

BOFIT Policy Brief
2020 No. 3

Le Xia

Lessons from China's past banking bailouts



Bank of Finland, BOFIT
Institute for Economies in Transition

BOFIT Policy Brief
Editor-in-Chief Juuso Kaarevirta

BOFIT Policy Brief 3/2020
21 January 2020

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ISSN 2342-205X (online)

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Le Xia¹

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Abstract

China's banking sector, particularly small and medium-sized banks, today face a headwind of asset quality deterioration. Revisiting Chinese bank rescues from the early 2000s, we examine how the authorities tackled a severe rise in non-performing loans (NPLs). Following a discussion on cost-sharing among government agencies in that fitful NPL clean-up, we identify policy measures most suited to dealing with the current NPL situation.

Keywords: China, banking, NPLs, bank restructuring

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Introduction

The failure of three Chinese banks in summer 2019 grabbed headlines globally. On May 24 of that year, the People's Bank of China (PBoC) and China Banking and Insurance Regulatory Commission (CBIRC) declared the takeover of Baoshang Bank, an Inner Mongolia-based commercial bank ranked 37th among China's more than 4,000 banks. In July and August, the government stepped in to rescue two more regional banks, the Bank of Jinzhou and Shandong-based Hengfeng Bank. Creditors were forced to take losses, marking an end to the implied government guarantee Chinese financial institutions had previously enjoyed (PBoC, 2019).

The bailouts were not special cases, unfortunately. PBoC governor Yi Gang (2019) publicly acknowledged a general asset quality problem among China's smaller banks, rural credit cooperatives, and rural commercial banks. The PBoC (2019) went on to concede that the current rise in non-performing loans (NPLs) constitutes the largest threat to China's banking stability.

If China's economic growth continues to moderate and trade tensions with the US persist, the asset quality of the banking sector is set to deteriorate further in the years ahead. How should the government deal with the banking sector's re-emergent NPL problem? Seasoned investors may feel a bit queasy about this question. China experienced an NPL crisis 20 years ago so severe that it posed a material threat to financial stability and growth sustainability. At the end of 1997, official figures showed 25% of all bank loans to be non-performing. China's authorities undertook a series of measures in the following years that eventually returned the NPL stock to manageable levels.

This paper revisits the experience of China's authorities tackling the NPL problem at the beginning of 2000s, particularly how they dealt with the problem with respect to the "Big Four" state-owned commercial banks. In the following, we describe the NPL clean-up process, provide an estimate of its medium-term costs, and draw a few lessons from this experience useful in dealing with today's situation.

The rise of NPL problems at Chinese banks

The NPL problem of China's banking sector emerged during the 1980s and 1990s, even as the country's average annual GDP growth reached levels as high as 10%. By PBoC estimates, the NPL stock of China's banking sector as of end-1997 amounted to RMB 1.5 trillion (USD 180 billion), which corresponded to about 25% of all bank loans or 20% of GDP. Many market participants, especially foreign investors, believed the official estimate significantly understated the actual NPL amount. Standard & Poor's (2001), for example, said it was likely NPLs held by Chinese banks would have represented roughly 40% of total loans in 1997 if international accounting standards had been applied. Even Chinese officials later conceded that China's banking sector was essentially in a state of technical bankruptcy in 1997 (BBC, 2002).

The NPL crisis of the late 1990s was rooted in institutional problems. In classifying NPLs, Chen and Zhuo (2006) point to central and local governments as the prime culprit. Central and local governments jointly accounted for 40% of all NPLs. (See Figure 1 below.)

Even as China's command economy was transitioning to a market-based paradigm, state-owned banks remained tightly under government control. This constraint prevented them from allocating credit on a purely commercial basis. It was commonplace for the government to instruct state banks to finance investment projects undertaken by state-owned enterprises (SOEs) regardless of borrower creditworthiness. The IMF, for example, estimates that in 1997, when over a third of industrial SOEs posted losses, state banks continued to extend loans to SOEs (Wei and Wang, 1997). Given that these

many of these borrowers were unlikely to pay back what they owed, banks evergreened these loans in their books, leading to NPL accumulation on their balance sheets.

