

Annual Review of Financial Economics
**Default and Bankruptcy
Resolution in China**

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bankruptcy law, nonperforming loans, shadow banks, bond markets, default, restructuring

Abstract

In this article, we review the literature on the recent growth of corporate debt in China and present stylized facts on the evolution of debt composition, nonperforming loans, defaults, and bankruptcy filings. We then describe the legal and political institutions that characterize the system for restructuring and liquidating financially distressed firms, including recent reforms of China's bankruptcy law. Finally, we discuss the main challenges faced by China in the implementation of these reforms, including frictions in judicial enforcement. We also propose potential avenues for future research.



1. INTRODUCTION

Corporate debt in China has experienced unprecedented growth since the 2008–2009 global financial crisis as a result of massive government stimulus and the fast development of onshore bond markets and the shadow banking system (Song, Storesletten & Zilibotti 2011; Cong et al. 2019; Amstad & He 2020). By the end of 2021, credit to nonfinancial corporations grew to approximately 160% of GDP in China, compared to 80% in the United States (see **Figure 1**). With the growth in corporate debt, nonperforming loans (NPLs) and defaults have started to rise at an alarming rate. For example, the total number of bond defaults in China’s domestic corporate bond markets by both state-owned enterprises (SOEs) and non-SOEs increased from 6 in 2014 to 253 in 2021, while in the same period the default amount increased from RMB 1 billion to RMB 312 billion. Debt defaults have spread not only to traditional manufacturing firms but also to large real estate developers and financial institutions (e.g., the defaults of Evergrande in 2021 and Baoshang Bank in 2019), raising concerns about systemic risk.

The Chinese government implemented a series of policy reforms to help firms deleverage and reduce excess production capacity and to formalize laws and procedures for restructuring distressed companies. For example, deleveraging-related policies such as the China Banking and Insurance Regulatory Commission’s (CBIRC) rules on commercial banks’ wealth management products (WMP), a widely used tool for banks to attract off-balance-sheet deposits in China, aimed to curb financial risks. Specifically, the CBIRC No. 8 Document issued in March 2013 (CBIRC 2013) restricted exposure to nonstandard debt assets within WMP, limiting these products to invest mainly in publicly traded corporate bonds (Chen, He & Liu 2020). However, whether such policies achieved their intended objectives and whether mechanisms for resolving debt defaults are efficient remain unclear. In addition, regulators have targeted corporate debt, in particular the debt of zombie SOEs. These policies, however, have had unintended consequences on privately owned firms that rely on funding from WMP and other shadow banking channels by tightening their financing constraints.

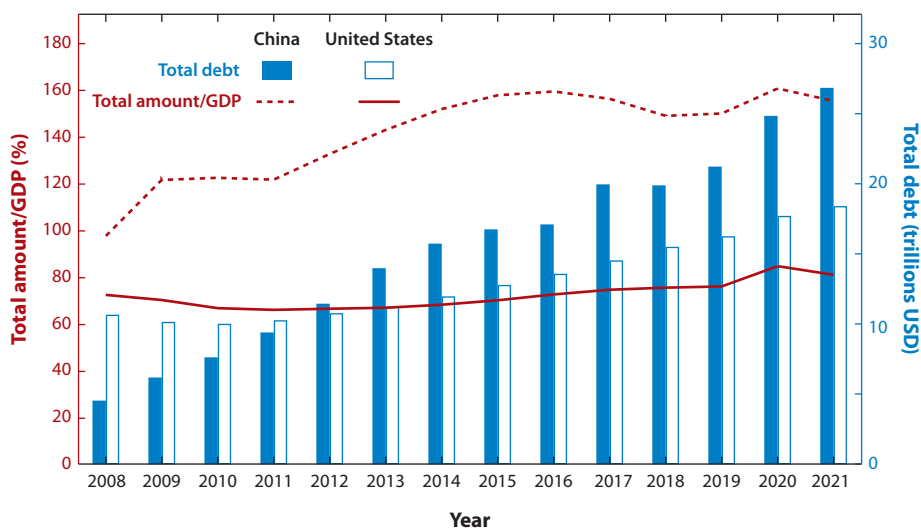


Figure 1

The total amount of credit to nonfinancial corporations in China and the United States in trillions of USD (*right*) and the ratio of total debt relative to GDP (*left*). Annual data from Bank Int. Sett. (2022).

In this article, we first provide stylized facts and review the existing literature on corporate debt growth, including the evolution of the bond market and shadow banking, and government policies and intervention in corporate debt markets in Section 2. We then focus on debt default, including defaults in the bond market, evolution of NPLs, and bankruptcy filings in Section 3. Next, in Section 4, we describe the legal and political institutions that are integral parts of the system for restructuring financially distressed firms in China and discuss the role of enforcement frictions that shape the restructuring process for Chinese firms. We conclude by discussing potential avenues for future research in Section 5.

2. CHINA'S CORPORATE DEBT MARKETS AND EVOLVING GOVERNMENT POLICIES

Firms in China exclusively relied on banks for debt financing before the 2008–2009 global financial crisis. In 2008, the Chinese government implemented an unprecedented economic stimulus plan, with RMB 4 trillion of government spending, to mitigate the effects of the crisis on the Chinese economy. A number of studies, including those by Chen, Ren & Zha (2018), Allen et al. (2019), Cong et al. (2019), Amstad & He (2020), and Chen, He & Liu (2020), show that both the onshore corporate bond markets and the shadow banking system experienced exponential growth. In addition, loans supplied by large state-owned banks increased dramatically immediately following the stimulus. The fast development of domestic debt markets helped fuel growth not only of investment by traditional corporations but also by local governments.

Figure 2 shows the annual aggregate net amount of financing to the real economy from bank loans, corporate bonds, and shadow banks between 2002 and 2019. As shown in the figure, the total amount of these three major sources of credit doubled from 2008 to 2009 and then doubled again in the following decade. Although bank loans remain by far the main source of financing for most companies, corporate bonds have grown to be the second most important source of credit.

