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Privatization of Public Sector Banks in India: Why, How and How Far

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PRIVATIZATION OF PUBLIC SECTOR BANKS IN INDIA WHY, HOW AND HOW FAR

NCAER Working Paper

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Abstract

Banks play a critical role in economic growth. In India, the banking sector, dominated by public sector banks (PSBs), has underserved the economy and their stakeholders. The under-performance of PSBs has persisted despite several policy initiatives during the past decade. Meanwhile, private banks have further improved their performance and have gained significant market share. In this paper, we have made the case for privatization of PSBs. Due to its better performance and adhering to the development view of the PSBs, we propose that the State Bank of India (SBI) may remain under government ownership for now, but all other banks should be privatized. In order for them to set an example for the success of future privatizations, the first two banks for privatization should be the ones with better asset quality and higher returns. The most critical element for privatization to succeed would be the withdrawal of the government from the post-privatization board of the bank. The paper proposes a couple of different pathways to successfully transition the sector toward private ownership. It cautions that the status quo will result in further erosion of the market share of PSBs toward oblivion, while impeding India's economic growth and inflicting substantial costs onto the depositors, firms, taxpayers and the government as their majority owner in the interim.

Keywords: Bank credit, Public sector banks, Privatization, India

JEL Classification: G21, G28, K23, L33, E23

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1. Introduction

Finance is the lifeblood of an economy. Banks have a special role in ensuring that this lifeblood flows from the source where it is generated to the parts of the economy that exhibit the highest growth potential. This function assumes special importance in developing countries since the available finance is scarce and returns across projects show a high degree of variance. The problem is compounded by relatively underdeveloped capital markets in the early stages of development, as this means that savers lack the instruments to directly invest in enterprises that promise high returns. Intermediation through the banks is their principal hope of earning decent returns on savings.

Poor investment choices by banks do not only lead to poor performance by the economy but also undermine the banking system itself. Such choices result in frequent defaults by borrowers and the accumulation of large losses by the banks. The latter, in turn, threaten a default by banks themselves on their obligations to the depositors. Since depositor interests are difficult to ignore in a democracy and large losses by banks pose a systemic threat to the economy, the government has to come to their rescue using valuable taxpayer resources. To avoid such episodes, it is important that banks are subject to commercial pressure and are closely monitored and regulated.

In India, banks have done a generally poor job of lending, resulting in frequent defaults on repayments, and consequently episodes of large accumulations of non-performing assets (NPAs).¹ In turn, the government has had to repeatedly deploy massive volumes of taxpayer money to recapitalize the banks to jumpstart stalled lending and pre-empt financial crises. Central to these repeated NPA episodes has been the public-sector ownership of banks, accounting for three-fifths of banking assets. As we will see, the NPA problem is primarily concentrated in these public sector banks (PSBs) and, indeed, they have been the sole beneficiaries of recapitalization financed by taxpayer money. Our view in this paper is that without transferring the ownership of these banks into private hands, the banking sector in India cannot be placed on a path to the sustained growth free of repeated episodes of NPAs. In principle, it is possible to reform PSBs while keeping their ownership in government hands but in practice, such reform has not happened and is unlikely to happen within the bureaucratic system of India. Hence, it is essential to focus on

¹Figure A1 in the appendix to this paper provides a comparison of the bank NPAs in India with those in other countries.

making the case for the privatization of PSBs and outlining the possible paths to it. This, therefore, is the task we set for ourselves in this paper.

Before we turn to the main subject of the paper, however, we find it useful to provide the reader a brief post-Independence history of banking in India. Accordingly, we offer a bird's eye view of the evolution of banking in India from Independence to 1991 in this introduction. Thereafter, in Section II, we present a slightly more detailed picture of the evolution of the key indicators during the three decades beginning with 1991. We then turn to an assessment of PSBs versus private banks (in Section III), making the case for privatization (in Section IV), and outlining the possible paths to it (in Section V). We conclude with a long summary of the paper (in Section VI).

At the time of Independence, all Indian banks were private. Even the Reserve Bank of India (RBI) was not entirely in the public sector until it was nationalized in 1948. In 1955, the government created the first public-sector commercial bank, the State Bank of India (SBI), by nationalizing the Imperial Bank and merging former State-owned and State-associated banks with it. In 1959, the government took over another eight State-associated banks, making them subsidiaries of SBI. These actions brought one-third of the then banking assets into the public sector.

There were two further episodes of nationalization. In 1969, fourteen private banks, each with Rs. 500 million or more in deposits, were nationalized. In 1980, another six private banks, whose deposits had come to exceed the Rs 500-million threshold by then, were nationalized. These nationalizations placed the government firmly in control of the banking sector and at least until the launch of the economy-wide reforms in 1991, market forces had little play in the sector.

Between 1969 and 1991, the government pursued two main objectives: expansion of bank branches into rural and semi-rural areas to bring banking to them, and redirection of credit to the "priority sectors", which it considered underfinanced. The bank-branch-expansion program led to the opening of many unviable bank branches and was formally discontinued in 1990. Priority-sector lending contributed to the problem of NPAs, which has plagued the sector repeatedly since formal norms for such classification were first adopted in 1985.² Despite the

²Figure A2 in the Appendix provides a comparison of NPAs in the priority sectors and the remaining ones. NPAs in priority sectors had remained lower than those in the remaining sectors until 2014-15. But once the RBI tightened norms on the restructuring of loans, the former rapidly ballooned relative to the latter.

recommendation by the Narasimham Committee I as early as 1991, priority-sector lending has not been phased out.³

Prior to post-1991 liberalization, RBI controlled nearly all borrowing and lending interest rates, and was the final decision-making authority on all loans of Rs. 40 million or more. It also engaged heavily in financial repression by setting the Cash Reserve ratio (CRR) and Statutory Liquidity Ratio (SLR) at ultra-high levels. The result was slow growth of the banking sector such that bank credit was barely 24.1 percent of GDP till as late as 1991-92. In this backdrop, let us consider the evolution of some key banking-sector indicators during the last three decades.

2. Evolution of Key Indicators: 1991-2021

Taking the banking sector as a whole, Table 1 provides the values of assets, deposits, credit, and credit to the private sector as proportions of GDP at the end of financial years 1991-92, 2000-01, 2010-11, and 2020-21. All the four indicators, especially assets and credit, show the fastest growth during the middle of the three decades covered.

Table 1: Size of the Indian Banking Sector as a percent of GDP:

1991-92 to 2020-21

Indicator	1991-92	2000-01	2010-11	2020-21
Assets	51.6	60.5	94.1	99
Bank Deposits	40.1	49.3	73.6	78.7
Bank Credit	24.1	24.6	56.3	54.6
Credit to Private sector*	21.7	21.0	51.6	49.4

Source: Reserve Bank of India statistical tables.

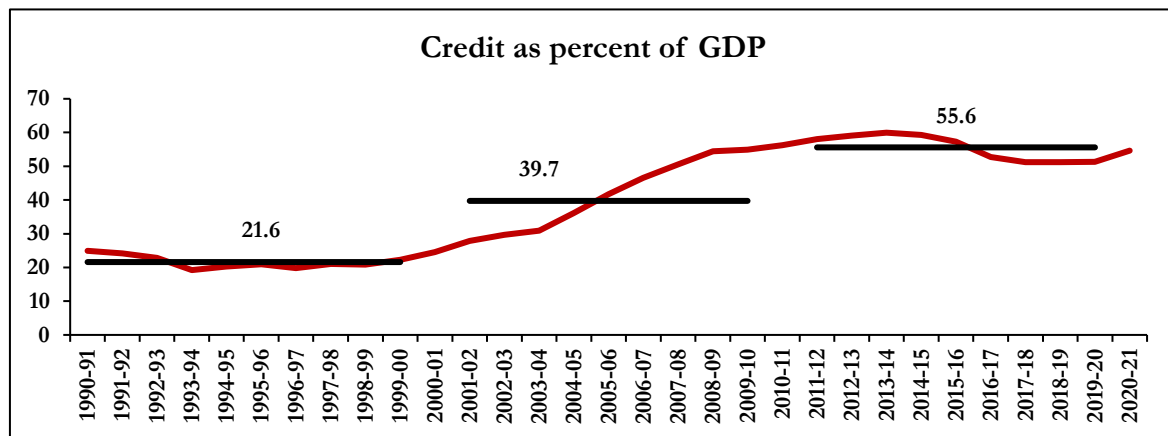
As is now well known and we shall further document below, the decade 2004-14 saw extra rapid expansion in bank lending and a significant part of it without due diligence. The result was the accumulation of a massive volume of NPAs and sudden brakes on lending in the second half of the decade of the 2010s. Albeit, deposits as a proportion of GDP expanded more rapidly during the decade of the 2000s as well but whereas they increased by less than 50 percent, credit as a proportion of GDP expanded by more than 100 percent.

³Narasimham 1991.

Figure 1 graphically depicts the phenomenon of rapid credit expansion: It saw massive growth in relation to GDP until approximately the mid-2010s. The process then reversed itself with shrinking of the credit-to-GDP ratio. Despite some recovery subsequently, the credit-to-GDP ratio in 2020-21 remained below the level it had achieved a decade earlier in 2010-11.

The fact that loans were indeed advanced to unworthy borrowers during the rapid expansion phase of credit is evidenced prima facie by the evolution of NPAs and the return on assets, as depicted in the left and right panels, respectively, of Figure 2. From the 6 to 7 percent range in the late 1990s, NPAs fell in the subsequent years as bank assets expanded during the 2000s, but they again rose sharply after 2014-15, returning to their 1997-98 level by 2017-18. This latter period also saw a sharp decline in the returns on assets. It was only after the government infused massive capital into the banks that both indicators began showing some improvement.

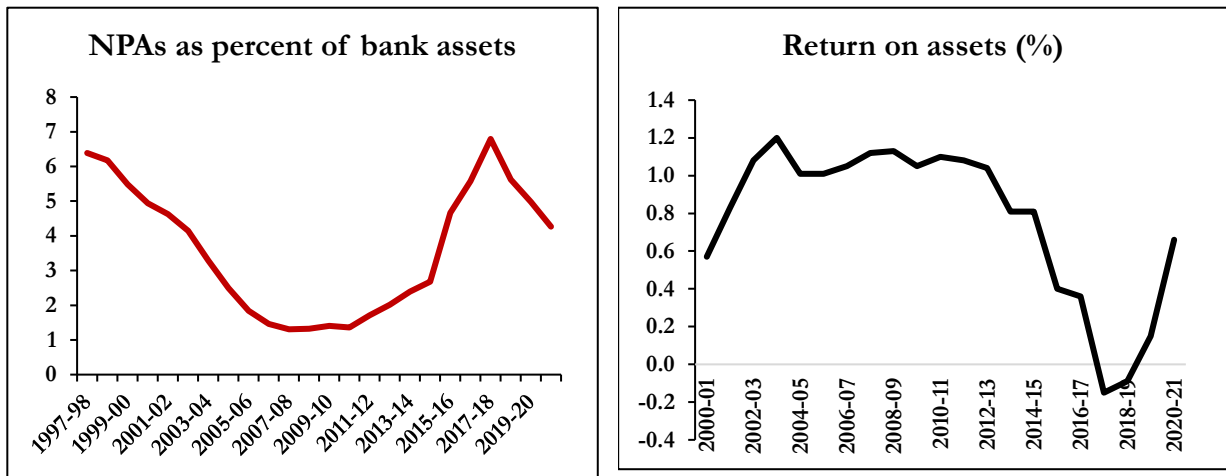
Figure 1: Evolution of Credit as a Proportion of GDP: 1991-92 to 2020-21



Source: RBI, Basic statistical return (BSR-1), Annual credit by Scheduled Commercial Banks.

Note: Horizontal lines denote the decadal averages.

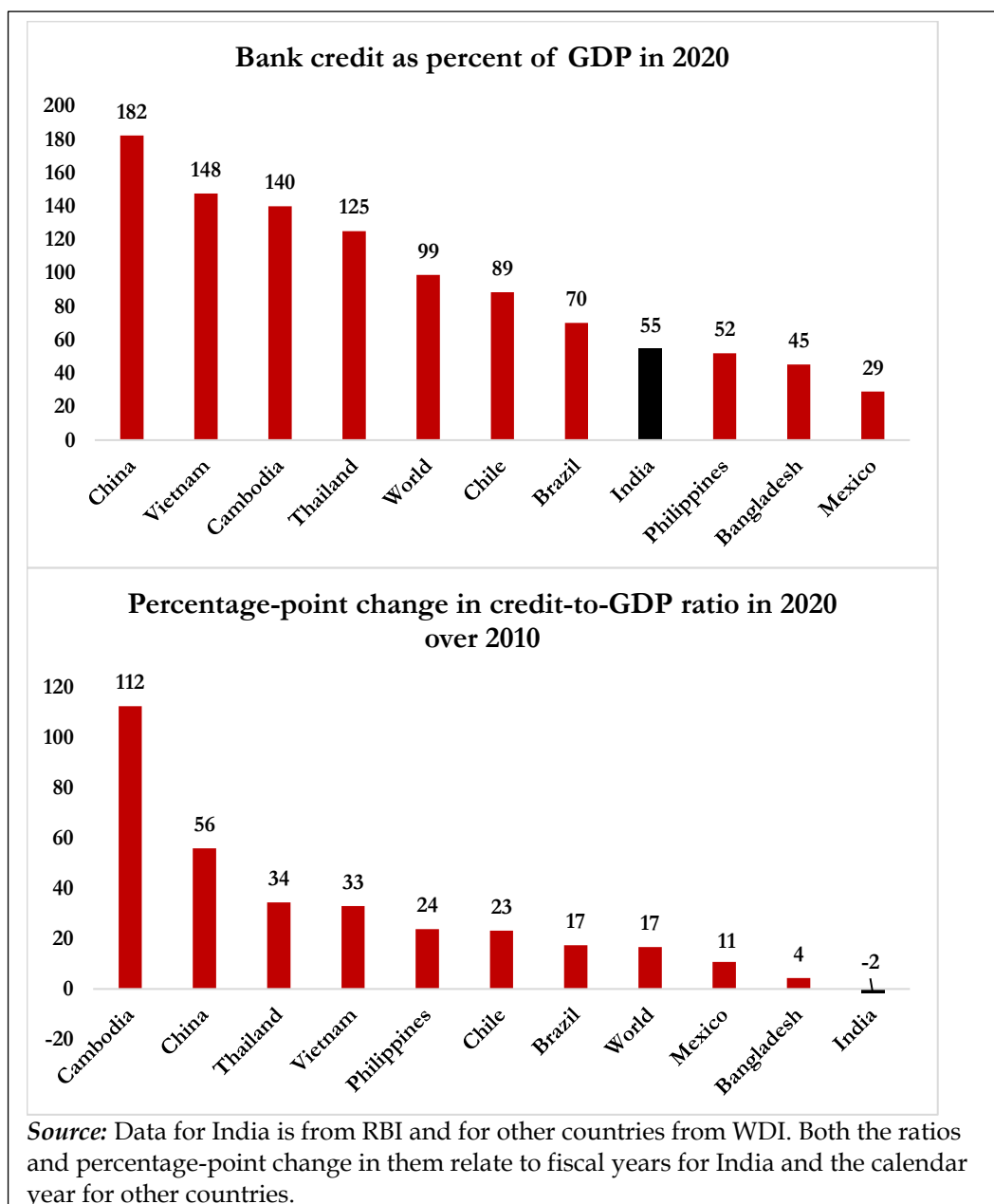
Figure 2: NPAs and the Return on Assets: 1997-98 to 2020-21



Source: RBI, Handbook of statistics on Indian economy, Statistical Tables relating to banks in India.

The result of the twin facts of slow expansion of credit prior to 1991 and lack of net expansion of the credit-to-GDP ratio during the 2010s has been that India remains well behind comparator countries in terms of bank-credit penetration. This fact is captured in Figure 3, in which the upper and lower halves show the credit-to-GDP ratio in 2020 and the percentage points growth in its value during the decade of the 2010s, respectively, in several emerging market economies. The ratio in India turns out to be less than one-third of that in China and only slightly more than one-third of that in Vietnam. It is less than half of that in Thailand and significantly lower than those in Chile and Brazil. The chart in the lower half of Figure 3 shows that India was the only country among those shown with a negative growth in this ratio during the decade of the 2010s. The accumulation of NPAs, which began around 2014-15, seriously dented the ability of banks to expand credit. As a result, credit growth fell behind the nominal GDP growth. Given that banks account for a majority of the commercial financial flows in emerging market economies, this comparison points to a significant scope for increased financialization of the economy in the coming decades.

