oct 1, 2015), <https://asia.nikkei.com/Economy/Minxin-Pei-The-root-of-China-s-economic-troubles-It-s-politics-stupid>.