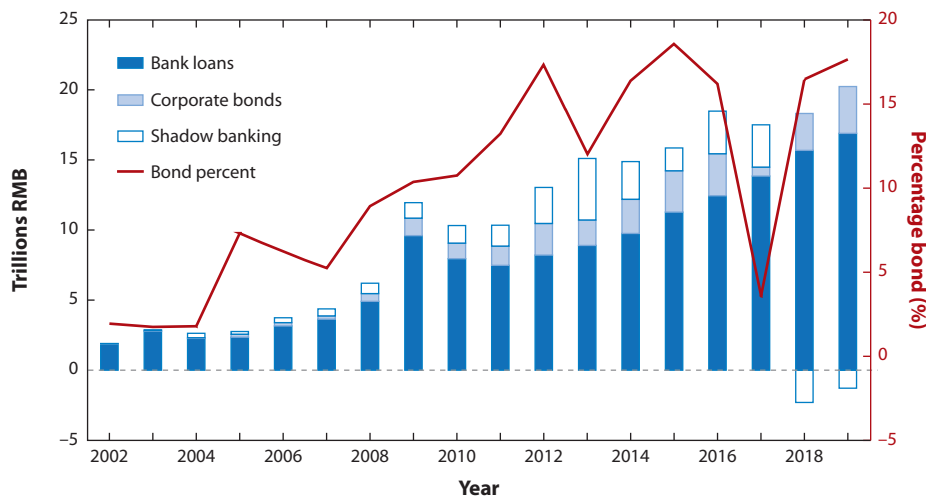


Figure 2

Aggregate financing to China's real economy by debt type. The figure shows annual net financing amount (i.e., the amount of issuance minus the amount of maturing) in trillions of RMB to the real economy by three debt sources: bank loans, corporate bonds, and shadow banking. The figure also shows the percentage of bonds to the aggregate of all three types of credit. Figure adapted with permission from Jin, Wang & Zhang (2023) and Cong et al. (2019).

There are five main types of corporate bonds issued by Chinese companies in the onshore bond market: exchange-traded corporate bonds, enterprise bonds, medium-term notes, commercial paper, and private placement notes (Amstad & He 2020). Corporate bonds are exchange-traded securities regulated by the China Securities Regulatory Commission (CSRC); enterprise bonds trade either in the interbank market or on securities exchanges and are regulated by the National Development and Reform Commission (NDRC); and medium-term notes, commercial paper, and private placement notes trade in the interbank market and are regulated by the National Association of Financial Market Institutional Investors (NAFMII). Shadow banking activities in China commonly refer to loans by trust companies, entrusted firm-to-firm loans, and WMP.

From the late 2000s to early 2010s, Chinese local governments also actively tapped into the corporate bond market and the shadow banking system by setting up local government financing vehicles (LGFVs) and issuing Chengtuo bonds (Ang, Bai & Zhou 2016; Hsieh, Bai & Song 2016; Chen, Ren & Zha 2018; Liu, Lyu & Yu 2021). The issuance of WMP by banks took off in the mid-2000s as a result of several policies aimed to limit the lending of commercial banks, such as the loan-to-deposit cap and safe loan regulations. The rise of WMP helped fuel the growth of local government financing and shadow banking activities (Hachem & Song 2016). Chen, Ren & Zha (2018) show that the majority of these municipal bonds were, in fact, absorbed by the shadow banking system, particularly WMP.

A major policy shift in 2014 (State Council People's Repub. China 2014) forced local governments to issue new municipal bonds to replace the outstanding bonds of qualified LGFVs in the few years that followed. The policy aimed to draw a clear line between LGFV liability and government liability. Amstad & He (2020) explain that further regulatory tightening by the Chinese government in 2017, which aimed to put scrutiny on the shadow banking system, led to a dramatic downward adjustment in such activities in 2018 and 2019, as evidenced in **Figure 2**.

Geng & Pan (2021) study the effect of perceived government support for SOEs on credit spreads in the Chinese bond market in recent years. Controlling for credit rating and other bond characteristics, they document that, following government policies aimed at credit tightening, perceived government support led to a substantial increase in the credit spreads of non-SOEs relative to their SOE counterparts. Given the recent waves of defaults in China's onshore debt markets, as discussed in the next section, there are concerns that such a deepening of the SOE premium in Chinese bond markets may lead to severe capital misallocation.

These findings are related to a large number of studies focusing on capital misallocation in China and its evolution over time, starting from the seminal works by Hsieh & Klenow (2009) and Song, Storesletten & Zilibotti (2011). The traditional view is that, although SOEs tend to be on average less productive firms, they can often obtain financing at more favorable terms than private enterprises because of implicit government guarantees. Several recent papers have documented how the 2008–2009 stimulus and the credit market boom that followed affected the allocation of credit between SOEs and private firms (see, for example, Hsieh, Bai & Song 2016; Huang, Pagano & Panizza 2020; Cong et al. 2019; Hachem & Song 2021).

3. STYLIZED FACTS ON DEFAULTS AND BANKRUPTCY FILINGS IN CHINA

3.1. Defaults in China's Onshore Bond Markets

Through the mid-2010s, despite the tremendous growth in China's onshore corporate bond markets, defaults were extremely rare. The first onshore corporate bond default occurred in 2014, when Shanghai Chaori Solar Energy, a privately owned solar panel manufacturer, announced its default on March 14, 2014. The default by Baoding Tianwei Group Co., a manufacturer of power

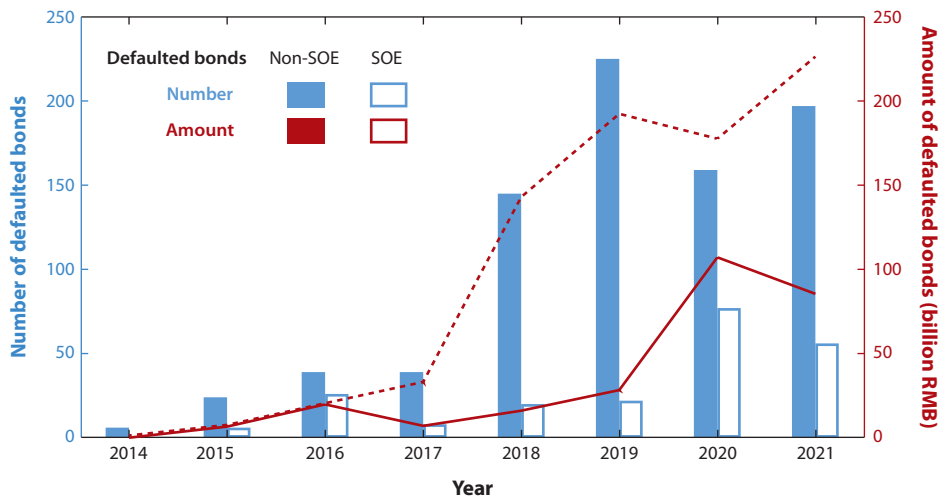


Figure 3

The total number and amount (in billions of RMB) of bond defaults in China's onshore bond markets. Abbreviation: SOE, state-owned enterprise. Data from the Wind database (Wind 2021).