Figure 3: Bank Credit as Percent of GDP and Percent Change in It in 2020 over 2010 in Selected Emerging Market Economies



Banks in India continue to face a high SLR. In addition, the central bank subjects all domestic commercial banks other than regional rural banks and small finance banks and foreign banks with 20 or more branches to “priority sector” lending. Under the regulation, these banks are required to lend a hefty proportion of their credit (currently 40 percent) to priority sectors. As per the current definition, the latter include agriculture, export credit, education, housing, social infrastructure, renewable energy, and micro, small, and medium enterprises (MSMEs). Although SLR has seen a steady decline in the post-reform era, it remains high at 23 percent of

all banking assets. This mandatory investment in government securities comes on top of a 4.5 percent Cash Reserve ratio (CRR) requirement. As regards priority-sector lending, it has seen an increase as a proportion of assets (Table 2). Altogether, SLR, CRR, and priority-sector lending currently absorb 45 percent of the banking assets, leaving only 55 percent to be advanced on purely commercial considerations.

Table 2: Mandated Lending and Investments (as Percent of All Assets)

Item	1997-98	2000-01	2010-11	2020-21
Priority-sector lending	12.1	11.8	18.3	18.4
Government securities	23.3	27.1	20.2	22.5

Source: Reserve Bank of India statistical tables.

The final indicator we consider before turning to an assessment of banks according to ownership relates to the allocation of credit across broad sectors.⁴ Not only is the overall level of bank credit in India low relative to economically successful emerging market economies, but its allocation across sectors is also distorted with the share of industry witnessing a sharp decline in recent years. This share has fallen from 43.9 percent in 2000-01 to 28 percent in 2020-21. Agriculture, which has seen its share in GDP steadily decline to approximately 15 percent, has nevertheless seen a modest expansion in its share in bank credit. This expansion has taken place on top of massive and expanding price subsidies on purchases of fertilizer and sales of foodgrains. The biggest beneficiary of the shift in credit allocation away from industry has, however, been personal loans. From just 12.2 percent in 2000-01, its share in credit has risen to 25.9 percent in 2020-21. Table 3 reports these trends in sectoral shares of the total credit.

Table 3: Allocation of Credit across Broad Sectors (Percent of Total Credit): 1997-98 to 2020-21

Sector	1997-98	2000-01	2010-11	2020-21
Agriculture	10.7	9.6	11.3	13.7
Industry	48.8	43.9	39.6	28
Personal loans	10.5	12.2	16.4	25.9
Other (mainly services)	30	34.2	32.7	32.3

Source: RBI, Basic Statistical Return (BSR-1) Annual Credit by Scheduled Commercial Banks.

⁴In the Appendix, we provide figures showing additions to employees, branches, credit growth and deposit growth for PSBs and private banks.

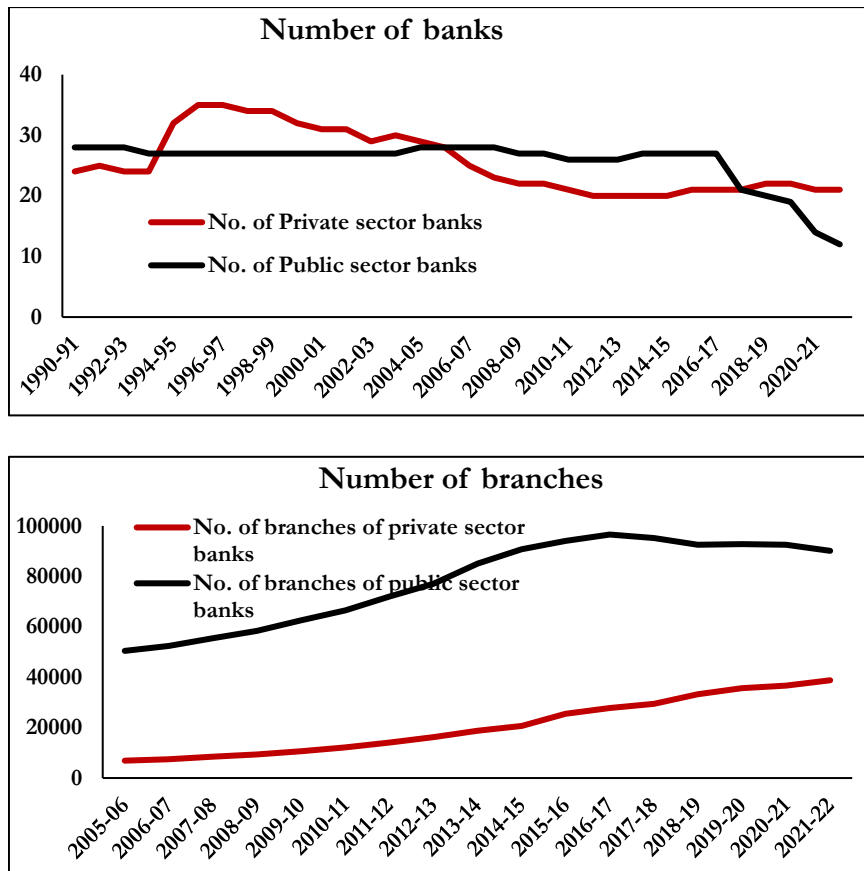
3. Private and Public Sector Banks

The aggregate picture presented up to this point masks the vastly different performances of private and public sector banks (PSBs). These differences form the subject matter of the present section. Occasionally, we also include the remaining banks, consisting of foreign banks, small finance banks, and payments banks though not regional rural banks. Since the largest PSB – the State Bank of India plus its associate banks (SBI) – accounts for more than one-third of all banking assets in the public sector, we also highlight it separately. To economize on space, we limit ourselves to presenting the evidence, letting the graphs speak for themselves, and refrain from a long commentary.

3.1. Number of Banks and Bank Branches

In the upper and lower panels of Figure 4, we show the number of banks and the number of bank branches, respectively, in private and public sector banks. The graph indicates some churning in both categories of banks. In 1990-91, there were 24 private banks in all. In view of the small share of private banks in the total banking assets at the time (see below), all these banks were small. Their number grew sharply from 24 in 1993-94 to 32 in 1994-95, and peaked at 35 in 1995-96. It fell steadily thereafter, dropping to 27 in 2002-03, rose to 30 in 2003-04, and began falling again, bottoming out at 20 in 2011-12. In the last decade, this number has seen a very small fluctuation between 20 and 22, and stands at 21 at the end of 2020-21. When the number of banks rises, it is due to the entry of new banks while when it shrinks, it is due to mergers. Banks have rarely been allowed to go bankrupt and exit in India.

Figure 4: Number of Private and Public Sector Banks and Bank Branches: 1990-91 to 2021-22



Source: RBI, Bank Branch statistics.

While the number of private banks has seen a movement in both directions during the three decades covered, the number of bank branches has seen a steady rise. It stood at 38,772 at the end of 2021-22. This is in contrast to the number of bank branches of PSBs, which has seen a reduction, at least during a handful of previous years.

The evolution of PSBs has been somewhat different from that of private banks. Their number began at 28 in 1990-91, fell to 27 in 1993-94, and stayed there for a decade until 2003-04. It then exhibited small fluctuations between 26 and 28, and stood at 27 in 2016-17. From that point on, considerable consolidation took place through mergers with the number steadily declining to 12. Purely in terms of numbers, there are thus fewer PSBs than private banks today. As noted above, the public sector has also seen some churning in the number of bank branches. The number of PSBs grew steadily to 96,584 by the end of 2016-17, but has since shrunk to 90,160 at the end of 2021-22.

As a side note, we may observe that considering that India has approximately 600,000 villages and the sum of bank branches between private and public sector

banks is less than 129,000, it is evident that most villages do not have a bank branch. This conclusion is reinforced by the fact that the number of bank branches is disproportionately high in urban areas. Opening brick and mortar bank branches involves large fixed and recurring costs relative to the economic size of a village, making such a proposition financially and economically unprofitable. This is a lesson that was learned the hard way from the forced expansion of bank branches in the 1980s.⁵

3.2. Banking Assets, Deposits, and Credit

We next consider the shares of different bank groups in banking assets, deposits, and credit. To be exhaustive, we classify all the commercial banks into four categories. The first group is represented by SBI, which includes SBI plus its associated banks.⁶ We report the shares of this group separately because it constitutes India's largest bank group and accounts for a disproportionate share of PSBs by all the three measures considered. It is a reasonable hypothesis that being disproportionately large, it behaves differently than the remaining PSBs. We next report the remaining PSBs whose numbers vary over time, as has already been discussed. The third category represents private banks, and the fourth and final one, all other banks. Included in this latter category are foreign banks, small finance banks, regional rural banks, and payments banks.

Table 4 provides the values of shares of the four groups in total banking assets, deposits, and credit at the end of 1991-92, 2000-01, 2010-11, and 2020-21. The indicators now show a much sharper shift away from PSBs and towards private banks. Interestingly, according to all the three measures, the shift in the middle decade is the smallest in percentage-point terms and the largest in the last one. The "boom" that PSBs experienced in the middle decade ended up as a major bust in the last one.

⁵This feature is yet another manifestation of the dispersion of the Indian population over a large number of thinly populated habitations. This dispersion poses many developmental challenges, including in the area of financial inclusion. Unfortunately, the consolidation of population into larger habitation, mainly through migration to urban agglomerations, has been painfully slow. In the banking area, the advent of digital technologies offers some hope but the deposit and withdrawal of cash requires the physical presence of some entity that can intermediate these basic transactions.

⁶The associated banks of SBI are: State Bank of Bikaner, State Bank of Jaipur, State Bank of Hyderabad, State Bank of Indore, State Bank of Mysore, State Bank of Patiala, State Bank of Saurashtra, and State Bank of Travancore.

Turning to the specific indicators, PSBs (including SBI) began with an 88.5 percent share in the total banking assets in 1991-92, and private banks began with just 4.2 percent. But by 2020-21, the share of PSBs had fallen to 59.8 percent and that of private banks had risen to 32.8 percent. In the “All Others” category, foreign banks account for the bulk of the assets. In 2020-21, small finance banks accounted for 0.8 percent of all banking assets and payments banks for just 0.06 percent.

When compared to the telecommunications sector in which private entry was permitted for the first time in the early 1990s, the impact of entry liberalization in the banking sector around the same time appears modest. While PSBs as a group continue to be the dominant player in banking, the state operator has been left with a minuscule share in telecommunications. The infusion of large volumes of resources into PSBs by the State has meant much slower progress of private sector banks in expanding their share in banking.

Table 4: Shares across Ownership Groups and Credit-Deposit Ratio

Bank Group	1991-92	2000-01	2010-11	2020-21
Assets as percent of total				
SBI	33.8	31.1	22.2	23.1
Other Public banks	54.7	48.4	51.5	36.7
Private Banks	4.2	12.6	19.5	32.8
All others	7.4	7.9	6.8	7.3
Credit to Private sector				
SBI	32.2	27.6	23.6	22.4
Other Public banks	57.8	49.1	51.7	34.1
Private Banks	4	13.9	19.8	38.1
All others	5.9	9.4	4.9	5.4
Deposits as percent of total				
SBI	28.6	29.6	22.2	23.6
Other Public banks	60.3	51.9	55.7	39.8
Private Banks	4.6	13	17.9	30.8
All others	6.5	5.6	4.3	5.8
Credit-Deposit Ratio				
SBI	0.71	0.48	0.80	0.67
Other PSBs	0.56	0.48	0.74	0.63
Private	0.52	0.50	0.80	0.82

Source: RBI, Statistical Tables Relating to Banks in India (Tables based on Annual Accounts).

The ownership of assets behaved quite differently between the decades of the 2000s and 2010s within the PSBs. SBI experienced a major loss in its asset share in the

former decade but made a marginal gain in the latter one. Exactly the opposite turned out to be the case for the other PSBs: they experienced a marginal gain in the asset share in the 2000s but a major loss in the 2010s.

The story observed in terms of assets is broadly mirrored in the behavior of credit and deposits. Private banks have steadily increased their shares in credit as well as deposits during the three decades. The share in credit rose from just 4 percent in 1991-92 to 38.1 percent in 2020-21. The share in deposits rose from 4.6 percent to 30.8 percent over the same period. Nearly all of the corresponding decline fell on PSBs with SBI bearing the larger burden in the 2000s, and the other PSBs in the 2010s. An interesting point to note is that the share of private banks in credit rose faster than that in deposits.

The final set of numbers in Table 4 report the credit-deposit ratios for SBI, other PSBs, and private banks. Private banks were lagging behind PSBs in 1991-92, kept pace with or did marginally better than them in 2000-01 and 2010-11, and then pulled ahead of them by a significant margin in 2020-21. According to the GlobalEconomy.com ranking of countries by the credit-deposit ratio, India was ranked 77th globally in 2020. As many as 27 countries in this ranking exhibit credit-deposit ratios exceeding unity.⁷ Therefore, there remains considerable scope for credit expansion in India even with the existing deposits. Even private banks are some distance from exploiting their full capacity to expand credit. It goes without saying, however, that unlike what was done during several years preceding 2014-15, credit must now go to worthy borrowers.

The patterns exhibited by the three indicators can also be gleaned from the growth rates during the relevant decades (Table 5). Based on data availability, this table replaces “Other Banks” in Table 4 by all Scheduled Commercial Banks (SCBs). Consistent with Table 4, the growth rates for assets, advances, and deposits for private banks have been consistently higher than those for SBI as well as other PSBs. Between SBI and the other PSBs, the latter showed higher growth rates in the 2000s and the former in the 2010s. The conclusion that these indicators point to superior performance of private banks, especially when seen against the amounts of capital infused by the government in PSBs over the years, is inescapable.

⁷See https://www.theglobaleconomy.com/rankings/bank_credit_to_deposits/ (Accessed on 4 June 2022).