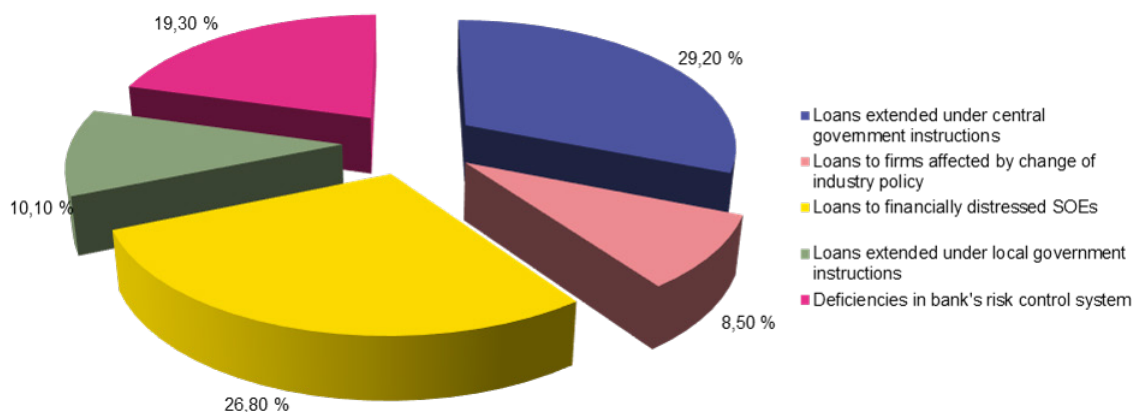
NPL problems at the local government level were even worse. During the 1980s and 1990s, provincial governments controlled bank personnel within their localities, giving local governments huge levers in determining bank credit allocation. To boost local economies, local governments would push banks to lend indiscriminately to firms within their localities and support ambitious investment projects such as highways, railways, and airports regardless of their investment returns or projected cash flows. The credit spree led to a large-scale waste and caused bank NPLs to soar (Chen and Zhuo, 2006).

Thanks to the implicit guarantees provided by the government, Chinese banks were allowed to keep their doors open even with balance sheets swamped by NPLs. Two events ended the authorities' complacency.

First, the Asian Financial Crisis (AFC) of 1997–1998 showed how damaging external financial shocks could be to a fragile banking sector and the real economy. Although China largely side-stepped the AFC thanks to its then-closed capital account, the suffering in affected countries prompted China's authorities to address the long-seated NPL problem in their domestic banking sector (Wang, 1999).

Second, as China's negotiations on joining the World Trade Organization (WTO) neared the finish line, the Chinese government began to come to terms with the implications of opening up the domestic financial market to the rest of the world. Included in the WTO ticket price was the requirement that weak domestic banks would have to face direct competition with sophisticated international financial institutions. This left China's authorities with only a narrow window during which to prepare the banking sector for the coming onslaught of foreign competition (Okazaki, 2007).

Figure 1. Breakdown of NPL origins



Source: Chen and Zhuo (2006).

NPL clean-up during 1999–2001

The authorities' efforts at addressing bank NPLs were launched in two phases. Both phases were marked with a national Financial Working Meeting (FWM), the first in 1997 and the second in 2002. Following the first FWM, the government put forward a number of reform measures geared to curtailing growth in the NPL stock and getting existing NPLs off bank balance sheets. These measures included:

- injecting equity to recapitalize state-owned banks;
- permitting banks to issue subordinated bonds to replenish their capital;
- accelerating the write-off of bad loans accumulated on bank books;
- establishing four asset management companies (AMCs) to receive the NPLs spun off from state-owned banks;
- enforcing international standards of NPL classification;
- requiring that banks operate on a commercial basis; and
- abolishing bank credit quotas.