transformers and wholly owned subsidiary of China South Industries Group, followed in the first half of 2015 and marked the first corporate bond default by an SOE. These default events broke investors' beliefs that Chinese domestic bonds had an implicit government guarantee. The overall frequency of bond defaults in China remained relatively low in the 2 years following those events. However, both the number and amount of bond defaults in China increased sharply after 2017 as a result of tightened regulations aimed at delevering firms, reducing excess capacity, and imposing regulatory oversight on WMP.

Figure 3 presents the annual number and amount (in billions RMB) of corporate bond defaults from 2014 to 2021. The figure shows that the total number of non-SOE bonds in default was four times larger than that of SOE bonds in default. The combined bond defaults of SOEs and non-SOEs reached a record high of RMB 300 billion in 2021, posing a potential threat to the stability of the financial system.

Jin, Wang & Zhang (2023) examine a series of SOE defaults in China's onshore bond markets, starting with the default by Baoding Tianwei in 2015, to study the effects of an implicit guarantee on corporate financing and investment policies. They find that the gradual removal of the implicit government guarantee has had confounding effects on SOEs. Although weakening of the guarantee can help mitigate agency problems due to soft budget constraints, the intended objective of government policies, it exacerbates financial constraints of those with limited access to alternative sources of financing. Policies and regulations in general can deliver unintended and often counter-productive consequences (Brunnermeier, Sockin & Xiong 2022). Whether government policy interventions and reforms of the bankruptcy system for restructuring the debt of defaulting firms are needed to mitigate the likelihood of damaging crises remains an open question for future research.

3.2. Bankruptcy Filings

Figure 4 shows the total number of bankruptcy cases accepted in Chinese courts every year from 1989 to 2021, as reported by the Supreme People's Court (INSOL Int. 2018; Supreme People's Court 2021). The data show an initial increase in filings following the introduction of the 1986

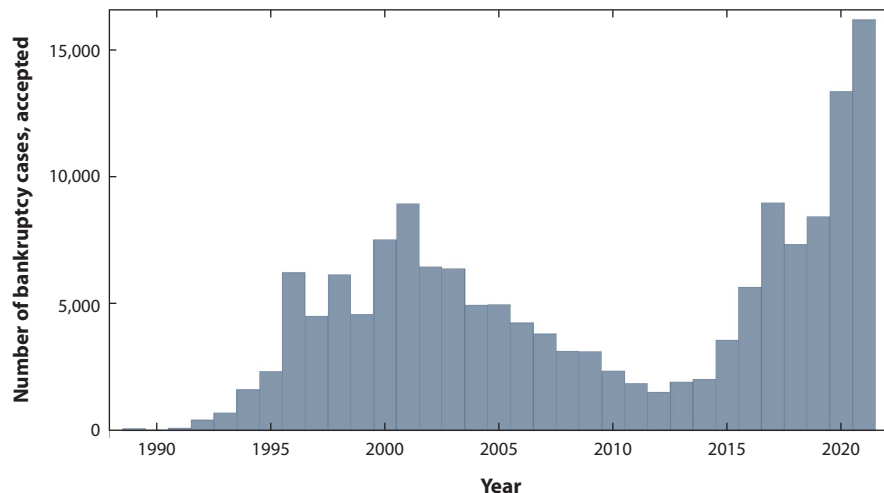


Figure 4

The total number of bankruptcy cases accepted in Chinese courts between 1989 and 2021, according to the aggregate statistics of the Supreme People’s Court. Data from INSOL Int. (2018) and Supreme People’s Court (2021).

Chinese bankruptcy law (discussed in Section 4) and up to the peak of the 1997 Asian Financial Crisis, which resulted in large increases in NPLs and defaults in the late 1990s and early 2000s. The first decade of the 2000s was characterized by a declining trend in bankruptcy filings in a period of fast economic expansion for China. The number of bankruptcy filings accepted in Chinese courts has been increasing substantially starting in 2013, from approximately 1,000 filings in 2013 to more than 15,000 in 2021.

The actual number of bankrupt firms in China likely exceeds the case numbers reported by the Supreme People’s Court. A potential explanation is that small firms with limited assets at the time of bankruptcy—and small number of creditors—might prefer to find an informal resolution with creditors out of court or dissolve without filing for formal bankruptcy. As we discuss in more detail in Section 4.2, understanding the limited use of formal insolvency in China and providing evidence on out-of-court insolvency resolution are important topics for future research.

3.3. Bond Default and Bankruptcy

Do firms that default on their bonds necessarily go bankrupt? Given the historical prevalence of an implicit government guarantee, limited research has been done regarding the relationship between default and bankruptcy. Nevertheless, how bond defaults are being resolved is an important question. Uncertain bankruptcy litigation procedures and political influence can affect the recoveries on defaulted bonds for domestic and global investors.

What are the typical ways the government is involved in rescuing failing firms, i.e., their implicit guarantee? A manual search of “government-led” resolutions in media and court documents associated with bond default cases shows that government participation can take the following forms: (a) through coordination with state-owned assets or trusts and government financing vehicles; (b) through distressed enterprise investment funds; (c) through the injection of capital from state-owned asset management companies; and (d) through funding provided by entrusted loans from SOEs as well as bank loans and credit guarantees.