Table 5: Average Annual Growth Rates (All Nominal)

Bank Group	1990-2000	2000-2010	2010-2020
Assets			
SBI	13.3	15.6	10.9
Other PSBs	13.1	18.6	8.7
Private banks	31.7	24.6	17.7
Scheduled Commercial Banks	14.6	18.5	11.6
Advances			
SBI	11.7	21.1	10.6
Other PSBs	11.9	23.7	8
Private Banks	31.4	28.5	19.2
Scheduled Commercial Banks	13.6	23.1	11.6
Deposits			
SBI	16.4	16	11.4
Other PSBs	14.3	18.4	8.7
Private Banks	32	22.1	17.7
Scheduled Commercial Banks	16.3	18.1	11.5

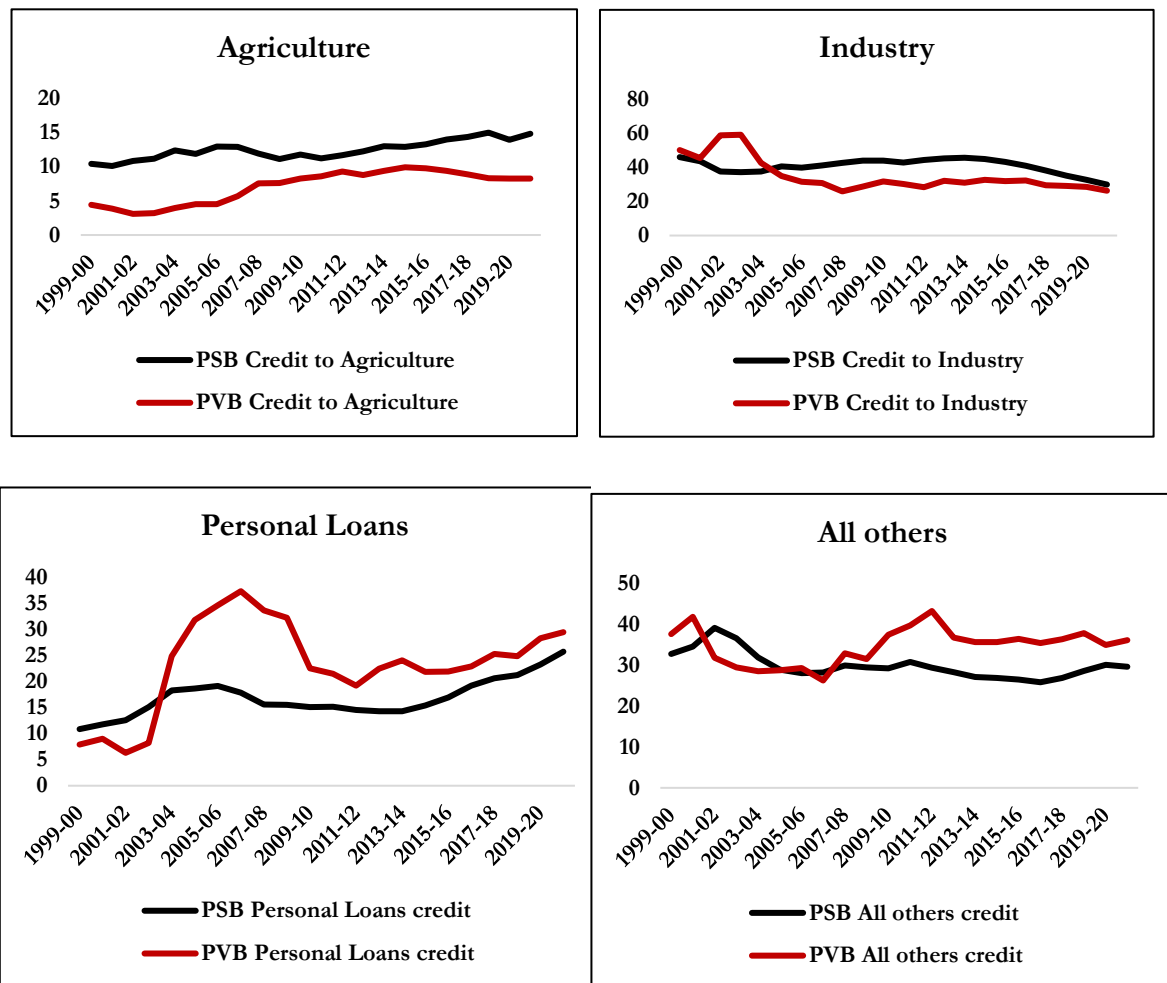
Source: RBI, Statistical Tables Relating to Banks in India (Tables based on Annual Accounts).

3.3. Credit Allocation

As Figure 5 shows, PSBs and private banks (PVBs) allocate credit across broad sectors quite differently. PSBs have consistently allocated a larger proportion of their total credit to agriculture than have PVBs. With the exception of the first half of the 2000s, they have also allocated a larger share of their total credit to industry than PVBs. Private banks, on the other hand, have been focused more on personal loans and all other categories. Although priority sector minimum is fixed at 40 percent of Adjusted Net Bank Credit for both private and public sector banks, it is possible that the latter are subject to additional informal government pressure or direction to lend higher proportions of their credit to agriculture and industry. If so, this is an additional source of distortion in lending by PSBs.⁸

⁸George et al. (2022) analyze the link between productivity and bank credit growth across public and private sector banks. They find this link to be weaker for public sector banks. In other words, public sector banks do not extend credit to most productive firms. The results there are potential growth and productivity gains to be made from improved governance or privatization of public sector banks.

Figure 5: Allocation of Credit by PSBs and PVBs across Broad Sectors of the Economy



Source: RBI, Basic Statistical Return (BSR-1) Annual Credit by Scheduled Commercial Banks.

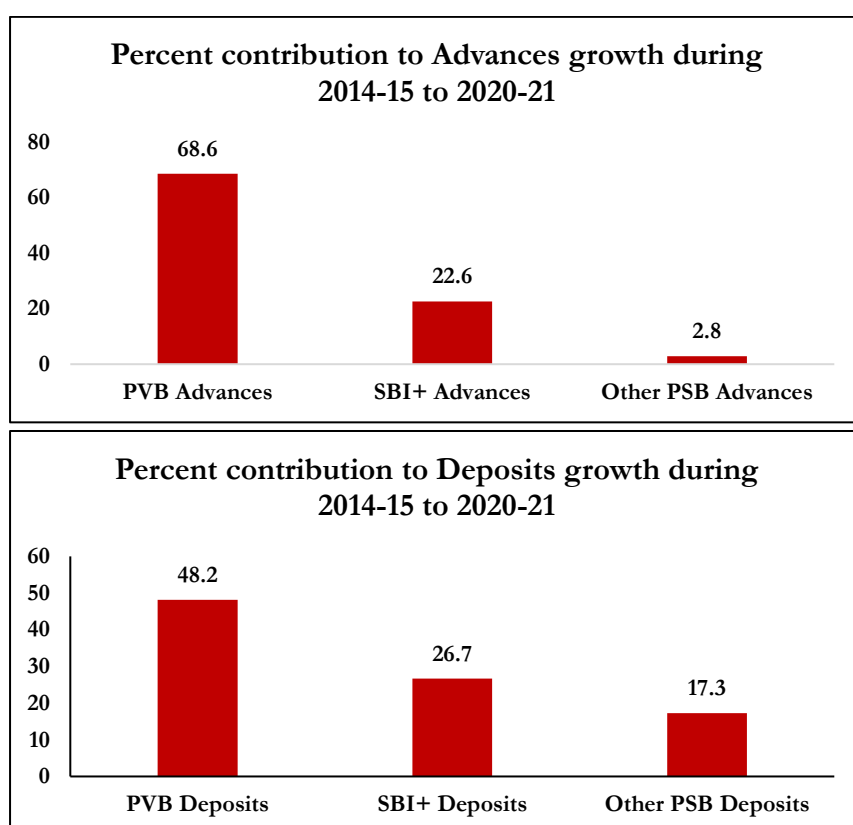
3.4. The Dramatic Shift into Private Banks in the Past Five Years

Shifts in shares based on the “stock” variables such as assets, deposits, and advances discussed up to this point greatly understate the pace at which the shift away from PSBs and towards private banks has taken place in recent years. To fully appreciate the dramatic shift that has taken place, we must look at the shares in the “flow” variables. Accordingly, Figure 6 shows the shares of SBI, other PSBs, and private banks in the increases in advances and deposits from 2014-15 to 2020-21.

Remarkably, private banks accounted for 68.6 percent of all additional credit created during these years. Despite their large volume of assets and deposits, PSBs other

than SBI contributed just 2.8 percent of the additional credit creation.⁹ The same, though a little less dramatic, pattern emerges from the shares in the change in deposits over these years: private banks accounted for 48.2 percent of the new deposits.

Figure 6: Shares in the New Advances and Deposits by Bank Groups: 2014- 15 to 2020-21



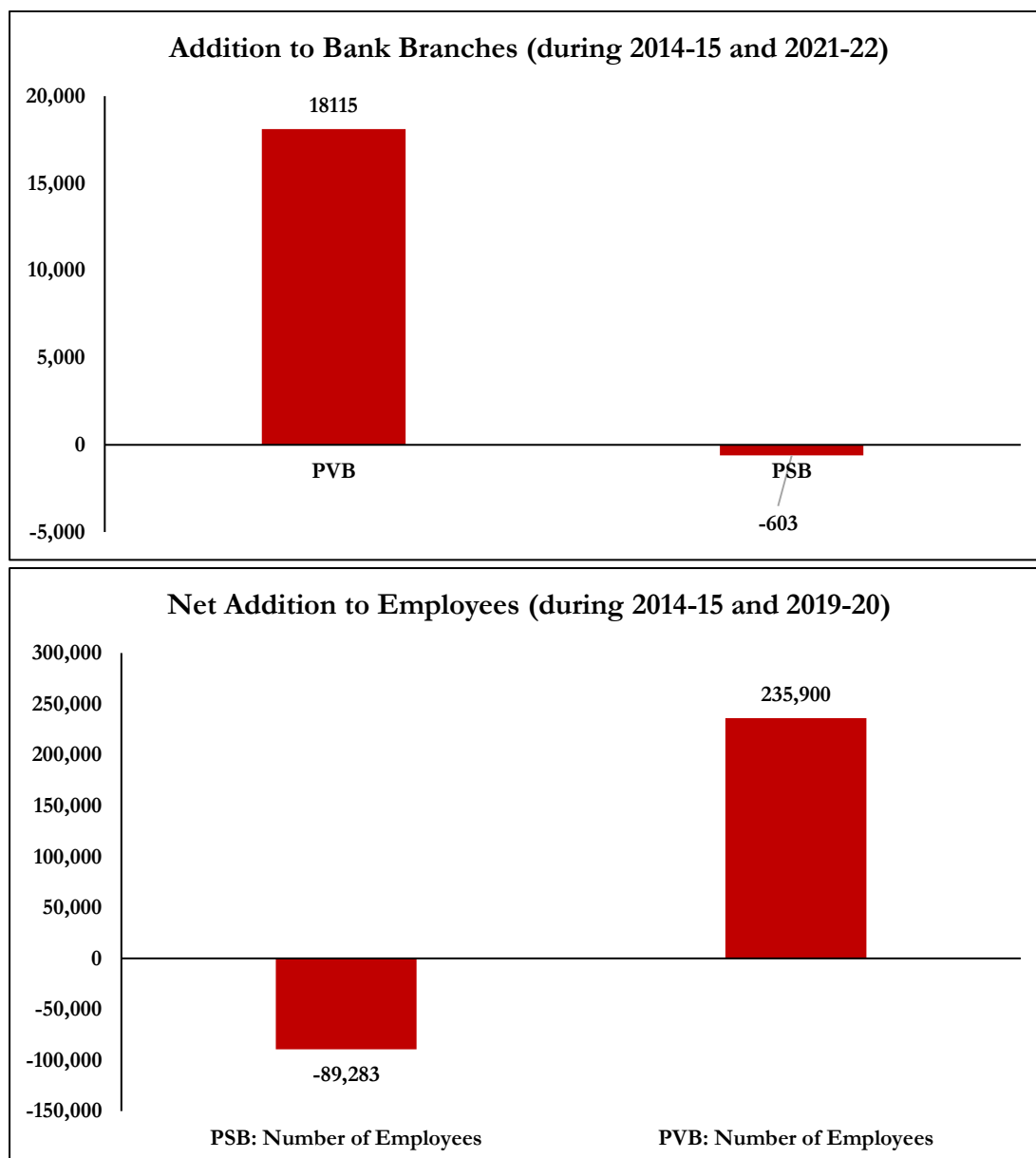
Source: RBI, Statistical Tables Relating to Banks in India (Tables based on Annual Accounts).

A common impression among policy analysts is that PSBs constitute an important source of well-paid jobs whereas private banks rely more heavily on automation including digitization. Yet, when we look at the changes that have taken place in the workforces of PSBs and private banks, it is the latter that have served as the source of job creation. Between 2014-15 and 2019-20, private banks created 235,900 new jobs while PSBs experienced a net loss of 89,283 jobs. The same point is also made by bank branch expansion: whereas PSBs closed down 603 branches on a net basis, private banks added 18, 115 of them, Figure 7.

⁹The shares shown in Figure 6 do not add up to 100 percent because of the exclusion of foreign, small finance, and payments banks.

To be sure, the loss of jobs and bank branches in PSBs represents a healthy development since historically they have employed far more workers and opened more branches relative to their assets, advances, and deposits than private banks. The point we want to underline here is that as private banks expand, they too create jobs and bank branches. Indeed, if the dynamism of private banks leads to greater overall expansion of the banking sector, they can add more jobs and bank branches even if due to higher efficiency they employ fewer workers and open fewer branches per billion rupees worth of advances or deposits.

Figure 7: The Change in Employment and Bank Branches in PSBs and Private Banks

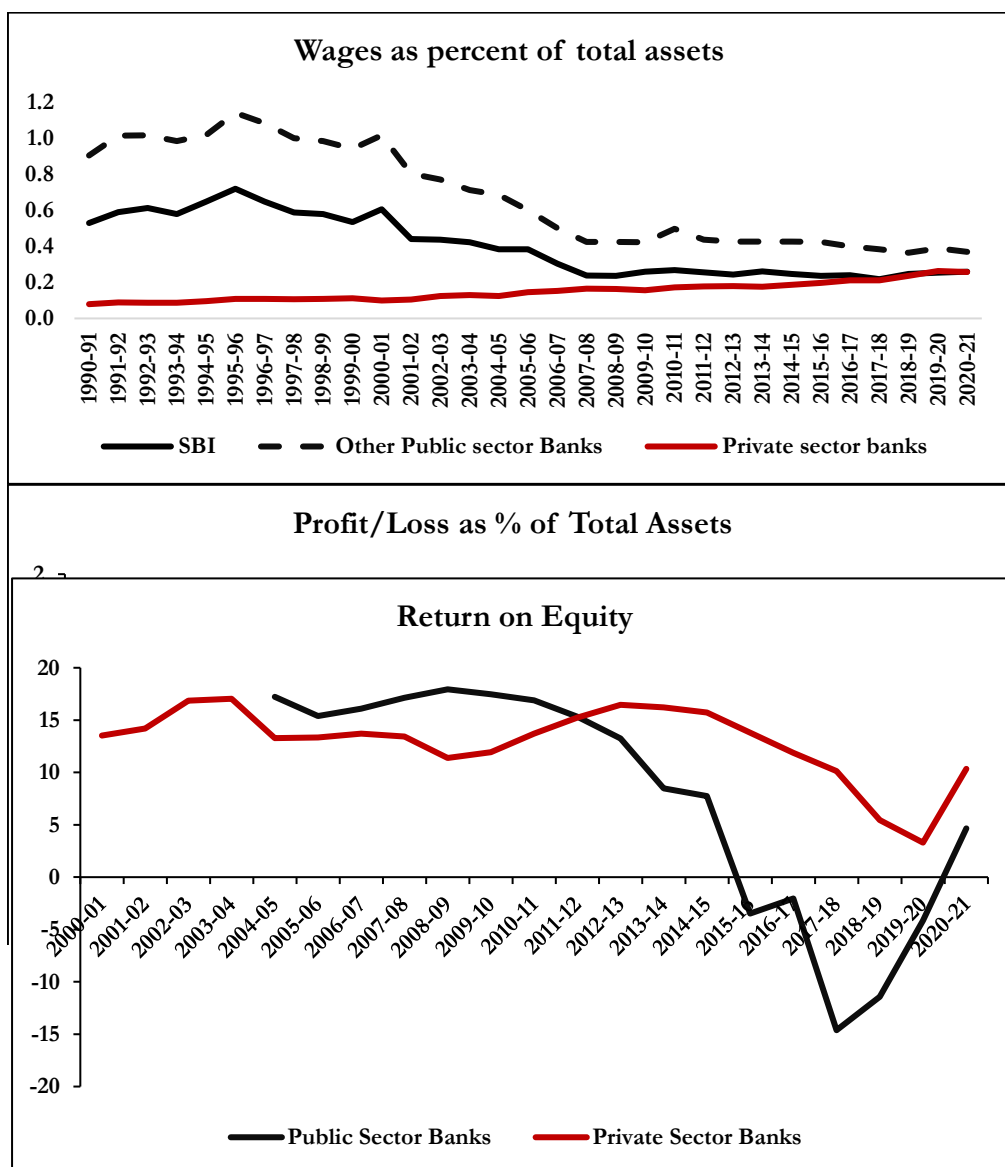


Source: RBI, Handbook of statistics on Indian Economy, Money and Banking, Bank Group wise distribution of Employees of Scheduled Commercial Banks.

3.5. Some Performance Indicators

Private banks have exhibited superior performance, especially in recent years, across a number of indicators, such as the wage bill as a percentage of the total assets, profits as a percentage of the total assets, and return on equity. Within PSBs, SBI generally performs better than the other PSBs. The trends in these measures during the past two or three decades for the three bank groups are shown in Figure 8.