Chief among the above measures were capital injection and the establishment of the four AMCs. In August 1998, China's Ministry of Finance (MOF) issued special government bonds worth RMB 270 billion (USD 32.5 billion) to the largest four state-owned banks (ICBC, CCB, BOC, and ABC), and then returned the proceeds to them in form of equity capital (Table 1). These special government bonds bore a fixed interest rate of 7.2% with a maturity of 30 years. In 2004, the 10th National People's Congress passed a bill that reduced the fixed interest rate of those special government bonds from 7.2% to 2.25%. The MOF's recapitalization increased the capital of these four state-owned banks from RMB 208 billion to RMB 478 billion and brought their average capital adequacy ratio (CAR) up from 3.5% at the end of 1997 to around 8% in 1998. By 1999, the average 8% CAR was broadly in line with the international standard under the Basel I framework at the time.

Table 1. Capital injections to China's Big Four banks in 1999, RMB billion

	Capital Injection
ICBC	85
BOC	43
CCB	49
ABC	93

Sources: Financial reports of the Big Four banks.

In addition to the MOF capital injections, the authorities established four AMCs in 1999 to receive the NPLs taken off the books of large state-owned banks. Initially, each of the four AMCs (Cinda, Huarong, Orient, and Great Wall) was dedicated to a particular state bank and focused solely on recovering at least part of the value of the NPLs transferred from that bank. The four pairings were Cinda-CCB, Orient-BOC, Great Wall-ABC, and Huarong-ICBC. Cinda differed slightly from the other AMCs in that it also took in NPLs from China Development Bank (CDB), one of China's three policy banks (public banks). Cinda also later accepted NPLs from Bank of Communications (BoCOM).

The authorities devised the mechanism by which AMCs would acquire NPLs from large state-owned banks. First, the MOF gave RMB10 billion to each AMC as equity. Second, the PBoC

provided direct refinancing of RMB 570 billion to the AMC for their acquisition of bank NPLs. In the final stage, the AMC issued their bonds (AMC bonds) to their paired banks at a 2.25% fixed interest rate in exchange for bank NPLs. The AMC bonds had an initial maturity of 10 years, and were rolled over when they matured. With the funds at their disposal, the four AMCs acquired RMB 1.41 trillion of NPLs at face value from their paired large state-owned banks. The aggregate size of transferred NPLs accounted for more than 20% of these four banks' combined loan portfolios – an amount equivalent to 18% of China's GDP in 1998. Table 2 shows the details of the NPL transfers to AMCs and their paired banks during 1999–2001.

Table 2. First round of bank NPL transfers and financing means, RMB billion

	NPL transfer	AMC bonds	Cash
ICBC	408	313	95
BOC	267	160	107
CCB	250	247	3
ABC	346	0	346
CDB	145	91	54

Sources: Banks' financial reports and author's estimates.

Even with the above measures, the NPL problem did not ease immediately. Official figures reveal that the NPLs of the Big Four banks still amounted to RMB 1.7 trillion (or 21.4% of total loans) in 2002 after the transfer of RMB 1.4 trillion NPLs to the AMCs. Moreover, the recovery rate on the transferred NPLs was low (Table 3), and the process dragged on longer than expected (Chen, 2006).

Table 3. NPL recovery rates as of December 2005

Asset Management Corporations	Recovery rate for assets	Recovery rate for cash
China Huarong	27%	22%
Great Wall	13%	10%
China Orient	27%	23%
China Cinda	34%	32%
Overall	24%	21%

Sources: CBRC website and CEIC.

The stubborn persistence of the NPL problem in Chinese banks can be attributed to the fact that China experienced an economic slowdown in 1998. The AFC triggered currency depreciations in several Asian countries that significantly weakened China's export competitiveness. In 1998, China's official GDP growth was 7.8%, atypically missing the official target of 8%. Official growth figures, of course, have long been challenged by scholars and foreign investors as they fail to reconcile with other economic activity indicators such as industrial output and fixed asset investment (Holz, 2014), but the government's readiness to acknowledge the deteriorated macro-economic environment was something of a breakthrough. This not only weighed on bank asset quality, but more importantly, the first round of NPL transfers and capital injections failed to address corporate governance issues at large state-owned banks. In the aftermath of NPL transfers, the large state-owned banks continued to

allocate credit according to political wishes rather than a commercial basis, leading to a rapid accumulation of new NPLs.