Given the increasing number of corporate bond defaults since 2019 (as shown in **Figure 3**), the outcomes associated with default cases have become a first-order question. Amstad & He (2020) illustrate five major bond default cases prior to 2017 to show how local governments deal with defaulted bonds. These cases include Baoding Tianwei, Guangxi Non-Ferrous Metal, and Dongbei Steel, where the resolution of default followed US corporate bankruptcy procedures, signaling the fading away of the implicit guarantee. Another recent default in October 2020 was that of the Shenyang-based Huachen Automotive Group, one of China's largest SOEs and a joint manufacturer of BMW vehicles. The total amount of defaulted debt reached USD 20 billion, with available cash covering only one-quarter of it. Surprisingly, events moved quickly so that, by November, the massive group had entered bankruptcy proceedings.

Li et al. (2023) document a recent increase in the number of bonds in default whose issuers file for bankruptcy within 1 year. This trend includes bonds issued by SOEs, suggesting a shift in the government's stance toward bailing them out. The rise of SOEs going bankrupt after default has intensified since the COVID-19 pandemic, partly due to the limited resources and capacity of local governments to rescue zombie firms.

3.4. Nonperforming Loans and the Distress of Financial Institutions

The growth of nonfinancial corporate debt can lead to deterioration of the banking sector. According to data from the CBIRC and the Peterson Institute for International Economics (PIIE), as shown in **Figure 5**, an uptick in outstanding NPLs occurred after 2018, which was more pronounced among rural commercial banks and city commercial banks. These NPLs can

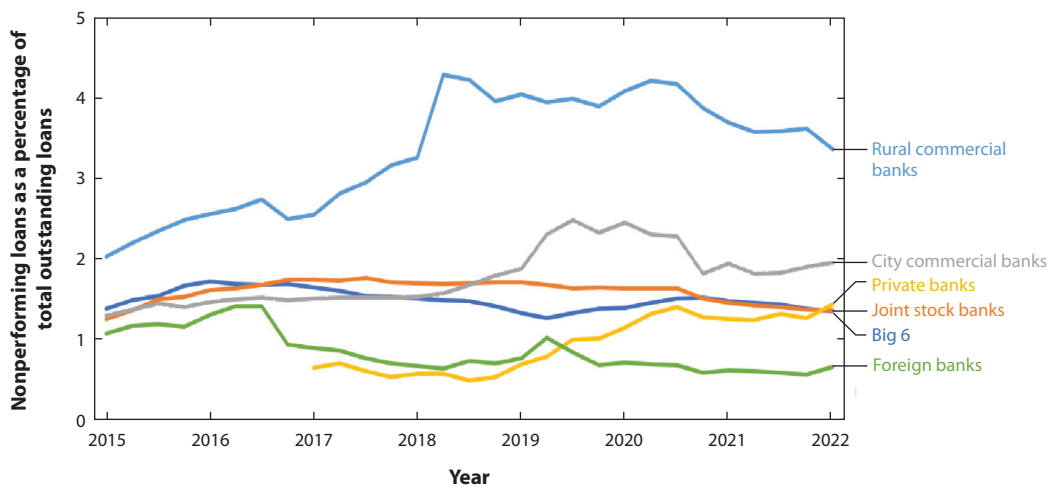


Figure 5

Nonperforming loans as a percentage of total outstanding loans, Q1 2015–Q1 2022. The figure shows the changes in nonperforming loans among different types of banks. Big 6 refers to major Chinese state-owned banks: Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), Agricultural Bank of China (ABC), Bank of China (BOC), Bank of Communications (BoCom), and Postal Savings Bank of China (PSBC). Joint stock banks adopt the modern enterprise organizational structure in the form of a joint stock system and operate in accordance with the operating principles of a commercial bank. City commercial banks serve the local economic development and the development of small- and medium-sized enterprises in accordance with the business principles of commercial banks at the city level. Private banks are controlled and operated by private capital. Rural commercial banks are joint stock local financial institutions whose shareholders are farmers, rural industrial and commercial households, business entities, and other economic organizations within its jurisdiction. Foreign banks refers to domestic banks controlled and operated by foreign capital. Figure adapted from CBIRC (2022).

underestimate actual bad loans, given opaque reporting to regulators. Banks' incentive to underreport asset losses can lead to delays in addressing problems within banks' loan portfolios.

The lack of an efficient mechanism to resolve NPLs and distressed banking assets is a fundamental concern to policy makers (Geithner 2009, Avgouleas & Goodhart 2017). Using detailed NPL transactions, Charoenwong, Miao & Ruan (2022) provide evidence that banks conceal NPLs with cooperation from government-established asset management companies. In addition, risks from misrepresenting or failing to resolve high levels of NPLs can increase the fragility of the financial system.

4. BANKRUPTCY LAW AND BANKRUPTCY OUTCOMES IN CHINA

4.1. Legal Framework: The 1986 and 2006 Bankruptcy Laws

The first attempts to introduce an insolvency law in China date back to the short-lived 1906 Qing Dynasty Bankruptcy Law (abandoned in 1908) and the Kuomintang Bankruptcy Law of 1935, which remained in force until the establishment of the People's Republic of China in 1949. For almost four decades—between 1949 and 1986—there was “virtually no knowledge, and certainly no experience nor practical application, of a bankruptcy law in China” (Harmer 1996, p. 2565). In the following 20 years, China introduced two bankruptcy laws, corresponding to periods of major economic reforms. The first bankruptcy law was approved in 1986, when China began its transition from a centrally planned economy to a market-based economy and the need for an insolvency procedure to deal with debt-burdened state-owned companies emerged. The second bankruptcy law was approved in 2006, after China entered the World Trade Organization, becoming a global player in international trade and a major destination for foreign direct investments. In what follows, we give a general overview of how these two reforms changed insolvency law in China.

The 1986 bankruptcy law—formally known as the Law on Enterprise Bankruptcy—was approved in December 1986 and became effective on October 1, 1988. The 1986 law was limited in scope: It only applied to SOEs. A separate piece of legislation—Chapter 19 of the Civil Procedure Law introduced in 1991—dealt instead with insolvency of non-SOEs. In addition, some local governments, such as the Shenzhen Special Economic Zone, had their own specific bankruptcy regulations. This created a patchwork of different legislation for dealing with insolvency in China. The limited scope of the law became an important limitation over time, as the market share of SOEs in the Chinese economy started to be eroded by a growing number of dynamic private firms.