Figure 8: Some Performance Indicators for Private and Public Sector Banks

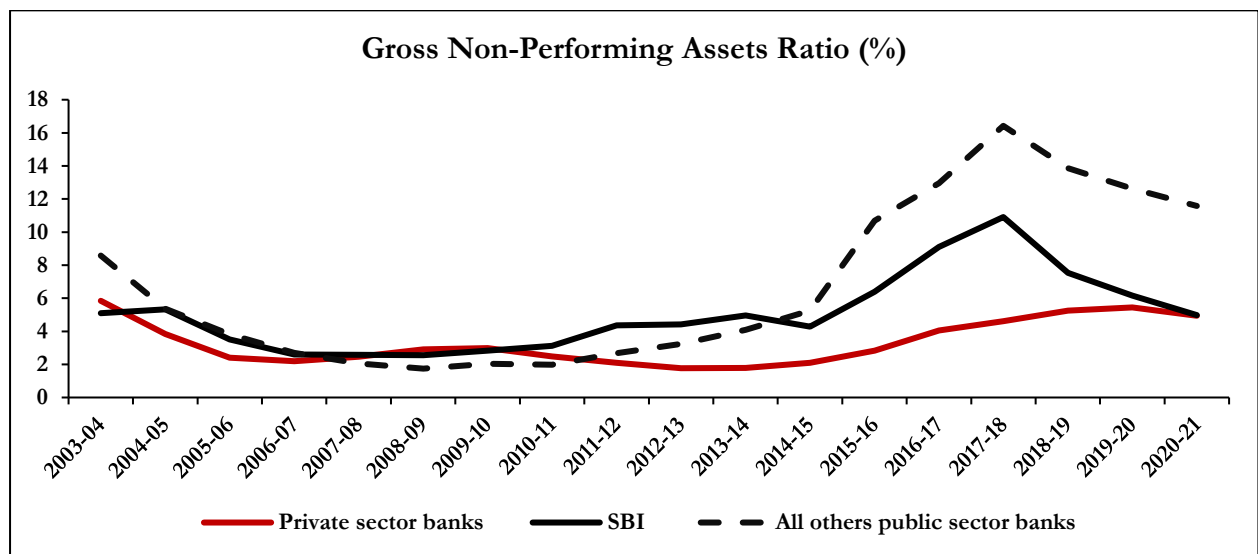


Source: Authors' calculation and Reserve Bank of India statistical tables.

3.6. Non-performing Assets, Stressed Assets and Provision Coverage

India first introduced a “health code” in 1985 requiring banks to classify each loan into one of eight categories based on its performance. Classification into the bottom four of these categories meant that the loan was non-performing. In 1992, this classification was replaced by a more demanding one which required each loan to be classified into one of four categories: standard, sub-standard, doubtful, and loss. All loans in the last three categories were considered as non-performing. Over time, the criteria for defining healthy loans were tightened further and got aligned with international norms in 2004. Accordingly, a delay of 90 days in payment places it into the non-performing category with a sub-standard status. After one year of substandard status, it becomes doubtful. If the loan becomes substantially uncollectable, it is given a loss classification. A substandard loan requires provisioning of 10 percent of loan value. Once it turns doubtful, the required provisioning rises to 100 percent for the unsecured part of the loan and 20 to 50 percent for the secured portion.

Figure 9: Gross NPAs as a Proportion of Gross Advances: 2003-04 to 2020-21



Source: Reserve Bank of India statistical tables.

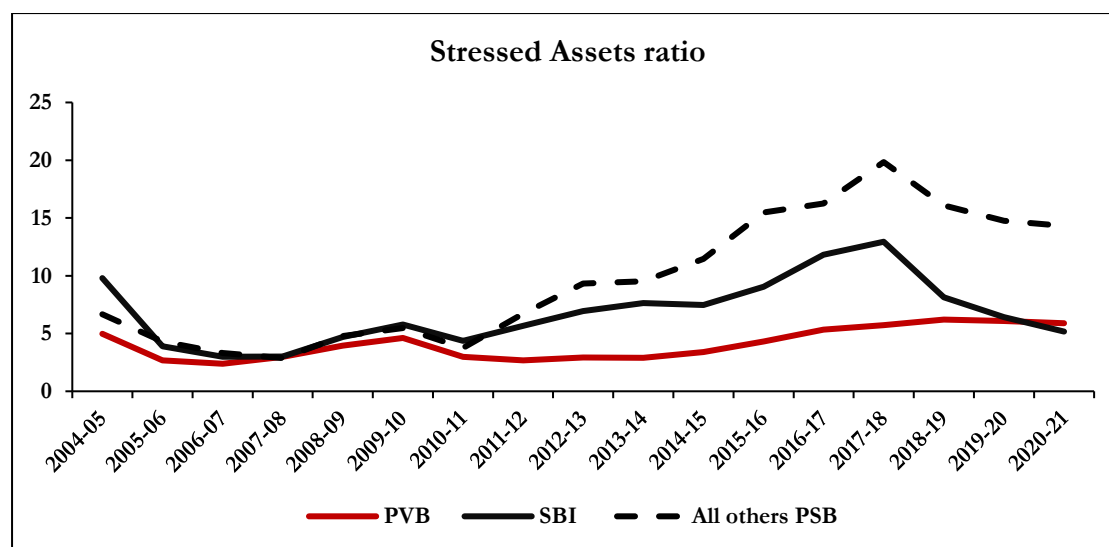
Figure 9 shows the gross NPAs as a percent of gross advances of SBI, other PSBs, and private banks.¹⁰ For more than a decade, the RBI had permitted loans to be

¹⁰Mohan and Ray (2022) have documented and analyzed the trajectory of NPAs since the early 1990s. They attribute the rise in NPAs during the last decade to a host of factors, such as commodity prices, business cycle, and regulatory forbearance, with governance issues in PSBs being one of them. They suggest that policy initiatives like bankruptcy reforms would lower the NPA of Indian banks durably.

restructured without a downgrade in their classification. This meant that if a borrower anticipated difficulty in repaying the loan, she could ask the lender to restructure it at more favorable terms. For the lender, the choice was between a default, which would weaken the balance sheet, and restructuring, which would not. Given the state of the bankruptcy process, recovery was difficult and uncertain even in cases in which the borrower's enterprise became unviable. An additional factor at work in PSBs was that their CEOs were government employees appointed for limited terms. Therefore, the CEO's incentives were to restructure doubtful loans and maintain their standard classification while they served even if it was clear that the loans had no chance of being repaid. In contrast, the managers of private banks remained answerable to their boards and shareholders, which translated into more responsible lending and restraint on restructuring doubtful loans.

It was beginning with the year 2015-16 that the RBI finally changed the policy and started mandating downgrading of loan classification upon restructuring. The change quickly led to the recognition of vast volumes of loans as non-performing. It can be seen that the problem turned out to be far more serious in PSBs than in private banks. SBI incurred smaller NPAs than other PSBs but still significantly larger than private banks. This most likely reflects better management at SBI than other PSBs but also closer scrutiny of it by the government, given its large size. The systemic risks of SBI losing creditworthiness are far larger than any one of the smaller PSBs. An interesting feature of Figure 9 is that whereas the NPAs of PSBs peaked in 2017-18 and began declining thereafter, the NPAs of private banks, though smaller, rose until 2019-20 before seeing a modest decline in 2020-21.

Figure 10: Stressed Assets as a Proportion of Gross Advances for Bank Groups: 2005 to 2021



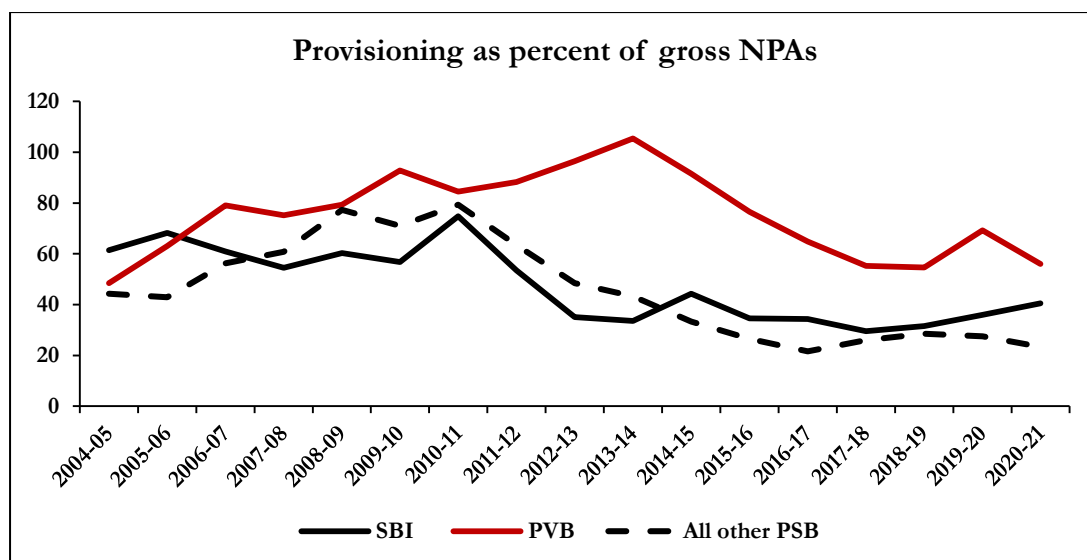
Source: RBI, statistical tables relating to banks in India.

Note: Stressed Assets Ratio is defined as (Gross NPA + Restructured Loans)/Gross Advances.

Two other indicators reinforce the observation of the superior performance of private banks, followed by SBI, and other PSBs, in that order. In Figure 10, we depict the stressed asset ratio, which measures gross NPAs plus restructured standard advances as proportions of total advances. It is evident that beginning with 2011, stressed assets had begun to spike as the problem remained unaddressed until it became much bigger.

Finally, Figure 11 shows provisioning plus contingencies as a proportion of the gross NPAs for the three categories of banks. This measure also shows the superior performance of private banks, followed by SBI, and other PSBs, in that order, at least in the more recent years. Private banks have consistently maintained higher levels of provisions relative to NPAs than their public sector counterparts.

Figure 11: Provisions and Contingencies as Percent of Gross NPAs: 2004-05 to 2020-21

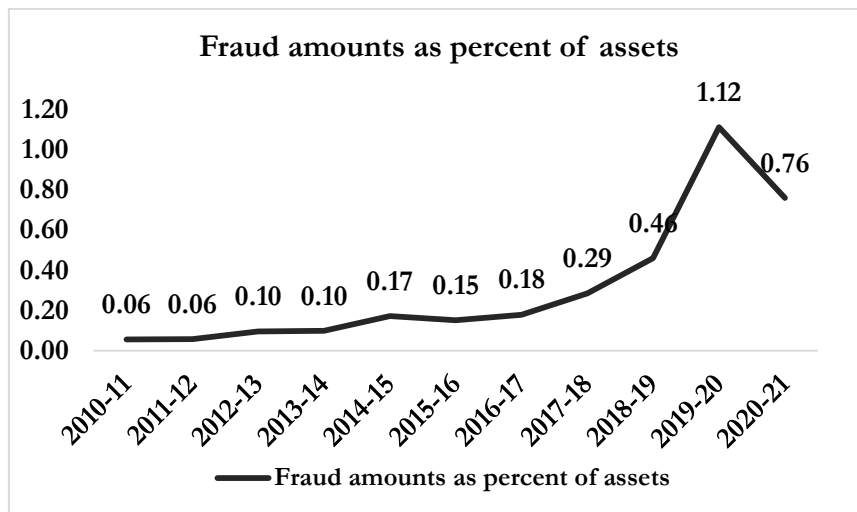


Source: RBI, Statistical Tables Relating to Banks in India (Provisions and contingencies of Scheduled Commercial Banks).

3.7. Bank Frauds

Bank frauds, which include misappropriation, fraudulent encashment, unauthorized credit, and fraudulent foreign-exchange transactions, have seen an uptick in recent years not only in absolute terms but even relative to assets. At an aggregate level, they steadily rose from 0.06 percent of combined assets of SBI, other PSBs, and private banks to the peak of 1.12 percent in 2019-20, before declining to 0.76 percent in 2020-21. Figure 12 depicts the evolution of frauds as a percent of the assets at the aggregate level. In recent years, there have been some high-profile cases of fraud contributing to large amounts. Evidently, they partially reflect a failure of the regulator in catching wrongdoings on time.

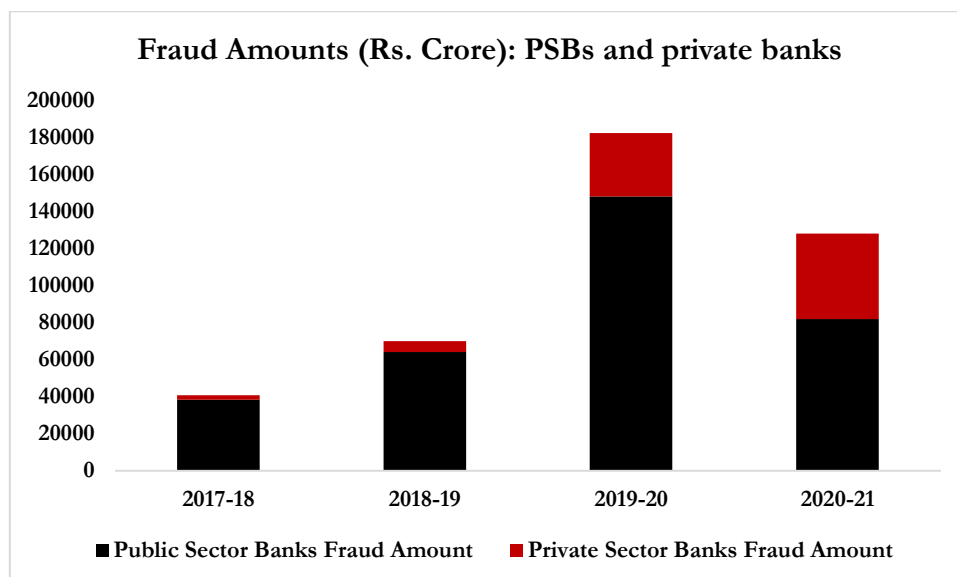
Figure 12: Bank Fraud as a Percent of Combined Assets of SBI, Other PSBs, and Private Banks

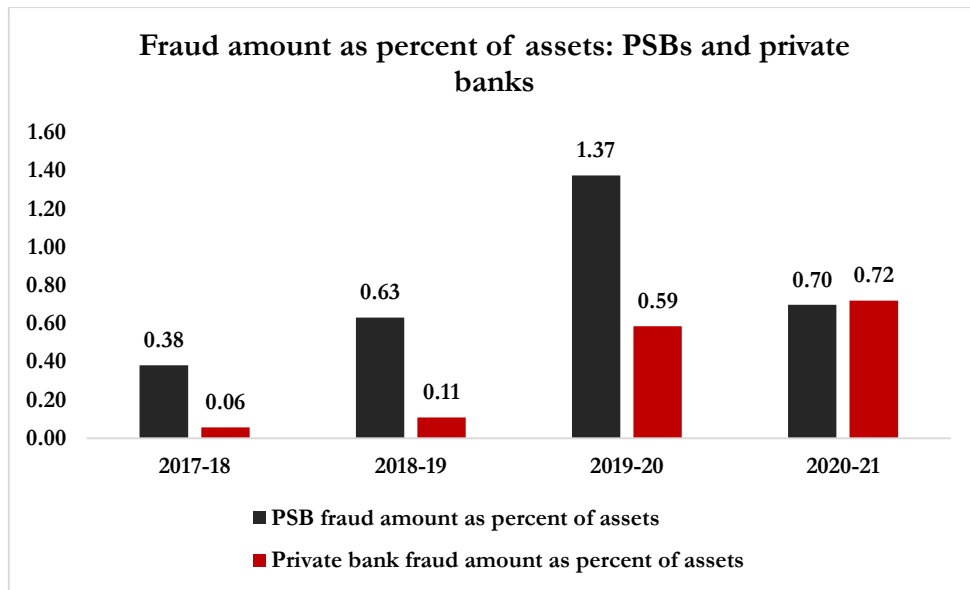


Source: Compiled from RBI Annual Reports.

From 2017-18 onwards, we also have the disaggregation of fraud amounts between PSBs and private banks. These disaggregated data show that fraud amounts have concentrated disproportionately in PSBs. In Figure 13, the upper panel shows the split of fraud amounts between PSBs and private banks, while the lower panel shows fraud amounts as proportions of assets for the two categories of banks.

Figure 13: Fraud Amounts in PSBs and Private Banks: 2017-18 to 2020-21





Source: RBI Annual Reports.

