COMPOSITION OF LOANS AND INVESTMENTS IN INDIAN BANKS - AN EMPIRICAL STUDY

KAMAL KISHORE
Apeejay School of Management, New Delhi
kamalk1951@yahoo.co.in

Abstract

Banks mobilise majority of funds from deposits, nearly 78%. Deployment of bank funds is mainly in loans and investments. Banks extend a variety of loans, both secured and unsecured, after due process of credit appraisal. Similarly, banks take exposure in investment instruments as per their policy and regulatory guidelines. Investments supplement lending function in various ways as they are more liquid and can be shuffled easily. There is no optimal allocation for deployment of funds by banks and same is decided by individual banks as per business strategy. The return generated in banks from loans is better than that from investments. The proportion of two forms of bank assets varies from bank to bank in line with business strategy and regulatory norms. The private sector banks have tendency to take more exposure in loans vis a vis their public sector counterparts. On the other hands, foreign banks in India are inclined to take higher exposure in investments. This paper examines the pattern of division of bank assets as loans and investment, between different categories of banks in India.

Key words: Bank loans, bank investments, bank funds, bank assets, foreign banks, public sector banks, private sector banks.

JEL classification: G300

1. INTRODUCTION

Banks perform important intermediation function by mobilising public savings and channelizing them to productive capital formation thereby aiding in economic growth. According to the Banking Regulation Act, 1949 of India, Banking " means accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise, and withdrawal by cheque, draft, order or otherwise" (BR Act, 1949). Banks thus accept deposit of money from public which is repayable to them as per their needs. Banks, being business entities, deploy these deposits in the form of loans or investments and earn return on them which is used for repayment of interest on deposits, meeting operational expenses and earn a surplus for generating profit. In addition, banks also carry out many financial activities to meet the needs of the customers and economy.

Banks mobilise funds mainly by deposits and nearly 78% of total liabilities constitute deposits (RBI, 2019). Other funds are contributed by borrowings and capital. Deployment of bank funds is mainly in loans and investments. Banks extend a variety of loans, both secured and unsecured, after due process of credit appraisal. These loans are repaid as per agreed system of instalments and carry interest rates depending upon loan product and risk profile of borrower. Similarly, banks take exposure in investment instruments as per their policy and regulating guidelines. Both forms of fund deployments have their own objectives from banking perspective. The proportions of two forms of bank assets vary from bank to bank. This paper examines the pattern of division of bank assets as loans and investment, between different categories of banks in India.

2. LITERATURE REVIEW

There is scarce literature in the area relating to relative proportion of deployment of funds as loans and investments. Important and relevant excerpts as available are given below.

Acting as a provider of loans is one of the main activities of financial institutions such as banks and credit card companies. For other institutions, issuing of debt contracts such as bonds is a typical source of funding (Wikipedia, 2018). The Indian banking sector is beleaguered by increasing bad loans, with gross NPLs accounting for 7.5 per cent of banks' total outstanding loan portfolio in the financial year ending March 2016. Banks tend to take on more risks during an upturn in credit growth (Chavan and Gambacorta, 2016).

Shollapur et al (2010) pointed out that bank loans generate income from interest as well as discounts on bills, letters of credit etc. The quantum of return on loans is desired to be higher to earn more income for banks and improve its productivity. "Ratio of return on advances to total advances indicates the ability of banks in generating income from its lending operations". Similarly in case of investments, return thereon is critical in banks' profitability. "The return on investments reveals the impact of movements of market interest rates on the portfolio value".

Toor (1994) examined the deployment of funds in banks and showed that operational efficiency of banks was dependent on their composition of bank funds and how these are deployed. Nguyen et al (2018), after a study of Vietnamese banks, found that bank loans do not have significant effect on bank deposits and that both are based on independent decisions. He added that banks wanted to rationalise their loans to keep interest payments under check. Banks provide some special service with their lending activity that is not available from other lenders (James, 1987).

In their paper, Hamzaee et al (2006) surmised that "The growing competitive conditions, both inside and outside the banking industry, have influenced the banks' investment in diverse assets and adoption of various forms of liabilities". On the basis of a study of seven Tehran banks, Raei et al (2016) found that credit portfolio diversification had significant relationship with risk.

Dolezal et al (2015) were involved in a study on bank loans to SMEs and advocated that the process of granting loans to SMEs need to be improved. Ramesh (2019) in his study paper on public sector banks in India brought out that "The soundness of the banking system is necessary for economic advancement and financial stability". He also averred that non-performing assets in Indian banks have led to grave sufferings by banks.

3. LOANS IN BANKS

Lending is primary business of banks. It is the backbone of economic development in a country. Interest generated from loans is major component of bank profit. Banks provide loans in various forms such as overdraft, cash credit, bills discounting, retail loans and project loans. Banks have their loan policy which governs their lending activities. The Banking Regulation in India enjoins banks to show loans and advances in their balance sheet in following details:

A. (i) Bills purchased and discounted
   (ii) Cash credit, Overdrafts, Demand loans
   (iii) Term loans
B. (i) Secured by tangible assets
   (ii) Covered by Bank / Govt guarantee
   (iii) Unsecured
C.I. Advances in India (priority sector, public sector, banks, others)
C.II. Advances outside India
   (i) Due from banks
   (ii) Due from others (Bills, syndicated loans, others)

Grand Total (C.I + C.II)

Thus, advances are represented in three forms – product wise, security wise and lastly country wise.