Bank restructurings from 2002 onwards

At the second Financial Working Meeting in February 2002, China's authorities unveiled a new set of strategies for bank restructuring. This time they focused on both clean-up of the existing NPLs and dealing with deep-seated corporate governance issues at the large state-owned banks.

In this round, the bank restructuring plan called on the authorities to take a three-pronged approach:

- Stage a second round of NPLs transfer from large state-owned banks to the AMCs, so as to further lessen banks' burden of bad debt and to enable them to extend new loans to the economy.
- Inject a large amount of capital into state-owned banks to increase their ability to fend off risk.
- Diversify bank ownership by allowing foreign capital investment in banks and then encourage banks to go listed on overseas and domestic stock markets.
(This last measure was intended to tackle the corporate governance issue of these state-owned banks and enhance overall efficiency through the transfer of advanced techniques that accompanied foreign capital participation.)

The second round of NPL transfers

In 2004 and 2005, the PBoC acquired NPLs of around RMB 1.028 trillion from CCB, BOC, and ICBC with PBoC special bills, and then auctioned NPLs to the AMCs. Unlike in the first round, the PBoC did not purchase NPLs from the three banks at their full book value. Instead, negotiated discount rates were applied to the NPL deals between the PBoC and each bank. This move was equivalent to forcing banks to write off part of their NPL losses (the PBoC's discount rate) to make the transfer. In the following step, the PBoC offered larger discount when reselling their acquired NPLs to the AMCs. As such, the AMCs acquired the NPLs at market value while the PBoC had to take losses equivalent to the difference between their payment to the banks and their received proceeds from the AMCs.

The PBoC acquired a total of RMB 494 billion in NPLs from CCB and BOC for around 30% of their book value in 2004. These were then resold to the AMCs at a further discount.

In 2005, the PBoC acquired an additional RMB 469 billion in NPLs from ICBC at a smaller discount (8.2%), and then auctioned them to the AMCs at a large discount (about 75%). As in the case of CCB and BOC, ICBC received the payment in the form of PBoC special bills with a five-year tenor and an interest rate of 1.89%.

Table 4. Second round of NPL transfers in 2004–2010, RMB billion

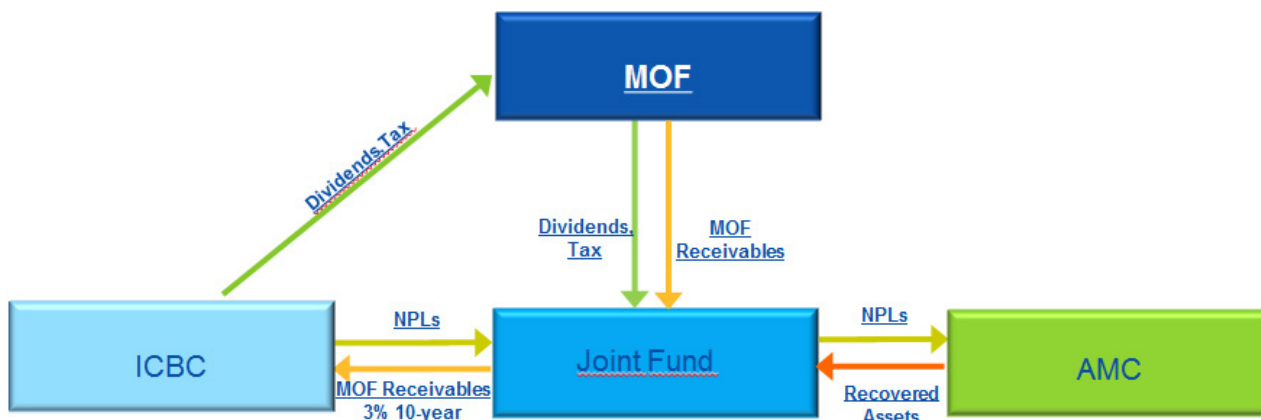
	Book value of NPLs	PBoC special bills to banks	AMC payments to PBoC
ICBC	469	431	113
BOC	308	92	75
CCB	186	64	45
ABC	65	65	16

Sources: Banks' financial reports and authors' estimates.