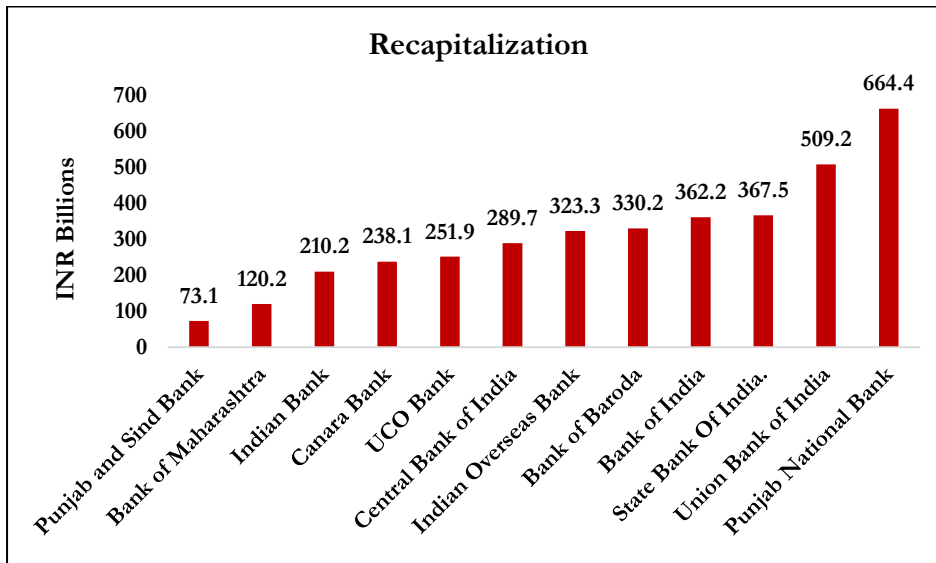
3.8. Infusion of Capital and Market Valuation

Evidence presented up to this point already overwhelmingly speaks to the superior performance of private banks over PSBs. Even SBI, which has performed better than other PSBs in the decade of the 2010s, fails to match the performance of private banks, on average, in terms of nearly all indicators. But as a last and final piece of evidence, we turn to a consideration of taxpayer resources that the government was obliged to infuse into them through recapitalization. The sheer magnitude of these resources is breathtaking.¹¹ In contrast, no taxpayer resources were infused into private banks though in one visible case, that of Yes Bank, the government did have to intervene with a heavy hand through a consortium led by SBI and including a number of private banks. The experience of this bank, discussed in brief at the end of this section, has useful lessons. We depict this stark fact in Figure 14, which shows the amount of taxpayer money spent on recapitalization of each of the 12 PSBs from 2010-11 to 2020-21.¹²

¹¹Chopra et al. (2021) argue that recapitalization policies are necessary after a clean-up even during normal times. They reason that the assumption that reduction in information asymmetry after the clean-up will lead to recapitalization through market forces alone is questionable.

¹²In its audit report on recapitalization, the Comptroller and Auditor General of India (2017) states: “PSBs signed (February/March 2012) MoUs with DFS [Department of Financial Services] for performance linked capital infusion in PSBs during 2011-12 to 2014-15. However achievement against MoU targets was not linked to actual capital infusion.” We may add that under *Indradhanush*, PSBs were to raise capital from the market to the tune of Rs 1.1 trillion between 2015-16 and 2018-19. But only a small fraction of this amount (Rs 77.26 billion between January 2015 and March 2017) was actually raised.

Figure 14: Taxpayer Resources Infused into 12 PSBs

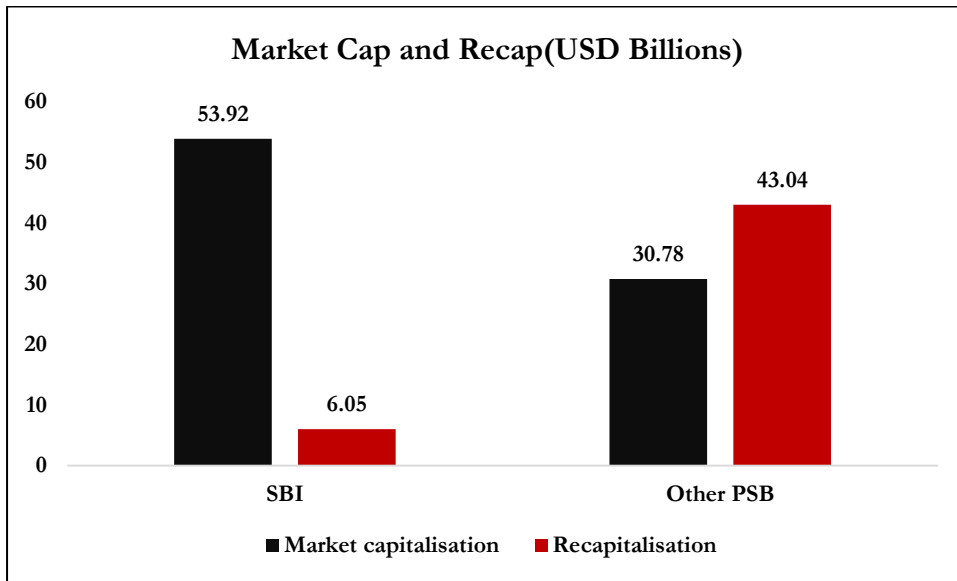


Source: Credit Suisse.

In dollar terms, the total amount infused into PSBs between 2010-11 and 2020-21 to help them tide over the NPA crisis stands at \$57.45 billion.¹³ Of this amount, \$6.05 billion went to SBI and \$51.40 billion to other PSBs. Even after this massive infusion, the NPAs of PSBs taken as a whole remain elevated relative to private banks. Only the NPAs of SBI have come down to the same level as their average level across all private banks in the year 2020-21.

¹³The original amounts of recapitalization are available in rupees by the financial year. We have converted these rupee amounts into dollars using the average exchange rate during the financial year by RBI. We thank Mr Neelkanth Mishra, Credit Suisse, for sharing these data with us. The total amount reported in the text, \$57.45 billion, excludes \$8.21 billion infused into IDBI Bank by its owner Life Insurance Corporation (LIC) Ltd, India's largest public sector enterprise by assets. For now, the burden of this amount has not fallen on the taxpayer but this may change if LIC itself has to be recapitalized by the government at some point.

Figure 15: Recapitalization and Market Capitalization

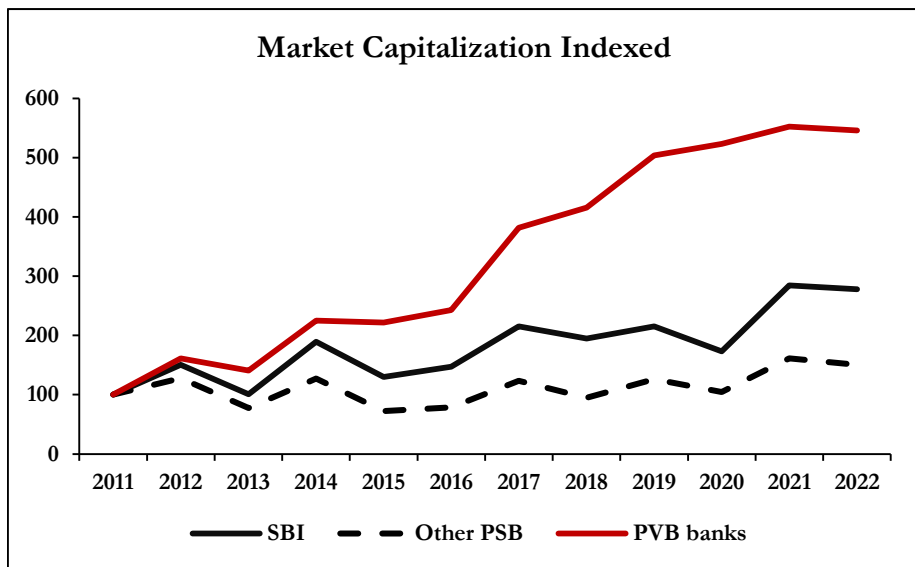
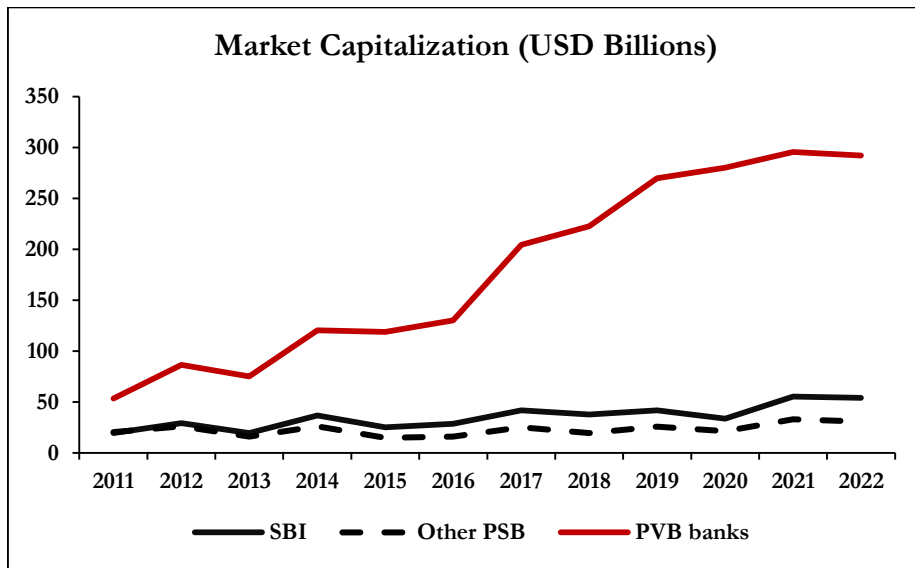


Source: Credit Suisse and Companiesmarketcap.com.

What is more striking, however, is that in the case of PSBs other than SBI, the current market valuation (as on 31 May 2022) remains significantly below the recapitalization resources infused into them. This is shown in Figure 15. At the end of May 2022, the market valuation of PSBs other than SBI and IDBI Bank was just \$30.78 billion. In comparison, these banks had received a massive \$43.04 billion in capital infusion.¹⁴

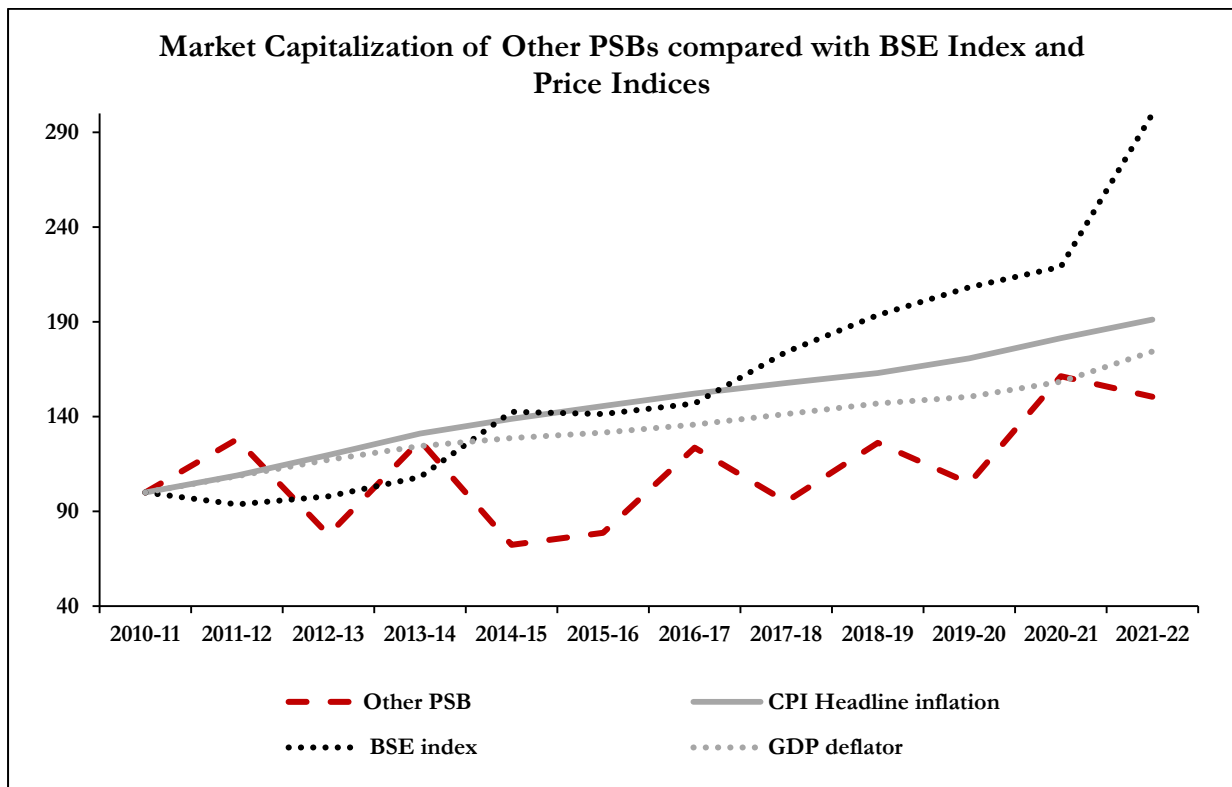
¹⁴In the data series on market valuation, we could access from a single source, UCO Bank and Central Bank of India were missing. As a result, they are not included in “Other PSBs” in Figure 15. The amount of capital infused into “Other PSB” banks shown in the figure (\$43.04 billion) excludes the amounts infused into these two PSBs.

Figure 16: Market Valuation of SBI, Other PSBs and Private Banks



Source: Companiesmarketcap.com, accessed on 31 May 2022.

Figure 17: Market Valuation of PSBs other than SBI Compared to the BSE Index, CPI, and GDP Deflator



Source: Companiesmarketcap.com, RBI and MoSPI.

Two further points relating to market valuation are worth making. First, despite their much smaller share in assets, private banks have left behind PSBs by miles in market valuation. This is underlined in Figure 16, which shows the market valuations of the three categories of banks from 2011 to 2022. The chart in the upper half shows the evolution in dollar terms and that in the lower half in terms of the indexed value with the valuation of each category of banks set at 100 in 2011. The difference in performance between PSBs and private banks is striking. Even SBI, which has exhibited respectable if not spectacular performance in terms of most other indicators, fails to come even close to the performance of private sector banks.

Second, the performance of PSBs other than SBI in terms of market valuation throughout 2010-11 to 2021-22 has been depressingly poor. It is not only the Bombay Stock Exchange (BSE) index that has left the progress in their valuation far behind, but even the GDP deflator which moves up extremely slowly has been ahead of them. Figure 17 compares the evolution of the market valuation of these banks with the BSE index, GDP deflator, and the Consumer Price Index.

While no taxpayer money has had to be deployed to recapitalize private banks, the government did have to intervene with a heavy hand to rescue Yes Bank.

Questionable lending and lack of transparency in identifying NPAs considerably weakened the bank's balance sheet by the end of 2016, but it went unnoticed by the market at least until September 2018. From that point on, the condition of the bank deteriorated steadily, culminating in a situation wherein the government had to place the bank under a moratorium on 5 March 2020 and announce a scheme of reconstruction on 6 March 2020. As a part of the scheme, the government pressed SBI into acquiring a 48.21 percent stake in Yes Bank, paying a price of Rs 10 for shares with face value of Rs 2 only.¹⁵ Additionally, the government leaned on HDFC Bank, ICICI Bank, Axis Bank, Kotak Mahindra Bank, Bandhan Bank, and Federal Bank to buy additional stakes, adding up to a 30 percent equity at the same share price. All the banks also had to agree to lock-in 75 percent of the equity for three years.

As on 7 June 2022, the shares of Yes Bank were trading at Rs 13.1 per share. While the participant banks are thus likely to be able to recover their investment with a positive return, it is unlikely that they would have invested their capital voluntarily in the bank. To be sure, the rescue was in the joint interest of all banks since the failure of Yes Bank would have adversely impacted their own valuations. Nevertheless, the free-rider problem meant that individual banks would not have come forward to invest in the rescue voluntarily.

4. Privatization: Why?

The case for privatization is largely based on the evidence of superior performance of private banks relative to PSBs that we have presented in the previous section.¹⁶ But a number of additional points must be considered to strengthen the case and address potential criticisms.