The 1986 law gave first priority to secured creditors' claims in the order of repayment, followed by workers, tax authorities, and general unsecured creditors. However, during the 1990s, the State Council issued two decrees specifying that payment of resettlement costs and other benefits for employees of bankrupt SOEs should have priority over all other claims (Booth 2008).¹ These deviations from the wording of the law made the Chinese bankruptcy regime particularly unfriendly to secured creditors, prioritizing government interests and workers' claims, with the primary objective of maintaining social stability and preventing social protests. Finally, another important limitation of the 1986 law was the lack of a well-defined reorganization procedure.

¹These decrees took the form of “Notices.” In particular, the 1994 Notice specified that the proceeds obtained from selling the land-use rights of bankrupt SOEs should be used to cover the resettlement costs of employees. The 1997 Notice clarified that these payments to employees would take priority over secured creditors. If the proceeds from the sale of land-use rights were not sufficient to cover resettlement costs, these costs would be financed by auctioning firm property (whether secured or unsecured) and, if not sufficient, directly paid by the government at the same level of the bankrupt SOE (Booth 2008).

In August 2006, the National People's Congress approved the new Enterprise Bankruptcy Law, which became effective on June 1, 2007. The new law replaces the 1986 bankruptcy law and all other insolvency provisions in the Civil Procedure Law and the Company Law, providing a unified legal insolvency framework for China. The 2006 bankruptcy law changes several key aspects of insolvency resolution, adopting internationally recognized procedures and increasing creditors' protection.

First, the new law changes which firms can use the bankruptcy system. While the old law only applied to SOEs, the new law applies to all firms, including privately owned and foreign-owned companies. Second, the new law clarifies the priority of repayment of creditors in liquidation. In particular, secured creditors are given priority over any workers' compensation claims and should be repaid with the specific property used as collateral (Article 109).² Secured claims are followed by general expenses of bankruptcy proceedings, workers' claims, tax claims, and general unsecured claims such as suppliers (Article 113).

Third, the new law introduces a detailed reorganization procedure (Chapter 8) that resembles Chapter 11 of the US Bankruptcy Code. If a reorganization is approved by the court, the debtor has 6 months to propose a reorganization plan. Four classes of creditors (secured, workers, tax claimants, and general unsecured) must hold a meeting to vote on the reorganization plan, which needs approval from at least two-thirds of the claims within each class (although the court can use cramdown power in a dissenting class under certain conditions). The new law also adopts several internationally recognized practices, such as an automatic stay on assets (although with some limitations) and the introduction of a bankruptcy administrator, named by the court, who responds to the creditor's committee appointed by the court and to the judge.

Although the new bankruptcy law was largely inspired by the US Bankruptcy Code, differences between the two bankruptcy regimes remain. In **Table 1**, we compare the US and Chinese bankruptcy codes along a set of key provisions.³ Some aspects on which the two laws differ, on paper, include the following: the extent of the automatic stay on assets, the priority given to debtor in possession financing, the ability of creditors to propose reorganization plans, and the cap on workers' compensation claims.

Of course, the differences between the United States and China outlined in this section only pertain to the wording of the law on the books, not to its application in practice. In the next section, we discuss recent evidence on bankruptcy outcomes in China for the period after the introduction of the 2006 bankruptcy law.

4.2. Bankruptcy Outcomes After the 2006 Bankruptcy Law

Although the new bankruptcy law has been in force for 15 years, direct empirical evidence on its effects on bankruptcy outcomes is still lacking. Evaluating the impact of this law is particularly challenging due to the lack of detailed data on bankruptcy outcomes in China.

The Supreme People's Court official statistics report the total number of bankruptcy cases accepted in Chinese courts since 1989 (reported in **Figure 4** above). These data are useful for analyzing broad trends in bankruptcy filings. As shown in **Figure 4**, the introduction of the new bankruptcy law—which was enacted in 2007—was not followed by major changes in the number of bankruptcy cases accepted by Chinese courts. Also, the number of bankruptcy cases dealt with

²One exception is workers' claims filed before the introduction of the new law, which are granted special status and receive priority over secured claims (Article 132).

³For comparative studies of the US versus Chinese bankruptcy procedures, see also the work by Eaton et al. (2006).

Table 1 Comparison of US versus Chinese bankruptcy procedures

Key dimensions	United States	China
Initiation	Both debtor and creditor can file.	Both debtor and creditor can file.
Procedures available	Reorganization, liquidation.	Reorganization, liquidation.
Court in charge	US bankruptcy court (specialized).	Civil court or specialized court if present in the city where debtor is located.
Automatic stay	Yes, upon filing of the petition.	Yes, limited to the period between court acceptance of the reorganization case and appointment of the administrator.
Priority of claims	Secured claims, administrative expenses, workers compensation claims (capped), tax authority, general unsecured claims.	Secured claims, administrative expenses, workers compensation claims (uncapped), tax authority, general unsecured claims.
Creditors' committee	Yes, appointed by the US Trustee and composed of unsecured creditors.	Yes, can be established during creditors' meeting and can include representatives of all classes.
Reorganization plan	Yes, proposed by debtor within 120 days (extendable to 18 months) after petition. After this period, other parties can propose alternative reorganization plans.	Yes, proposed by debtor or bankruptcy administrator within 6 months (extendable to 9 months) after petition. After this period, if no plan is presented by the debtor or bankruptcy administrator, the reorganization case is closed and the company is liquidated.
Plan approval rules	A class of creditors approves the plan if two-thirds of claims and one-half of the number of creditors in that class have voted in favor of the plan. Plan needs approval from each affected class, but the bankruptcy court has the power of cramdown in the event of a dissenting class.	A class of creditors approves the plan if two-thirds of claims and one-half of the number of creditors in that class present at the creditor's meeting have voted in favor of the plan. Plan needs approval from each affected class, but the bankruptcy court has the power of cramdown in the event of a dissenting class.
DIP financing	Allowed. DIP lender entitled to first-priority status in case of liquidation.	Allowed. Level of priority of DIP lender not specified by the law.