In this new round of NPL clean-up, the MOF also started to explore new ways to help banks to tackle the NPL problems. For this purpose, the MOF set up a joint fund with ICBC in 2005. The mechanism worked as follows (Figure 2):

- ICBC injected NPLs with a book value of RMB 246 billion into the joint fund.
- ICBC received in return the equivalent amount of MOF receivables bearing a 3% interest rate and a five-year tenor.
- During the life of the fund, the MOF, which is also a large shareholder of ICBC, would place dividends and other relevant income it received from ICBC into a joint fund until the MOF receivables were paid off.

Figure 2. Model of joint fund adopted by the MOF and ICBC



By the first quarter of 2010, the MOF had paid off all the receivables held by ICBC. A similar mechanism was adopted by the MOF in 2010 when ABC was restructured. The total amount of NPLs put into the joint fund this time around was increased to RMB 766.8 billion. Accordingly, the lifetime of the new fund was extended through 2022.

Additional capital injection from Huijin

On top of the NPL transfer, China's authorities embarked on a new round of capital injection into the Big Four starting in 2003. This time the PBoC, through its subsidiary company of Central Huijin Investment, took the lead in capital injection. The amounts and timing of the capital injections are listed in Table 5.

Table 5. Capital injection with foreign reserves

	Year	Capital injection, USD bn	% of foreign reserves	% of bank's total asset
ICBC	2005	15	2.4%	1.9%
BOC	2003	23	7.7%	6.7%
CCB	2003	20	6.9%	4.7%
ABC	2008	19	1.2%	1.9%

Sources: Financial reports of the respective banks.

Certain difference existed for the banks. BOC and CCB received new capital from Huijin at the end of 2003. Before the capital injection, the MOF was the sole shareholders of CCB and BOC. But after the injection, Huijin became the 100% shareholder in both banks, while the MOF's shares of CCB and BOC were wiped out in full.

As for ICBC and ABC, the MOF invented the joint fund mechanism described in the previous section as a means for NPL clean-up. It allowed the MOF to retain part of its shareholdings in ICBC and ABC even after Huijin injected large amounts of foreign reserves to the two banks.

In the case of Bank of Communications, the total capital injection of RMB 8 billion consisted of RMB 3 billion from Huijin and RMB 5 billion from the MOF. As such, the MOF continued to be one of largest shareholders of the Bank of Communications after the restructuring.

Foreign equity participation

As an integral part of bank restructuring, foreign strategic investors were invited to take a stake in domestic commercial banks, including the large state-owned banks. This measure marked a far-reaching shift in the official policy stance, even if the government still had reservations for allowing foreign investors to hold the majority of the shares in domestic banks. By implementing such a partial opening-up strategy in the domestic banking sector, the authorities hoped to improve corporate governance of banks and facilitate know-how transfers from foreign strategic investors (international financial institutions in most cases) to domestic banks. Moreover, the participation of foreign strategic investors would substantially boost the confidence of overseas investors in China's banking restructuring and thereby pave the way for the public listing of large state-owned banks lists on overseas exchanges.

Table 6 summarizes foreign strategic investors' participation in the Big Four since 2005. The strategy of involving foreign partners in banks' restructuring has been proved successful in the sense that it has helped many Chinese banks to raise capital in international capital market. In the meanwhile, those foreign strategic investors also made lucrative profits when they exited Chinese banks.