4.1. PSBs and Stability of the Banking Sector during a Financial Crisis

During the 2008 financial crisis, some observers had argued that with PSBs dominating, India's banking sector was able to weather the crisis better than other

¹⁵The then chair of SBI, Rajnish Kumar, has written in his book "The Custodian of Trust" that his bank was reluctant to play the role of the lender of the last resort but was compelled to do so.

¹⁶Laporta and Schleifer (2002), is among the first papers which attributed slow financial development and low growth of per capita income and productivity to the state ownership of banks. The paper also showed that the government ownership of banks is large and pervasive in countries with low levels of per capita income and backward financial systems.

countries. The argument was based on the observations that in the immediate aftermath of the crisis, private banks found their valuations to decline much more sharply than PSBs and depositors exhibited a tendency to switch out of private banks and into PSBs. One major private bank even experienced a mini-crisis as a result of this shift with the result that the RBI had to intervene on its behalf to reassure depositors.

At least two studies have subjected this argument to empirical scrutiny and concluded against its validity. Acharya (2012) found that the smaller decline in valuation of PSBs and the movement of depositors towards PSBs principally reflected a stronger implicit guarantee on deposits held in them. He characterized this asymmetry as a distortion that tilted the playing field in favor of PSBs, especially in times of financial crises. Eichengreen and Gupta (2013) reached much the same conclusion, stating, "While there was some tendency for depositors to favor healthier banks and banks with more stable funding, the reallocation of deposits toward the State Bank of India cannot be explained by these factors alone. Rather it appears that the implicit government guarantee of the liabilities of the country's largest public bank dominated other considerations." The authors note that rather than playing a stabilizing role, the stronger implicit guarantee on PSB deposits may have contributed to the destabilization of some private banks, most notably ICICI Bank.

Longer-term trend in deposits reinforces the proposition that the movements in them towards PSBs in the aftermath of the financial crisis resulted from a stronger implicit guarantee by the government. Between 2010-11 and 2020-21, the share of private banks in total deposits rose from 17.9 percent to 30.8 percent. SBI, which has performed significantly better than other PSBs during this decade in terms of most of the indicators considered in the previous section, was able to marginally increase its share as well. But the latter, which fared poorly during the decade, lost share by a massive 16 percentage points.

4.2. Social Objectives

A common defense of PSBs has been that they help the government promote certain social objectives. Indeed, this was the original reason cited for the broad-based nationalization of banks in 1969. At the time, there had been a debate as to whether social objectives could not be pursued through social control with ownership. But post-nationalization, this alternative got largely wiped out from public memory and it became an accepted doctrine that ownership was essential if the government were to promote social objectives such as increased share of agriculture and MSMEs in

credit and expansion of banking in rural areas. In more recent times, the ownership argument has also been made in the context of financial inclusion through the rapid expansion of Jan Dhan bank accounts and assistance to firms to tide over the difficult COVID crisis years.

Experience with priority sector lending shows that ownership is not necessary to implement social objectives. Ensuring the availability of credit to certain sectors was perhaps the most important objective cited at the time of the 1969 nationalization. But private banks have been subject to this mandate as much as PSBs almost since the RBI formally began implementing it. Data show full compliance with the 40 percent priority-sector lending directive by private banks.

Generalizing from this experience, it stands to reason that any social objectives should be pursued via regulation rather than ownership of banks. There is hardly any social goal related to financial intermediation that the government cannot pursue without ownership of banks. On the contrary, government ownership over the years has resulted in a high cost of lending and even impeded progress in the spread of banking. It is a plausible proposition that had the ownership been largely private, India would not have faced the acute NPA crisis that it did in recent years. And absent such a crisis, not only would deposits and credits have seen greater expansion, but the economic performance would also have been superior.

Going one step further, it stands to reason that as long as a large number of banks remain in the public sector, the government will find it hard to resist using them to pursue goals that are best pursued by using alternative instruments. In the past, the government has used PSBs as instruments of employment as well as subsidies to favored actors in the economy through cheaper credit, including outright write-offs of loans. A recent example is the call by the Finance Ministry to PSBs and state-run insurers to explore employment opportunities for youngsters who would be looking for jobs after completing their four-year service in military under the newly launched “Agniveer” scheme. Such mismatch between goals and policies is not only highly inefficient but also has an adverse effect on the growth of banking.

4.3. Governance Issues

Government ownership of banks gives rise to many governance issues bearing on both the efficiency of bank operations and the ability of RBI to regulate the sector. First, loan officers going all the way up to the CEO are subject to strict anti-corruption laws, which may be invoked when bank loans, even when made in good

faith, go bad. At the same time, they can expect no real rewards for the superior performance of loans that they extend and the contribution they make to the growth of their bank. This incentive structure discourages them not just from innovation in lending but also any deviation from established practice. A study by Banerjee et al. (2004) found that in most cases, loan officers simply re-approved the previous year's limit on the loan available to a firm. The study also found that corruption charges against an officer in a bank had an immediate chilling effect on lending by other officers in the bank.

Second, PSBs broadly follow the government salary and benefits structure and rules of employment. This has translated into high salaries, benefits, and job protection at the clerical and lower levels but low salaries and benefits at the higher levels relative to those prevailing in private banks.¹⁷ The end result has been low productivity all around. A high degree of protection against layoffs and lack of a relationship between individual performance and salary increases have made lower-level staff unwilling to perform. And lower salaries of higher-level staff have meant that the banks are unable to attract skilled and high-caliber staff, which is particularly damaging to productivity in the current environment of rapidly changing technology. This factor is very likely behind the poor performance of PSBs and the steady defection of depositors to private banks despite perceptions of lower security of deposits there. The lack of talented staff at upper levels, coupled with resistance to change at lower levels, has also translated into slow modernization of processes including digitization. One fallout of this set of problems has been that some bank frauds that recently came to light had gone undetected for years.

Third, government ownership also brings with it political interference. This interference can come at two levels. The flow of loans may be manipulated to serve political objectives. For instance, Cole (2009) shows that PSBs in India are subject to political capture. Politicians use them to achieve electoral goals through an expansion in lending just prior to elections and targeting of credit to the swing States. He further finds that the marginal political loan is less likely to be repaid than loans extended in normal times.¹⁸ The second form that political interference takes is

¹⁷Among PSBs, Canara Bank paid its CEO the highest salary in 2019-20 at Rs 3.92 million. Among private banks, the highest salary the same financial year, at Rs 189.2 million, went to the HDFC Bank CEO. Among the private banks for which salary figures are available, even the lowest CEO salary, at Rs 5.18 million for Tamil Merchant Bank in 2019-20, exceeds that paid by Canara Bank to its CEO.

¹⁸Kumar (2020) analyzes the impact of the State elections in India on bank lending and finds strong evidence of politically motivated bank lending to farmers before elections; and that such lending crowds out lending to manufacturing firms. He also provides evidence to support the hypothesis that "such politically motivated increased agricultural lending before state elections contributed towards excessive indebtedness of farmers and a subsequent costly bailout in 2008."

through the manipulation of specific loans to favored clients. There is a widespread belief that such interference played an important role in the eventual accumulation of NPAs in the second half of 2010s in India. More concretely, using a loan-level dataset of 90,000 firms from Pakistan, Khwaja and Mian (2005) show that firms with directors or executives with political ties borrow 45 percent more and have 50 percent higher default rates. Remarkably, this preferential treatment occurs exclusively in PSBs with no similar favors bestowed by private banks.

In this context, it may be noted that questionable lending is not the exclusive preserve of PSBs. We described earlier the case of Yes Bank, which had to be rescued by the government. But two important points must be recognized in this context. The scope for such lending is much greater and such cases much more frequent in PSBs than private banks. Commercial pressures and the need for maintaining reputation work as deterrents to reckless lending in the private sector. Moreover, the regulator has far more power over private banks than PSBs.

Finally, government ownership of a subset of banks gives rise to several regulatory problems. One, PSBs themselves end up with two masters: in some areas, they must follow RBI regulation while in others, they are subject to government-imposed regulations. Two, RBI itself ends up with dual regulation: one set of regulations applies to private banks and another set to PSBs. And three, the government ends up assuming the roles of owner, regulator, and policymaker in banking.

The first problem manifests itself in central government circulars with directives that apply to PSBs but not private banks. For instance, when the government launched the Jan Dhan bank account program, it issued special directives to PSBs that did not apply to private banks. Recently, the government has also set informal loan targets for managers of PSBs, something it is forbidden to do for private banks. The second problem turns out to be even more serious. For instance, RBI can remove directors or the management of private banks but not PSBs. This feature substantively erodes the authority of RBI to regulate PSBs. Finally, the last problem leads to a three-way conflict of interest among the government's role as the owner of PSBs, as regulator and as policymaker. A general best practice rule is for the government to play the role of policymaker only, leaving even regulation to a statutorily independent entity.¹⁹

¹⁹Acharya and Rajan (2020) have proposed reforms to bank governance and ownership, especially for PSBs, besides a host of regulatory and market reforms, in order for banking activity to grow significantly in a sustainable manner.

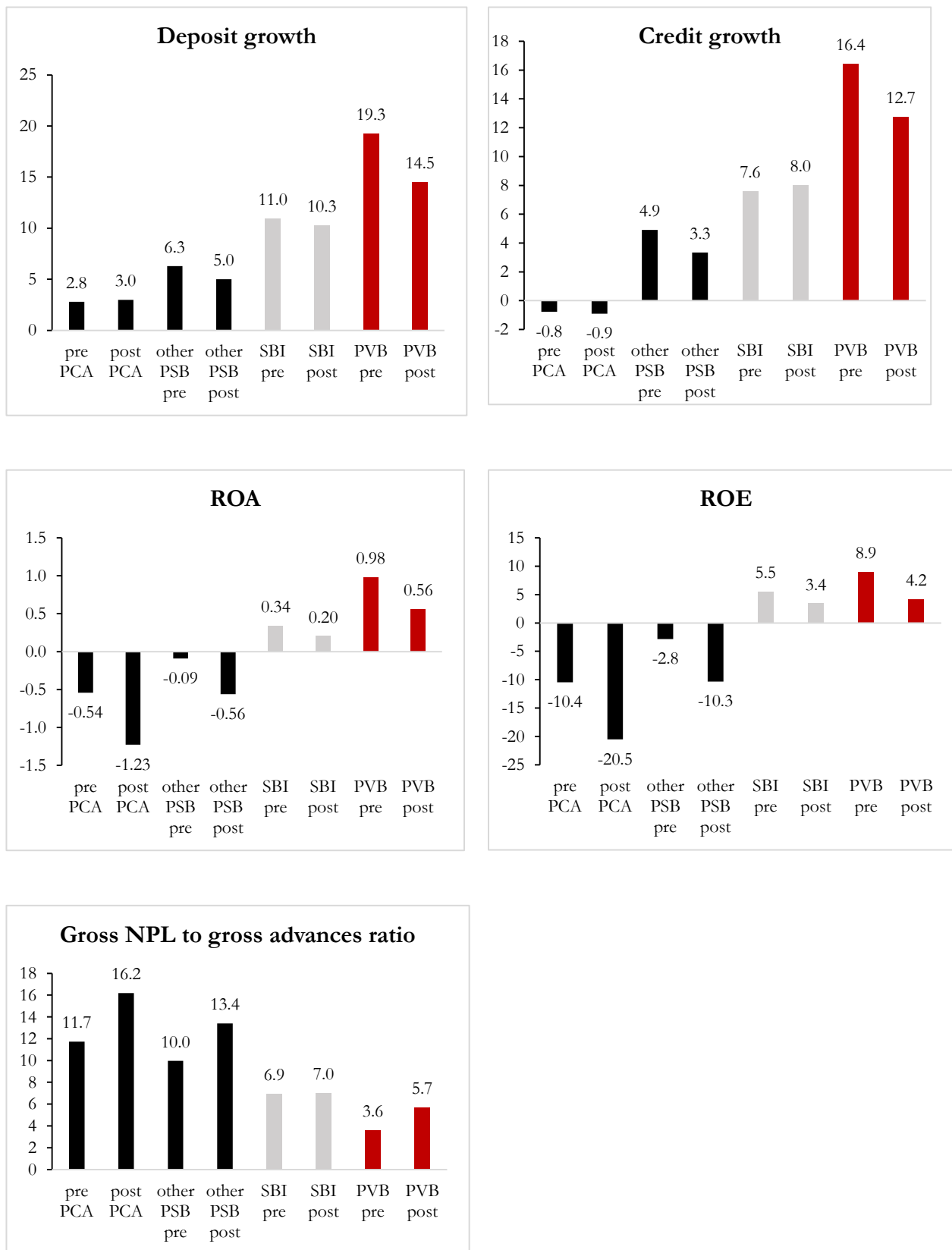
4.4. Reform without Change of Ownership?

The case for privatization will remain incomplete without addressing two further questions: (i) Can measures such as prompt corrective action (PCA) and recapitalization be counted on to fix the problem, returning PSBs to good health; and (ii) Even if the answer to the first question is in the negative, is there a path to reform that would place PSBs on the road to self-sustained healthy growth without transfer of ownership to the private sector?

That the answer to the first question is in the negative is readily seen. In April 2017, the RBI had introduced the PCA mechanism to restore the health of banks seen as suffering from low profitability, high NPAs, poor asset quality, and high debt. Under PCA, it imposes restrictions on dividend distribution, branch expansion, salary increases and directors' fees, and new recruitment. It may also choose to conduct special inspections and audits of the bank and a detailed review of its manpower, investments, and processes.

In Figure 18, we present some key indicators of the banks that have been subject to PCA with the view to assess the effectiveness of PCA. For each indicator, we show the values before and after the banks were placed on PCA. Alongside, we also show the values of the same indicator for SBI and private banks as a whole. There is unequivocal evidence that the banks under PCA were performing poorly before they were placed on PCA (which was the reason that they got placed on PCA in the first place), and they showed virtually no progress after coming out of PCA. Indeed, NPAs actually increased and the return on assets declined. The conclusion that these banks will continue to be a burden on the taxpayer in the years to come is difficult to escape

Figure 18: Performance before and after Prompt Corrective Action



Source: Authors' calculations.

Note: Pre-PCA values include the year of PCA and years prior to it. Post-PCA values include years after PCA and before any mergers of the respective banks.

Turning to question (ii) above, critics of privatization contend that the problems plaguing PSBs can be solved without the transfer of their ownership into private hands. One possible path to it was suggested by the P.J. Nayak Committee in 2014. Under the plan recommended by this Committee, the government would repeal the Bank Nationalization Acts of 1970 and 1980 together with the SBI Act and the SBI (Subsidiary Banks) Act, and incorporate all PSBs under the Companies Act. It would constitute a Bank Investment Company and transfer its holdings in banks into it. After a transition phase of two to three years, all PSBs would come to be governed by professional boards and be subject to the same regulation as private banks by the RBI. The role of the Department of Financial Services would be limited to making policy.

In principle, a plan like this can solve the bulk of the problems plaguing PSBs. Yet, there are two key reasons why we lean against it. First, the process outlined by the Nayak Committee to arrive at the final outcome involves a large number of steps. The Committee, which presumably assumes frictionless implementation, itself estimates the time required to complete these steps to be two to three years. But going by the slow pace at which Indian bureaucracy moves as well as its propensity to place hurdles in the way of even small changes, we remain skeptical that the entire plan would arrive at its final destination even in ten years. The lack of progress in implementing the plan to date reinforces our skepticism. The Committee report has been ready for eight years but PSBs have continued to be run as they were at the time of the appointment of the Committee.

The second problem with taking the route of reform without a change in ownership is that even if a government manages to implement it as per the Nayak Committee plan and schedule, it provides little guarantee that a future government will not reverse it. As long as the government continues to own the banks, the temptation to use them to pursue political objectives will remain. It is wishful thinking that banks can be made to function as genuinely commercial entities without the transfer of ownership in private hands. After all, the aim behind the regulation requiring promoters of private banks to dilute their stake to 15 percent (recently revised to 26 percent) in 15 or fewer years is precisely to minimize their influence over lending and other operations. Why would then governments stop exercising such influence, especially when their time horizon is limited to the next election?