Abbreviation: DIP, debtor in possession.

by Chinese courts is much lower than the number observed in the United States. As noted by Jiang (2013, p. 561), in “2009, bankruptcy filings totaled 1,473,675 in the United States, while the number of accepted bankruptcy applications in China reached only 2,434,” and actually declined in the years following the enactment of the new law.⁴ Understanding the reasons behind the limited use of formal insolvency procedures in China is an important research question. For example, Lee (2011) argues that the limited use of the new law—and of its reorganization procedure in particular—could be due to judges’ lack of familiarity with the new provisions, to the protection of state-connected firms by local government officials, and to the lack of qualified bankruptcy professionals. Jiang (2013) argues that one reason for the limited use of formal bankruptcy procedures in China is the deeply rooted belief that dispute resolution should be in the hands of the government rather than decided between private parties under the supervision of bankruptcy courts. Finally, the limited use of formal bankruptcy might be related to cultural norms and the stigma associated with bankruptcy in China, where there is a deeply rooted belief that bankruptcy is a

⁴Notice that by 2009 the Chinese economy—as measured by GDP—was already more than one-third the size of the US economy.

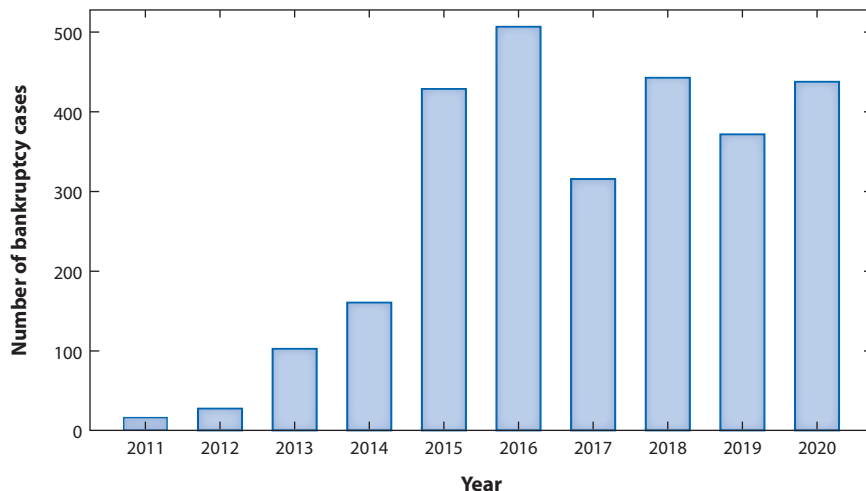


Figure 6

Number of bankruptcy cases reported in the National Corporate Bankruptcy Information Disclosure Platform. The figure shows the number of bankruptcy cases by year of acceptance, 2011 to 2020. Figure adapted with permission from Li & Ponticelli (2022, figure 2).

sign of failure, as in many developing countries. Bernstein, Hoffman & Iverson (2022) show that the provision of information and knowledge about bankruptcy lowers the stigma of bankruptcy. Overall, this remains an empirical question for which we do not yet have well-identified empirical evidence and, hence, is an important avenue for future research.

An important limitation for empirical research on this topic is that the Supreme People’s Court data do not provide case-specific information, thus preventing the type of diff-in-diff identification strategies that have been used to evaluate the impact of changes in bankruptcy laws in other countries. Recently, a new case-level data set on bankruptcies filed in Chinese courts has become available through the National Corporate Bankruptcy Information Disclosure Platform (NBIDP), an online platform launched in 2016 by the Chinese Supreme People’s Court that allows debtors and creditors to monitor the evolution of bankruptcy cases.⁵ For each case, the online platform reports the name of the company filing for bankruptcy, the name of the court in which the case was filed, the current status of the case, and the province, sector, size and ownership category of the bankrupt firm.

Figure 6 shows the number of cases reported in the NBIDP by the year of filing. As shown, the number of cases recorded in the online platform is significantly lower than the official statistics reported in **Figure 4**. Li & Ponticelli (2022) argue that the limited coverage of the bankruptcy disclosure platform data might be due to two reasons. First, because the platform was launched in 2016, cases filed before 2016 are recorded only if they were still in progress as of 2016. Second, and more importantly, although Chinese regulation requires judges and bankruptcy administrators to upload information on all cases on the online platform, it is clear from a comparison with the official statistics that, even starting from 2016, not all cases are reported. Li & Ponticelli (2022) argue that bankruptcy filings involving small firms with no assets left at the time of filing—likely a large fraction of bankruptcy cases in China—are “less likely to be reported by judges and bankruptcy administrators in the online platform, which instead tend to focus on larger cases where the insolvent

⁵The platform is publicly available at <http://pccz.court.gov.cn/pcajxxw/index/xxwsy>.

Table 2 Characteristics of bankruptcy cases recorded in the National Corporate Bankruptcy Information Disclosure Platform, 2011–2020

	<i>N</i> cases	Percent	<i>N</i> cases closed	Time in court (days)		
	(1)	(2)	(3)	Mean (4)	Median (5)	SD (6)
All	2,815		1,401	539	374	481
By case type						
Liquidations	2,337	83%	1,168	541	368	501
Reorganizations	478	17%	233	526	424	368
By firm size (number of employees)						
Below 50	2,044	72.6%	1,023	467	306	457
50–99	315	11.2%	156	725	670	455
100–499	355	12.6%	179	742	606	508
500–999	62	2.2%	20	916	904	610
1,000–4,999	28	1%	16	673	535	526
5,000 and above	11	0.4%	7	247	303	142
By firm sector						
Construction and real estate	565	20%	213	520	372	472
Electricity, gas, and water supply	73	2.6%	41	588	458	508
Finance	73	2.6%	33	416	258	401
Hotels and restaurants	67	2.4%	25	418	221	398
Manufacturing	1,166	41.4%	664	589	429	496
Mining	66	2.3%	23	577	486	470
Other	553	19.7%	267	514	356	482
Wholesale and retail trade	252	9.0%	135	400	236	413
By firm ownership						
Privately owned	2,635	93.6%	1,316	537	375	480
State owned	180	6.4%	85	567	344	499

Table adapted from Li & Ponticelli (2022, tables 1 and 5).