Table 6. Foreign investor participation in the Big Four

Chinese bank	Foreign acquirer	Date	Stake(%)	Price(mn USD)	Exit Date
ICBC	Goldman Sachs	Mar-06	7.0	2,580	May-13
	Allianz	Mar-06	2.5	1,000	Mar-11
	America Express	Mar-06	0.5	200	Aug-11
	Kuwait Investment Authority	Apr-06	1.0	719	n.a
BOC	UBS	Sep-05	1.6	500	Jan-09
	ADB	Oct-05	0.2	75	n.a
	Temasek	Dec-05	5.0	1,500	Jul-11
	The Bank of Tokyo-Mitsubishi UFJ Ltd.	Jun-06	0.2	180	n.a
CCB	Bank of America(BoA)	Jun-05	9	2,500	Sep-13
	Tamasek	Jul-05	5.1	1,460	n.a
ABC	Standard Chartered	Jul-10	0.4	500	Apr-15
	Rabobank	Jun-10	0.2	250	n.a
	Temasek	Jun-10	0.1	200	n.a
	United Overseas Bank	Jun-10	0.1	100	n.a

Sources: Big Four financial reports and other publicly available information.

Indeed, most foreign strategic investors exited the Big Four in the following years (Zhang and John, 2017). Although each investor has their own reasons for doing so, there was a gradual general appreciation that they had little success in influencing the operations of Chinese banks where the state remained the majority shareholder. On the positive side, their investment in Chinese banks had brought about sizable profits for them upon exit. For example, Goldman Sachs overall earned some USD 10.2 billion from selling its shares in ICBC on an initial investment of just USD 2.58 billion.

NPL clean-up costs

An enormous amount of funds went to restructuring China's ailing large state-owned banks through NPL clean-up and capital injection. Ma (2006) estimates that the cost of restructuring China's banking sector was as much as RMB 4.047 trillion. His calculations of bank restructuring costs include:

- the actual losses of NPLs;
- the costs of the two rounds of capital injection into banks; and
- costs of foreign investors' equity participation in banks.

Our estimates differ with Ma (2006) in two aspects. First, we only focus on the bailout costs of Big Four rather than the entire banking sector. Second, we argue that foreign investment in Chinese banks had a commercial basis and should not be included in government bailout costs. Indeed, the fact that most foreign investors walked away with generous profits from their previous investments in Chinese banks bolsters our argument.

Therefore, our estimates of total bailout costs only include the first two cost items of Ma (2006). It is straightforward to calculate the sum of capital injections in two rounds. The first round of capital injection was carried out by the MOF, which paid a total cost of RMB 270 billion. The second round of capital injection was through Huijin, basically an agent of the PBoC, in the total amount of RMB 627 billion (USD 76.5 billion).

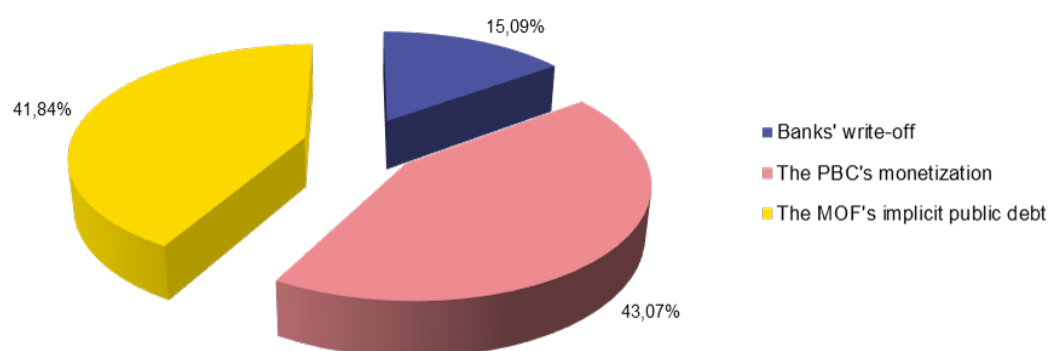
The non-trivial challenge is calculating how the actual losses of NPLs were absorbed. It appears that a few major stakeholders shared the costs of NPL clean-up: the banks, the AMCs, the PBoC, and the MOF. The AMCs, of course, were established by the PBoC and the MOF, leaving us with three main stakeholder groups:

- **Banks:** the costs of NPL clean-up directly came from their write-off of NPLs when transferring them to the AMCs or joint funds with the MOF.
- **The PBoC:** Some of its losses in the NPL clean-up was reflected in the difference between its payment to the banks in exchange for NPLs and its received proceeds from reselling the acquired NPLs to the AMCs in the second round of bank restructuring. The PBoC also provided refinancing to the AMCs to allow them to directly acquire NPLs at their book value in 1999–2001. The PBoC absorbed these related costs by monetization of the debt.
- **The MOF:** the costs of NPL clean-up consisted of two parts. First, the MOF was an AMC stakeholder, so it had to assume AMC losses when the recovery on NPLs was insufficient. Second, in the later cases of ICBC and ABC, the MOF directly set up the joint funds with two banks, and therefore assumed the responsibility of paying off the NPLs injected into the funds by these two banks.

Figure 3 illustrates the distribution of the costs of NPL clean-up the banks, the PBoC, and the MOF. We assume here that the recovery rate of all NPLs is 24.2% as reported by the CBRC and Cinda. Taking the total losses of RMB 2.49 trillion, the banks accounted for RMB 376 billion, the PBoC RMB 1.07 trillion, and the MOF RMB 1.04 trillion. If we include the bank write-offs to the MOF, the costs of the MOF rise to RMB 1.42 trillion.

All in all, the second round of NPL clean-up achieved its goal. There was no quick rebound of NPLs at the Big Four banks. Moreover, the clean-up seems to have spurred improvements in bank efficiency. Although their efficiency on average still lagged behind foreign banks and joint-stock commercial banks in 2011, large state-owned banks managed to improve their efficiency more than other types of banks in 2006–2011 (Fungacova et al., 2013).

Figure 3. Distribution of NPL-related costs



Source: Author's estimates.

Bank restructuring and public debt

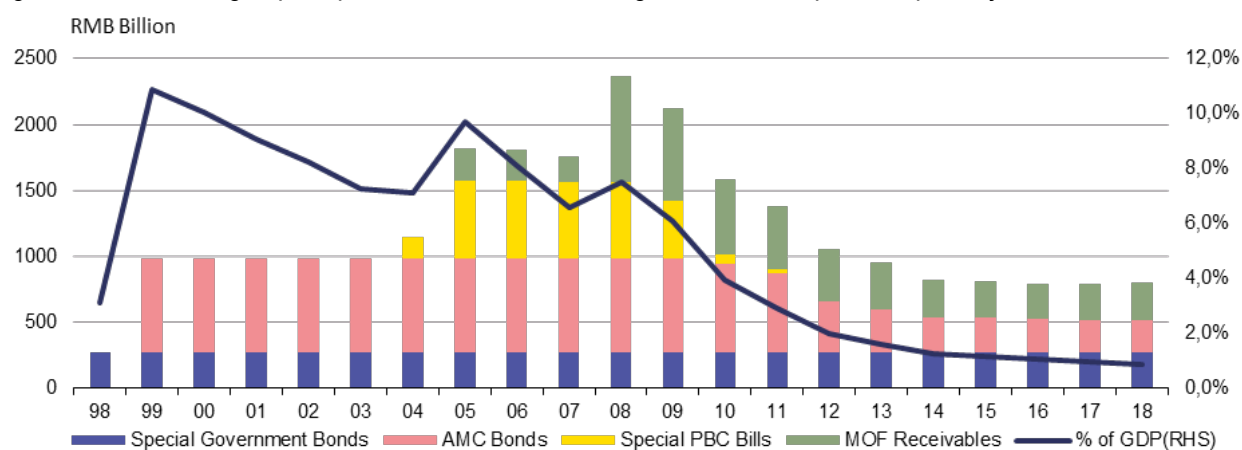
The two rounds of NPL clean-up and capital injection boosted public debt. However, most of that debt was not booked to the central government's fiscal budget or its balance sheets under China's fiscal system. Instead, a share of public debt became implicit debt of the Chinese government.

Generally speaking, the public debt related to bank restructurings fell into four categories:

- Special government bonds issued by the MOF in 1998 for bank capital injection;
- AMC's bonds issued to banks in 1999–2001 in exchange for NPLs;
- PBoC special bills issued in 2004–2005 in exchange for NPLs; and
- MOF receivables issued to ICBC and ABC in exchange for these two banks' NPLs.