5. Privatization: How and How Far?

In principle, the case for privatization we have made applies to all PSBs including SBI. But we recognize that within the Indian economic framework and political ethos, in the foreseeable future, no government will want to be without a single PSB in its portfolio.²⁰ Keeping this in view, the goal, whether stated explicitly or left implicit, should be to privatize all PSBs other than SBI, which is by far the largest of the existing PSBs in terms of assets, deposits, and credit, and the best performing one during the critical 2010s decade when the NPA crisis hit PSBs the hardest. It may also be recalled in this context that SBI had been nationalized as early as 1955 on pragmatic grounds and well before the ideological wave of nationalization swept India beginning in 1969. Of course, if some years later, the circumstances turn yet more favorable to privatization, the goalpost may be moved to include SBI in the privatization list.

It may be argued that leaving one bank in the public sector leaves the problem of dual regulation unsolved. Strictly speaking, this is uncontested. This being said, with all but one PSB privatized, the problem of dual regulation will be considerably alleviated. Even if SBI retains its current share, we can expect a little over 75 percent of bank assets and deposits to move to the private sector once the remaining 11 PSBs and IDBI Bank are moved into private hands.²¹ This would bring substantial harmony in regulation across banks and help resolve most of the problems arising out of dual regulation. Furthermore, we can expect the government to rule SBI with a much lighter hand than it currently applies to PSBs since without a level playing field, it would risk its only bank rapidly losing market share to private banks. Finally, it is our conjecture that with the bulk of banking moving into the private sector, RBI will also feel the pressure to streamline its processes, rules, and regulations to deliver superior outcomes since the fact of three-fifths of the banking sector being outside its regulatory reach would no longer serve as an explanation for its lapses.

²⁰Patel (2020) in his insightful book, has observed the different performances of PSBs and private banks, and the dual regulation of PSBs. He notes “The sovereign and the regulator face a trilemma: It is clear that it is not possible to: (i) have dominance of PSBs in the banking sector; (ii) retain independent regulation and (iii) adhere to public debt-GDP targets. All three are not feasible on a durable basis; only two out of three can be sustained.” Yet Patel does not foresee the possibility of the government letting go of the PSBs out of its control. He notes, “The likelihood that meaningful privatization of banks will be pursued by any government is small.”

²¹Currently LIC, a public sector enterprise, is the majority shareholder of IDBI Bank. It is expected to pass its stake in the latter into private hands in the near future.

The next question we confront is the pace of privatization. Here our view is that the government should move as rapidly as politically feasible. The reason is that private banks are now clearly outperforming PSBs. It is quite unlikely that this trend will reverse in the coming years. The implication is that privatization of the banking sector as opposed to PSBs themselves is well under way and therefore the latter face a real threat of value destruction over time as has been the case with public carriers in telecom and airline sectors. Going by the past history, there also remains a strong possibility that the longer the government holds on to PSBs that it eventually plans to privatize, the more taxpayer money it would end up sinking into yet more rounds of recapitalization. On the other hand, the sooner the government places PSBs in the private hands, the sooner will they reach their true potential market value and the larger will be the recovery from them.

Even more important, we must not forget the gain to the economy as a whole from rapid privatization. Privatization of PSBs would speed up the privatization of the banking sector as a whole and force the Reserve Bank of India to shape up. With the bulk of the banking sector turning private, the current ambiguity on whether the poor performance of the banking sector is to be attributed to government interference or failure of the regulator would disappear. RBI will have to be fully responsible for proper regulation and smooth running of the banking sector. Therefore, by subjecting banks to genuine commercial pressures and forcing necessary regulatory reforms, rapid privatization of PSBs will contribute to rapid development of a vibrant banking sector. That in turn will contribute to faster economic growth.

The next important question is which banks should be privatized first and how. Taking the “which banks” question first, we may note that in the 2021-22 Budget, the government had announced its intention to privatize two PSBs. Subsequently, multiple media reports have stated that the NITI Aayog has listed four banks as possible candidates for privatization. In order of rising asset value, they are: Bank of Maharashtra, Indian Overseas Bank, Central Bank of India, and Bank of India. These banks respectively accounted for 1.1 percent, 1.5 percent, 2.0 percent, and 4 percent of all banking assets at the end of 2020-21. The media has also reported that a high-level panel of secretaries, headed by the Cabinet Secretary, zeroed in on Central Bank of India (CBI) and Indian Overseas Bank (IOB) as the top two choices for privatization.²² The government has neither confirmed nor denied either of these reports.

²²See <https://www.moneylife.in/article/gom-may-consider-privatisation-of-iob-central-bank-this-year/64359.html> (accessed on 9 June 2022).

Given that the reports of these choices remain unconfirmed, we choose not to speculate on their merit or lack thereof. Instead, we proceed to suggest a path that in our view is likely to help sustain privatization till all the 11 PSBs are passed into private hands. It is of utmost importance that the first two banks chosen for privatization should set an example for the success of future privatizations. In other words, markets must see value in the chosen banks and they must be capable of attracting two or more buyers. If no buyers come forward, the outcome will become ammunition in the hands of critics and the government's hand will be dramatically weakened. In contrast, buyer interest and success in transferring the banks into private hands in the very first attempt will establish the credibility of the government. Moreover, immediate increases in the valuations of privatized banks will create buyer interest in other PSBs as they are brought to the market.

Table 6: Selected indicators for PSBs

Banks	Percent share in total assets in 2020-21	Market cap Rs. billion on June 6, 2022	Recapitalization in Rs. billion total during 2016-17 to 2020-21	Net NPA as percent of net advances annual average during 2016-17 to 2020-21	Percent return on assets annual average during 2016-17 to 2020-21	Percent return on equity annual average during 2016-17 to 2020-21	Deposit growth annual average during 2016-17 to 2020-21	Share of Government in the Bank as on March 21, 2021
Punjab and Sind Bank	0.61	103	70.7	6.7	-0.9	-14.9	1.5	97.1
Bank of Maharashtra	1.08	115	90.1	7.2	-0.8	-16.3	4.8	93.3
UCO Bank	1.39	138	217.1	8.2	-1.1	-17.2	3	94.4
Indian Overseas Bank	1.51	332	256.3	9.8	-1.5	-28.5	1.5	95.8
Central Bank of India	2.03	160	213.0	8.5	-0.9	-16.6	4.5	89.8
Indian Bank	3.45	205	183.8	3.7	0.4	5.8	29.4	88.1
Bank of India	4.00	195	297.9	5.6	-0.4	-7.9	4.3	89.1
Union Bank of India	5.90	263	437.4	6.4	-0.4	-7.1	26.7	89.1
Canara Bank	6.35	383	197.6	5.4	-0.1	-1.8	17.9	69.3
Bank of Baroda	6.36	528	227.9	4	0.01	0.1	12.3	64
Punjab National Bank	6.94	347	572.3	7.4	-0.5	-9.3	16.5	76.9
State Bank of India Group	24.97	4145	144.8	3.2	0.2	3.7	10.5	56.9

Source: Reserve Bank of India statistical tables, Groww.com and Authors' calculations.

In Table 6, we present some key indicators for the twelve PSBs from which (excepting SBI) the first two banks must be drawn. Given the goal of attracting enough buyers and fetching a respectable price in the first go, the three banks that stand out are Indian Bank, Bank of Baroda, and Canara Bank, in that order. These banks exhibit the highest returns on assets and equity, and the lowest NPAs. Their market valuations also exceed the amounts infused to recapitalize them. Among the three banks, Canara Bank, however, exhibits small negative rates of return on assets and equity.

In narrowing down the choice further, an additional criterion may be the current government stake in the banks. The lower the existing government ownership, the easier it may be to privatize any given bank. Applying this criterion, the ranking turns out to be as follows: Bank of Baroda, Canara Bank, and Indian Bank. Alternatively, one may argue that politically the government may find it more attractive to begin the process with a bank with a small asset base. Based on this criterion, Indian Bank would come on top, with Canara Bank and Bank of Baroda tied at second place. Therefore, taking all the five criteria (return on assets, return on equity, NPAs, government stake, and asset base) into consideration, Indian Bank and Bank of Baroda suggest themselves as the two top choices. Between these two, Bank of Baroda would seem to be easier to privatize since in principle, the government will need to divest its stake by only 15 percentage points.

Turning finally to the question of how to privatize, the most critical element has to be full withdrawal of the government from regulation as well as governance and management of the banks. All the powers to regulate the privatized banks must pass on to RBI. A private board with a strict cap on the number of government-appointed directors must have the sole responsibility to govern each privatized bank. Within the RBI norms, the power to appoint management and to set the salaries of all bank staff must be vested in the board. Government vigilance agencies must cease to have any jurisdiction over any of the bank employees.

These objectives can be achieved by incorporating the banks under the Companies Act of 2013, placing their operations under an RBI license, bringing government share in equity strictly below 50 percent, and transferring the governance of the bank to a board constituted under the Companies Act of 2013 and the Banking Regulations Act of 1970. The articles of Association of the privatized bank should explicitly limit the number of government-appointed directors on the board to smaller of two and what is permitted under the law by the proportion of equity held by it.

The key to successful privatization is for the government to withdraw from the governance and management of the bank. If potential buyers fear that the

government interference will continue, they are unlikely to come forward. This point was painfully brought home during the erstwhile privatization of Air India. The government initially insisted on keeping a 24 percent stake in the carrier, and the result was that it failed to attract a single bid. It was only after it offered to divest 100 percent of its stake that it was able to attract a buyer. In the case of banks, continued partial stake of the government in equity is not a make-or-break issue but any impression that it wants to keep the control of the bank is.

One final prescription for the sales strategy is to give the potential buyer enough flexibility to reconfigure the bank's staff, post privatization. The provisions in the Air India deal regarding staff can serve as a reasonable guide here. Accordingly, employment guarantee should be limited to one year and employee benefits, including those associated with retirement, should be preserved as per industry standards. At the same time, one year after privatization has been concluded, the newly appointed board should have a free hand to re-imagine the workforce as per the bank's skill requirements.

Operationally, the government will first need to amend the legislations nationalizing the banks to allow them to incorporate themselves under the Companies Act of 2013 and to replace their current licenses by those issued by RBI.²³ In the next step, it will dilute its stake to below 50 percent, thereby paving the way for the appointment of a board under the provisions of the Companies Act of 2013, Bank Regulation Act of 1970 and any other relevant laws. The Articles of Association would specifically limit government-appointed directors to smaller of what is justified by its equity and two.

The remaining operational question is how much equity should the government divest and how. Because the success of the privatized bank will principally depend on the new governance structure and the quality of management the board puts in place and not the extent of equity held by the government, the answer to the first of these questions does not depend on any objective criteria. Therefore, the government may choose the level of divestment as per its comfort or

²³Currently, PSBs are set up as statutory bodies under the relevant nationalizing legislations and operate under licenses derived from them. Incidentally, according to media reports, the government is expected to place before the Parliament a law amending the acts nationalizing the banks other than SBI along the lines mentioned in the text and incidental amendments to the Banking Regulation Act of 1949 in the monsoon session of 2022. See <https://economictimes.indiatimes.com/epaper/delhicapital/2022/jun/28/et-front/psb-privatisation-bill-may-allow-govt-complete-exit/articleshow/92502989.cms?from=mdr>.

revenue needs. For instance, it could retain as much as 49.9 percent of the bank's equity or divest its entire stake.

On the question of how to divest, the first point to note is that all PSBs are currently listed on the stock market. Therefore, a market valuation of each bank already exists and the prospects of allegation that the government undervalued its equity are limited. The fact of listing of the banks on the stock market introduces considerable transparency with respect to the price from the viewpoint of the potential buyers of the shares as well.

Given this fact, there are two broad avenues to disinvestment. First, should the government choose to keep its stake near the 50 percent threshold and its existing stake happens to be less than 70 percent, it would need to divest only 20 percentage points of its shares. To take a concrete example, the current stake of the government in the Bank of Baroda is 64 percent. In addition, Life Insurance Corporation Ltd. (LIC), a public-sector enterprise, holds another 5 percent stake in it. Therefore, the government will need to divest 20 percentage-point stake to bring the combined public-sector shareholding below 50 percent. It may do so by publicly committing to selling 4 percentage-point shares on the 15th of each month for five successive months beginning in a specified month. The commitment will have the immediate impact of raising the share price in the market and as the government makes good on its commitment, the price will move towards its expected post-privatization level. The government will thus be able to reap much of the benefit of the higher post privatization price on the shares it chooses to divest.

The second avenue to sale is through a large strategic buyer or a consortium of buyers. Strategic buyers would foresee the post privatization value of the bank from which the government would benefit through a competitive auction involving multiple bidders. The exercise of this option makes more sense in cases in which the government plans to sell a large stake in a bank. One constraint in seeking a single large buyer, however, is that the current banking regulations require the shareholding by a single entity to be brought down to 26 percent or less within 15 years of initial acquisition. This regulation by itself is likely to discourage potential buyers from putting more than 26 percent capital in the first place. This is because investors who create value want to reap the returns on it by holding their investments as long as they are able to generate those high returns. Therefore, if the government takes this route and needs to divest equity worth 30 percentage points

or more, it may have to look for a consortium of buyers or sell a part of the shares in the market to retail investors beforehand.²⁴

We address two final questions before concluding this section. First, is there a need to reduce the number of PSBs further through mergers before launching the process of privatization? Our answer to this question is in the negative. Based on whatever small data points for recently merged banks exist, we see little scope for value creation through additional mergers. Moreover, the government may find it easier to find buyers for small banks with operations concentrated in specific geographical regions. What the government can do is to allow the buyer of one bank to bid for another in a later auction. This will allow mergers as and when buyers see value in it.

Second, who should be allowed to buy the banks? In our view, the government must cast its net widely, allowing foreign investors including foreign banks, existing domestic banks and non-financial corporate houses to enter the auctions. Banking in India is now at a level of maturity that it can withstand competition from foreign banks.²⁵ Moreover, these banks would bring innovation in banking. Likewise, letting the existing banks to enter the auctions would open the door to further consolidation in the banking sector. India lacks large banks currently such that even its largest bank, SBI, is smaller than the four largest banks in China.

As regards corporate houses, it is fair to say that the balance of opinion currently is against allowing them to enter banking sector. The commonest argument offered against their entry is that this will lead to crony lending and place depositor interests at risk. Our view is that while this may be a valid argument in abstract, under current Indian conditions, the cost of exclusion of non-financial corporations is significantly higher than that of their inclusion.

²⁴In many PSBs, the government holds a stake of more than 80 percent. In these cases, it will indeed need to divest 30 percentage points of equity or more to cross the 50 percent threshold.

²⁵In a special issue of the *Journal of Banking and Finance* (2005), the editors Clarke, Cull and Shirley summarized the key lessons from a host of papers on the issue of bank privatization in developing economies. The main conclusion that they arrived at is “that although bank privatization usually improves bank efficiency, gains are greater when the government fully relinquishes control, when banks are privatized to strategic investors, when foreign banks are allowed to participate in the privatization process and when the government does not restrict competition.” The role of foreign banks since then has been contested for propagating the impact of the global financial crisis. The regulator can contain perceived risks through appropriate measures including by ringfencing the Indian banking operation of a foreign firm, ensuring adequate diversification of ownership amongst the foreign and domestic owners, and through appropriate regulation and supervision.

Given the scarcity of potential large-scale investors in banks, our options are limited to allowing non-financial corporations to buy PSBs and maintaining status quo of letting PSBs remain in government hands indefinitely. Therefore, the relevant question is not whether there will be crony lending in the banks held by non-financial corporations but whether the overall crony lending will rise or fall when PSBs pass on from government hands to the latter. Our judgment is that with appropriate regulation in place crony lending will fall and, in addition, efficiency will greatly improve if PSBs came out of government hands. For instance, regulation can prohibit the banks held by non-financial corporations from lending to their affiliates and subject any violations to large penalties.

This view is at least partially supported by the fact that we already have some corporations that own deposit-taking non-bank finance companies (NBFCs). We have found no visible cases of wrongdoing in terms of lending to corporate affiliates or otherwise putting the interests of depositors at risk by these NBFCs. On the other hand, it was IL&FS with the Life Insurance Corporation, Ltd., a public sector enterprise, as its largest single shareholder and no ownership of non-financial corporations that brought the entire NBFC sector to the doorstep of a collapse in 2018.