Abbreviation: SD, standard deviation.

Columns 3–6 show a set of stylized facts on case duration from Li & Ponticelli (2022); these data are from cases that were closed as of December 2020.

firm has positive assets at filing” (p. 466). Limited disclosure of judicial decisions by Chinese courts has been documented also by Liu et al. (2022), who document how courts tend to underreport cases involving publicly listed firms, especially when those firms are state owned.

In their study of the impact of specialized bankruptcy tribunals in China, Li & Ponticelli (2022) use these data to document a set of stylized facts on bankruptcy outcomes in the period between 2011 and 2020, after the introduction of the new bankruptcy law.⁶ **Table 2** reports summary statistics on the number of cases filed, number of cases closed, and time in court by case type and

⁶The data used by Li & Ponticelli (2022) were extracted from the platform in December 2020, when the platform contained 2,815 cases with available court documents, only half of which (1,401) had reached a formal conclusion.

firm characteristics. Similar to most emerging countries, liquidations in China represent the vast majority—83% of bankruptcy cases—while reorganizations represent only 17% of cases. In terms of firm size, 73% of bankrupt firms have fewer than 50 employees, 24% have between 50 and 499 employees, and the remaining 3% have 500 or more employees. In terms of firm ownership, only 6.5% of bankrupt firms are registered as state owned; the remaining are privately owned. Finally, in terms of sector composition, almost half of the cases recorded in the online platform are of firms operating in the manufacturing sector, followed by construction and real estate and wholesale and retail trade.

Figure 7 presents the number of cases filed each year between 2011 and 2020 by case and firm characteristics. The composition of cases by type is relatively stable over time, with liquidations consistently representing the vast majority in all years. However, some clear trends emerge in the composition of cases by firm size, sector, and ownership. In particular, bankruptcies of small firms have become a larger fraction of cases over time, increasing from 60% in 2011 to 85% in 2020. Relatedly, the share of bankruptcies of SOEs—which tend to be larger firms—has declined

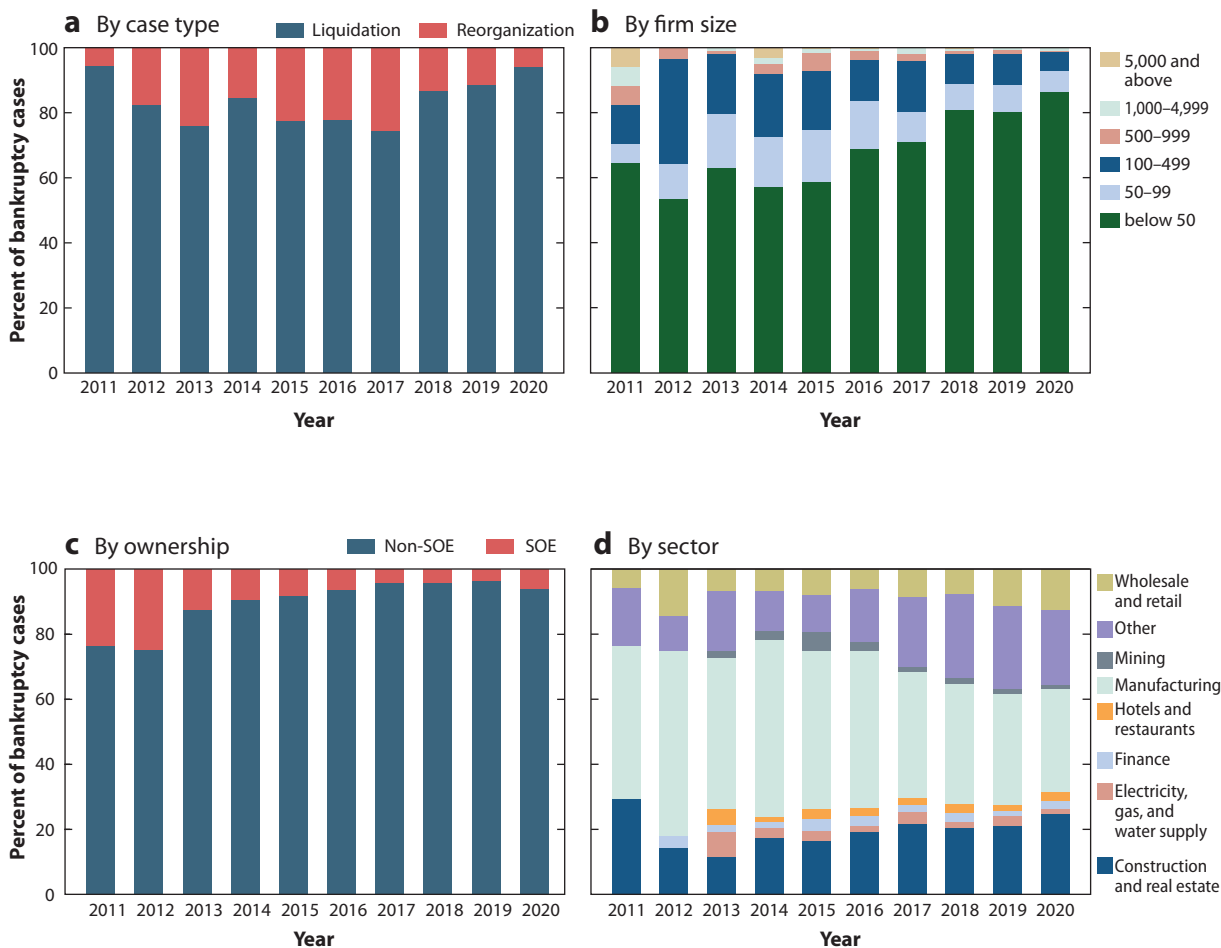


Figure 7

The percent of bankruptcy cases by year and case or firm characteristics (2011–2020). In panel *a*, cases switching between types are classified based on their initial filing. Abbreviation: SOE, state-owned enterprise. Figure adapted from Li & Ponticelli (2022, figure 3).

from more than 20% of cases in 2011 to roughly 5% in 2020. Finally, the share of manufacturing firms has been declining over time, while the share of bankruptcies of construction and real estate companies has increased.