Figure 4 demonstrates the evolution of implicit public debt incurred by NPLs clean-up and capital injection. The absolute amount of related public debt peaked at RMB 2.37 trillion as of end-2008 when a large chunk of NPLs were spun off from ABC. By 2018, the outstanding amount had been reduced to around 800 RMB billion. In terms of its share to GDP, the highest percentage appeared in 1999. By 2018, the outstanding amount only accounted for 0.9% of nominal GDP from 11% of GDP in 1999 thanks to the debt payment as well as China's rapid GDP growth over the past couple of decades.

Figure 4. Outstanding implicit public debt incurred through NPL clean-up and capital injection



Sources: CEIC, bank financial reports and author's estimates.

Conclusions and policy suggestions

China's experience from bailing out its Big Four state banks in the early 2000s provides a context for the current efforts of Chinese authorities to deal with a new emerging NPL problem in Chinese banks. China's banking sector today is much safer and stronger than it was two decades ago, which is evidenced in the comprehensive implementation of internationally recognized supervisory standards such as the Basel Committee's capital rules and the elimination of the governments' day-to-day interventions. The current NPL problem mainly applies to smaller lenders. The large banks, at least so far, are still safe (Stevenson and Cao, 2019).

That said, a number of deep changes complicate the current situation and warrant the authorities' immediate attention. The total assets of banks as a percentage of GDP climbed from 140% in 1999 to 292% in 2018, and the entire financial system is much more complex than earlier. In addition to the discussed formal banking sector, a gigantic shadow banking system has taken root over the past decade (Ehlers et al., 2018). China's financial system and capital account have also become more open to the rest of the world, making it impossible to tackle NPLs without triggering external pressures.

The evolution of China's financial system means that cleaning up today's NPLs in smaller banks is a thorny task – and not necessarily simpler than 20 years ago. Fortunately, the authorities can draw some useful lessons from the previous NPL episode.

For starters, bailing out banks is expensive. The total cost of bailing out the Big Four state banks in early the 2000s amounted to RMB 2.49 trillion, which was roughly 30% of China's 1999 GDP. The cost is so high so that it needs a team of actors that includes the central bank, the fiscal authority, special vehicles to deal with the NPLs (AMCs), and foreign investors to share the bill. It implies a big burden on taxpayers, although part of cost is through monetization of debt.

Second, the severing and moving of NPLs from their originator banks to AMCs, even with repeated capital injections, does not always solve the problem. The unsuccessful first-round efforts at NPL clean-up during 1999–2001 show that banks can continue to accumulate new NPLs even amidst a bailout. In other words, the authorities must provide safeguards that stem the rise in new NPLs as they clean up the existing mess.

Third, it could be inappropriate for AMCs or other special NPL-dealing institutions to acquire NPLs from the banks at their face value. Of course, this problem only arises if the authorities are willing to intervene at such a scale, aware that the recovery rate for NPLs tends to be quite low. More importantly, forcing AMCs to take NPLs at an unfair price could create its own perverse incentives that lead to the fast rise in new NPLs.

Fourth, the introduction of new external investors could stabilize market confidence and improve corporate governance of banks. In the early 2000s, foreign investors played a big role in boosting external confidence. Under the current circumstances, Chinese authorities may want to seek other options. They can open the domestic banking sector further to attract foreign capital that acquires distressed banks, or open the banking sector to private domestic investors.

Finally, the authorities should see the current moment as an opportunity for eliminating implicit guarantees to banks and state-owned-enterprises (SOEs). Allowing creditors, particularly institutional creditors, to share in the bailout costs, makes them more selective in choosing their banks in future. It could incentivize banks to increase their level of risk management so as to attract more clients. Moreover, the elimination of implicit guarantees to SOEs will force banks improve their efforts in identifying sound clients and managing relevant risks, rather than blindly lending to the projects with implicit government guarantees.

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