A final argument against blocking non-financial corporations from participating in PSB auctions is that today the intersection of information technology and financial intermediation defines the frontier of banking. Telecommunications corporations such as Airtel and Jio have already been granted limited banking licenses. With the interface between technology and banking only likely to get larger, it is myopic to exclude non-financial corporations from banking. A more prudent course is to use their instrumentality to privatize PSBs, develop necessary regulation to minimize the risk and grow the banking sector.

6. Summary and Conclusions

Banks play a critical role in economic growth and in enhancing the well-being of all economic agents, be they households or firms. In India, the banking sector has been dominated by PSBs for nearly half a century due to deliberate policy choices. This has also been a period during which the banks have generally underserved the economy and their stakeholders.

The under-performance of PSBs has been documented and analyzed for nearly two decades. Yet the issue did not gain urgency until recently both because the private banks were considered to be too few in number and too small in size to

be able to displace the PSBs; and because the PSBs performed at par with the private banks during a brief period prior to the global financial crisis, casting some doubts on whether ownership was an important determinant of their performance.

In recent years, private sector banks have emerged as a credible alternative to PSBs, having gained substantial market share.

Barring the largest one of them, that is, SBI, most other PSBs have lagged behind private banks in all the major indicators of performance during the last decade. They have incurred larger NPAs and higher operational costs, and have attained lower returns on assets and equity than their private-sector counterparts. They have lost ground to the private banks in terms of both the deposits attracted and credit advanced. Since 2014-15, almost the entire growth of the banking sector is attributable to the private banks and the largest PSB, SBI.

The under-performance of PSBs has persisted despite a number of policy initiatives aimed at bolstering their performance during this period, such as recapitalization; constitution of the Bank Board Bureau to streamline and professionalize their hiring and governance practices; prompt corrective action plans; and consolidation through mergers, which helped reduce their number from 27 in 2016-17 to 12 currently.

The government infused \$65.67 billion into PSBs between 2010-11 and 2020-21 to help them tide over the NPA crisis. Even after this massive infusion of funds, their NPAs remain elevated relative to private banks. Strikingly, the market valuation of PSBs other than that of SBI (as on 31 May 2022) remains hugely below the recapitalization resources infused into them. Meanwhile, private banks have sped ahead by miles in terms of market valuation. The steady erosion in the relative market value of PSBs is indicative of a lack of trust among private investors in the ability of PSBs to meaningfully improve their performance.

In this paper, we have made the case for privatization of PSBs. Our case rests on the following grounds. The first is the superior performance of private banks relative to PSBs. Second, the presence of PSBs potentially destabilizes private banks. This was evident during the global financial crisis of 2008-09 when depositors turned to the implicit safety of the largest PSBs, particularly SBI. Third, government ownership of banks gives rise to many governance issues bearing on both the efficiency of bank operations and the ability of RBI to regulate the sector. Fourth, government ownership brings with it political interference through the flow of loans to serve political objectives. Fifth, regular bailouts of PSBs cost the taxpayer vast sums of money. Finally, government ownership of a subset of banks gives rise to regulatory arbitrariness and ambiguities for all the three stakeholders concerned.

The PSBs end up with two masters: the RBI and the government. The RBI ends up with two sets of regulations: one set that applies to private banks and another set to PSBs. The government ends up with the complex and possibly conflicting roles of the owner, regulator, and policymaker in banking.

We propose that the case for privatization applies to all PSBs, including SBI. But we recognize that within the Indian economic framework and political ethos, the government would want to retain at least one PSB in its portfolio. Thus, keeping in view its size and relatively better performance, we propose that the goal should be to privatize all PSBs except SBI for now.²⁶

In our view, in the pathway toward privatization of all of the 11 PSBs, it is important that the first two banks chosen for privatization set an example for the success of future privatizations. The banks chosen may be the ones with the highest returns on assets and equity, and the lowest NPAs in the last five years. To this, additional criteria may be applied such as the current government stake in the bank and its size. The lower the existing government ownership, the easier it may be to privatize any given bank. Likewise, politically the government may find it more attractive to begin the process of privatization with a bank that has a small asset base.

As regards the question of how to privatize, the most critical element has to be the withdrawal of the government from regulation as well as governance and management of the banks. All powers to regulate the privatized banks must pass on to the RBI. A private board with a strict cap on the number of government-appointed directors must have the sole responsibility to govern each privatized bank. Within the RBI norms, the power to appoint management and to set the salaries of all bank staff must be vested in the board. Government vigilance agencies must cease to have any jurisdiction over any of the bank employees.

The first step for privatization to take place would be to incorporate the banks under the Companies Act of 2013, placing their operations under an RBI license, bringing government share in equity strictly below 50 percent, and transferring the governance of the bank to a board constituted under the Companies Act of 2013 and the Banking Regulations Act of 1970. The number of government-appointed

²⁶In a book-length account of the crisis-like situation in the banking sector during the last decade, Tamal Bandyopadhyay (2020) reports interviewing past four RBI governors. According to him, most of them would like the government ownership to be pared down significantly. Also see Acharya and Rajan (2020) in this context.

directors on the board to smaller of two and what is permitted under the law by the proportion of equity held by it.

With the proposed governance structure, the government may choose the level of divestment as per its comfort or revenue needs. For instance, it could retain as much as 49.9 percent of the bank's equity or divest its entire stake.

There are two broad avenues to disinvestment. First, should the government choose to keep its stake near the 50 percent threshold and its existing stake happens to be less than 70 percent, it would need to divest only 20 percentage points of its shares. It may do so by publicly committing to selling 4 percentage-point shares on the 15th of each month for the required number of months beginning in a specified month. The commitment will have the immediate impact of raising the share price in the market and as the government makes good on its commitment, the price will move towards its expected post-privatization level. The government will thus be able to reap much of the benefit of the higher post privatization price on the shares it chooses to divest.

The second avenue to sale is through a large strategic buyer or a consortium of buyers. Strategic buyers would foresee the post privatization value of the bank from which the government would benefit through a competitive auction involving multiple bidders. The exercise of this option makes more sense in cases in which the government plans to sell a large stake in a bank.

We have addressed two final questions in the paper. The first is whether there should be further consolidation of the sector through mergers before the process of privatization is launched. We see little scope for value creation through additional mergers. If anything, the government may find it easier to find buyers for small banks with their operations concentrated in specific geographical regions.

The second question is: Who should be allowed to buy the banks? In our view, the government must cast its net widely, allowing foreign investors including foreign banks and domestic investors, including domestic banks and corporate houses to enter the auctions with due diligence. Any potential risks associated with corporate ownership or foreign banks may be minimized by letting a consortium of corporations enter the bidding with the stake of any single corporation capped; ringfencing the Indian banking operations of a foreign firm; and through appropriate regulation and supervision.

While we have provided a preliminary roadmap for privatization in the sector, the timing and manner in which it is undertaken will ultimately be a political call. In cognizance of the fact that there may be very little or no privatization at all

during the next one decade, we project the implications of this scenario too. On the basis of the relative pace of deposit collection and credit advancement since 2014-15, we project that in a business-as-usual scenario, PSBs other than SBI will shrink further and become faded entities, accounting for only 4.4 percent of the deposits, 9.4 percent of credit, and 8.4 percent of the assets in 2032-33. SBI has had a surprisingly steady market share of about 22-25 percent and will continue to operate at that level. All the rest of the banking operations will reside with the private banks.

Meanwhile, if the status quo is maintained, it will lead to the following results: (i) the various constituencies of the PSBs will continue to be underserved; including the depositors of the banks, who would be deprived of higher interest rates, better customer services, and the benefits of digital banking; (ii) the productive firms, who will find it hard to get credit at market rates; (iii) the RBI who will struggle with dual regulation and an impeded monetary policy transmission through the PSBs; and (v) the government, who will be saddled with poor valuations and demand on its limited fiscal resources.

Eventually, these costs will have macro-economic implications of lower economic growth; slow progress in financialization of savings, and diversion of scarce resources from more worthy social goals.

References

Acharya, V. 2012. "Is State Ownership in the Indian Banking Sector Desirable?" *India Policy Forum*, 8: 1-36. New Delhi: National Council of applied Economic Research.

Acharya, V.V. and Rajan, R. 2020. "Indian Banks: A Time to Reform." *University of Chicago Booth School of Business Working Paper*.

Bandyopadhyay, T. 2020. *Pandemonium: The Great Indian Banking Tragedy*. Roli Books.

Banerjee, A., S. Cole, and E. Duflo. 2004. "Banking Reform in India." *India Policy Forum*, 1(1): 277-332. National Council of Applied Economic Research; Brookings Institution Washington, D.C.

Chopra, Y., K. Subramanian, and P.L. Tantri. 2021. "Bank Cleanups, Capitalization, and Lending: Evidence from India." *The Review of Financial Studies*, 34(9): 4132-4176.

Clarke, G.R., R. Cull, and M.M. Shirley. 2005. "Bank Privatization in Developing Countries: A Summary of Lessons and Findings." *Journal of Banking & Finance*, 29(8-9): 1905-1930.

Cole, S., 2009. "Fixing Market Failures or Fixing Elections? Agricultural Credit in India." *American Economic Journal: Applied Economics*, 1(1): 219-250.

Eichengreen, B. and P. Gupta. 2013. "The Financial Crisis and Indian Banks: Survival of the Fittest?" *Journal of International Money and Finance*, 39: 138-152.

Khwaja, A.I. and A. Mian. 2005. "Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market." *The Quarterly Journal of Economics*, 120(4): 1371-1411.

Kirti, D., S. Martinez-Peria, S. George, and R. Vijayaraghavan. 2022. "India's Banks: Lending to Productive Firms?" *IMF Working Papers 2022/073*, International Monetary Fund.

Kumar, N. 2020. "Political Interference and Crowding out in Bank Lending." *Journal of Financial Intermediation*, 43: 100815.

La Porta, R., Lopez-de-Silanes, F. and Shleifer, A., 2002. Government ownership of banks. *The Journal of Finance*, 57(1): 265-301.

Mohan R. and P. Ray. 2022. "The Roller Coaster Ride of Non-performing Assets in Indian Banking." *Centre for Social and Economic progress (CSEP) Working Paper*.

Narasimham. 1991. "Report of the Committee on the Financial System". Mumbai: Reserve Bank of India.

Panagariya, A. 2020. *India Unlimited: Reclaiming the Lost Glory*. Harper Collins.

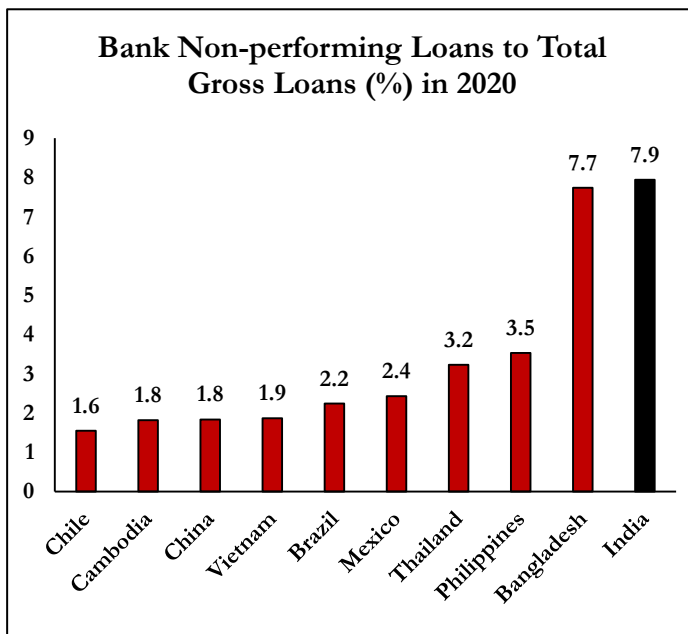
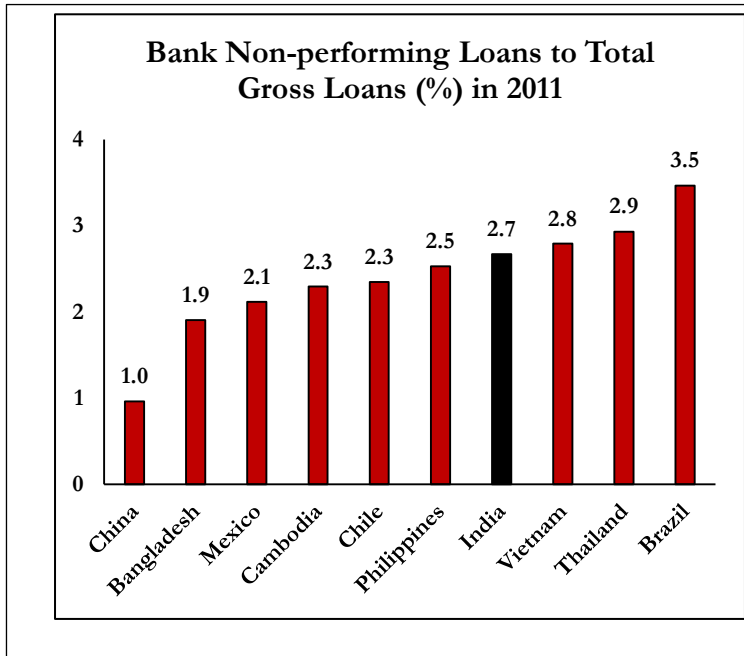
Patel, U. 2020. *Overdraft: Saving the Indian Saver*. Harper Collins.

P.J. Nayak. 2014. "Report of the Committee to Review Governance of Boards of Banks in India". Mumbai: Reserve Bank of India.

Report of the Comptroller and Auditor General of India on Recapitalization of Public Sector Banks, Union Government Ministry of Finance Report No. 28 of 2017 (Performance Audit).

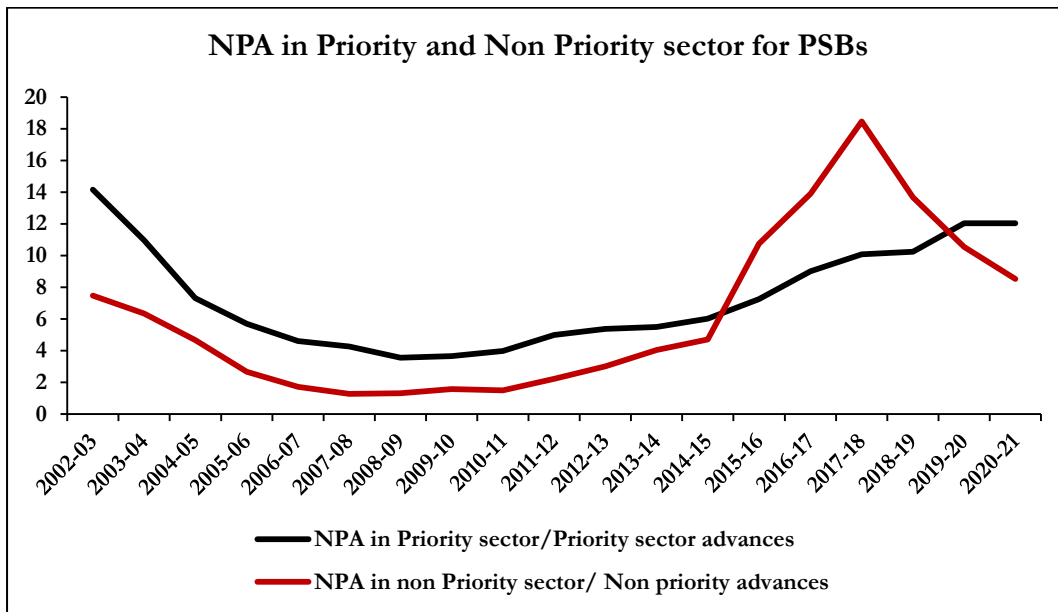
Appendix

Figure A1: India's NPA Ratio Remains Higher than that of Most Other Comparator Countries



Source: World Development Indicators (World Bank).

Figure A2: NPAs Incurred by PSBs in Priority Sectors versus Other Sectors



Source: RBI, Statistical Tables Relating to Banks in India (Composition of NPA’s of Public sector Banks, data availability from fiscal year 2003 till 2021).

Note: Non- Priority sector NPA calculated as Total NPA minus NPA in Priority sector. Similarly, Non-priority sector advances calculated as Total Advances – Priority sector advances. Systematic data for private banks separating NPAs in priority sector are not available.



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