Li & Ponticelli (2022) also report a set of stylized facts on case duration, which we replicate in columns 3 to 6 of **Table 2** by focusing on cases that were closed as of December 2020. The table reports the average, median, and standard deviation of case duration measured from the day of acceptance to the closing date.⁷ The average time in court for a bankruptcy case in China is approximately 540 days, or 1.5 years. This is approximately 50% longer than the average duration of bankruptcy cases in the United States, according to the World Bank Doing Business database (World Bank 2023). On average, reorganizations take approximately 20 fewer days in court than liquidations. The average time in court increases with the size of the debtor firm, except for very large firms—those with more than 1,000 employees—which instead emerge from bankruptcy relatively quickly. The time in court is longer for manufacturing, mining, utilities, and construction firms, while it is shorter for service sector firms such as hotels, restaurants, and retail firms. Bankruptcy cases of state-owned firms and privately owned firms show similar average duration.

Although these stylized facts provide a snapshot of bankruptcy outcomes in China after the introduction of the 2006 bankruptcy law reform, they cannot be used to evaluate the impact of the reform itself, because of the lack of case-level data in the pre-reform period. Future digitization of existing court documents on bankruptcy cases filed before the new law entered into force could help to gather the data required for more systematic empirical studies on the impact of the law.

4.3. Challenges in Implementation

China's new bankruptcy law constitutes a major step forward in terms of legislation on insolvency resolution. Despite the few differences highlighted in Section 4.2, the wording of the new law is very close to that of the US Bankruptcy Code, bringing internationally recognized procedures into the Chinese insolvency regulation and, at least on paper, increasing protection of creditors' rights. However, the extent to which this new law will be effective in practice largely depends on the institutions in charge of its enforcement. This is a common challenge faced by emerging economies when they enact reforms of their laws and regulations.

The literature on bankruptcy institutions in emerging economies has highlighted three major frictions in the enforcement of bankruptcy laws, which are also likely to pose challenges in the case of China. First, judges in charge of bankruptcy cases often lack the necessary training and specialization. Rulings in the bankruptcy of a corporation are a complex matter that require not only an understanding of the law but also a sound understanding of accounting and corporate finance principles to guide decisions that affect the future of the firm and the value of creditors' claims. Existing literature has shown that introducing specialized courts can mitigate this friction. For example, in the context of India, Visaria (2009) documents that introducing tribunals specialized in bankruptcy can increase loan repayment and reduce the cost of credit for local firms. China introduced liquidation and bankruptcy tribunals attached to existing courts after the introduction of the new law. Li & Ponticelli (2022) document that these specialized tribunals used better trained judges, which led to a 36% reduction in case duration relative to traditional courts.

⁷For cases for which the date of court acceptance is not available, we use the date of filing as a proxy for the acceptance date. The median gap between filing date and acceptance date in our data is approximately 20 days. The closing date corresponds to the final approval of the plan in a reorganization or the closure of the case after (usually partial) repayment of creditors in a liquidation.

The second friction is the duration of the bankruptcy proceedings. Time is of the essence if insolvency resolution is to achieve the successful reorganization of a distressed firm or the repayment of creditors using the assets of a liquidated firm. Several studies in both developed and developing countries have documented that courts in charge of bankruptcy cases are often slow at processing cases. Lengthy bankruptcy proceedings negatively affect recovery rates for creditors, which in turn undermines the ex ante ability of firms to access external finance (Ponticelli & Alencar 2016; Rodano, Serrano-Velarde & Tarantino 2016; Iverson 2017; Fonseca & Van Doornik 2022).

Finally, the decision to close or reorganize a business can be politically sensitive, especially because this process implies the layoff of workers. Thus, the judicial system can be subject to direct and indirect political influence from local or central governments. This specific friction is likely to be more prominent in China, relative to other emerging economies. Local courts in China often operate under the influence of local governments when dealing with bankruptcy cases (Henderson 2007; Fan, Huang & Zhu 2013; Li & Ponticelli 2022).

5. CONCLUSIONS AND OPEN RESEARCH QUESTIONS

This article reviews the literature on the growth of corporate debt in China, which accelerated after the 2008–2009 global financial crisis and was followed by a widespread increase in defaults in recent years. We present a set of stylized facts on the evolution of defaults in the bond market, NPLs, and bankruptcy filings. We also describe recent reforms in China's bankruptcy law along with the main challenges that China is facing in their implementation. Throughout the article, we emphasize several potential avenues for future research, which can be summarized in two broad areas.

First, we highlight that an important area for future research is the collection of new micro data that can inform the empirical research in banking and corporate finance in China. For example, as discussed in Section 4, there is a scarcity of detailed micro data on bankruptcy cases in China, including information on the decisions taken by judges adjudicating different stages of the process and the recovery rates obtained by creditors. The disclosure and digitization of existing court documents will gradually make available to researchers high-quality micro data enabling much needed empirical work in this area. In this respect, it is worth underlining that the Supreme People's Court has led an effort to upload judicial decisions by all Chinese courts on a centralized online platform starting in 2014.⁸ We believe this platform can be a valuable resource for researchers interested in the functioning of the Chinese judicial system and its effects on the economy, including when it comes to bankruptcy resolution. Still, as discussed by Liebman et al. (2020) and Liu et al. (2022), disclosure rates in this platform differ substantially across courts and may be influenced by political factors.

Second, in this article, we list several questions that are still unanswered in the area of debt default and bankruptcy in China. Such questions include: (a) the consequences of the recent sharp increase in bond defaults and NPLs on the stability of the Chinese financial system, (b) the financial and real effects of the 2006 bankruptcy law reform, and (c) the reasons behind the limited use of formal insolvency by Chinese firms. Let us also emphasize that, in this article, we do not discuss the issue of personal bankruptcy. However, we think of this as a particularly relevant topic for future research in light of the fast increase in household debt over GDP in China and the lack of a personal bankruptcy law.

⁸The online platform China Judgements Online is available at <https://wenshu.court.gov.cn/>.

DISCLOSURE STATEMENT

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