Bank regulation in India also provides for 40% of credit to be allocated to priority sector that includes agriculture, exports, medium and small industries, education, housing and renewal energy. Any shortfall has to be invested in specified bonds.

Non-performing assets (NPAs) or bad loans constitute a serious issue in Indian banks. A loan asset become NPA when default in principle or interest exceeds 90 days. The NPA category of asset goes higher with increasing age of default. The NPAs impact balance sheet of banks in reducing profits because of provisioning for NPAs and non-recognition of income. Current estimates indicate NPA level of 10.58 % in Indian banking system. Another aspect of loans is that every bank has to provide minimum capital in relation to risk weighted assets (loans and investments) as per regulations of Central Bank of the country. These regulations, popularly known as Basel guidelines, provide for a minimum capital adequacy ratio (CAR) of 9%. There are sub components of this ratio based on core capital and supplemental capital, depending upon their loss absorption capacity.

Bank loans are subject to various kinds of risk, which includes credit risk, market risk, business risk etc. The bank loans are also subject to credit exposure norms of Reserve Bank of India. These guidelines enjoin upon banks to restrict credit exposure to a borrower, group or industry within specified limits based on net worth of banks.

4. INVESTMENTS

In addition to loan assets, banks take exposure in various kinds of investments. Each bank is required to formulate its policy on investments. Bank investments constitute regulatory exposure in the form of Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR). Currently SLR stands at 18.25% meaning that each bank has to invest this much ratio of demand and term liabilities in specified investments. The CRR component is currently 4% of demand and time liabilities to be invested as cash with RBI. Any shortfall in meeting these ratios is met with penal consequences in the form of interest penalty. In addition to SLR investments, banks also make investments in non SLR instruments as part of their treasury function or strategic decisions.

Banks are required to display their total investments in balance sheet in following different categories:

- Government securities
- Other approved securities
- Shares
- Debentures / bonds
- Investments in subsidiaries/ joint ventures
- Others (CP,CD,MF)

Investments provide cushion to lending function as they have better liquidity and can be shuffled as per market needs. If there are surplus funds which cannot be used for lending, banks can quickly invest them in securities. Banks make substantial profits from their investment function.

Similar to any other type of investments, bank investments are subject to risks. The nature of risk varies depending upon the kind of investment. Government securities carry much less risk than corporate securities and equities. Banks diversify their investment portfolios to mitigate risk.

5. RETURN FROM LOANS AND INVESTMENTS

The data on the returns generated by banks from loans and investments is reflected in following table:

Table 1. *Return on Advances and Investments in all banks in India*

All Scheduled Banks

Year	Return on loans	Return on investments
2018-19	8.68	7.06
2017-18	8.31	7.00
2016-17	8.86	7.45
2015-16	9.35	7.68
2014-15	9.78	7.54

Source: Compiled from Statistical Tables Relating to Banks in India (RBI, 2019)

Not only lending is primary activity in banks, they also generate better return from advances as compared to investments. However, as observed, return in both areas has been declining implying shrinking margins, with marginal increase in 2018-19.

6. CD RATIO AND ID RATIO IN BANKS

Two important ratios followed in Indian banks are Credit to Deposit ratio (CD Ratio) and Investment to Deposit ratio (ID Ratio). CD ratio represents proportion of deposit deployed in credit (loans and advances). If the ratio is more than 100%, it implies that funds other than deposits have been used for credit. This ratio, when measured on regional basis, has also some political sensitivity in as much as ratio of less than 100% indicates use of deposits raised in that region for lending in other regions. In India, many states have CD ratio of much less than 100%. On the other hand, ID ratio represents proportion of deposit used for investments made by bank.

The pattern of CD and ID ratios in Indian banks in last three years are depicted in the following table:

Table 2. *CD and ID ratios in Indian bank groups*

	CD ratio			ID ratio		
Banks	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**
Public Sector Banks	69.83	68.96	67.13	31.84	33.79	29.35
Private banks	88.26	88.36	86.54	32.35	33.57	33.34
Foreign Banks	68.18	70.93	71.39	65.90	63.16	51.50
All scheduled Banks	75.34	74.16	73.03	33.52	34.90	32.86

Source: Compiled from Statistical Tables Relating to Banks in India (RBI, 2019)

On the average, CD/ID ratio in Public sector banks is 69/31. Private banks take more exposure in investments as ratios stand at 88/33. This category, thus, derive funds, other than deposits, from borrowing also. The foreign banks are very aggressive in investment function as these ratios in their case are 70/60, though investment has grown more weight in last year. On overall basis, the ratios are 74 /33.

7. OBJECTIVE OF STUDY

Banks deploy funds in loans and investments as per their business strategy. The study aims to examine the pattern of deployment of bank funds in loans and investment in Indian banks in different categories. The study also compares the same pattern for foreign banks operating in India as covered in RBI data.

8. DATA AND METHODOLOGY

Data for the study has been drawn from Statistical Tables relating to Banks published by Reserve Bank of India (RBI) (RBI, 2019 & 2018). The panel includes 20 Public Sector Banks, 21 Private Sector Banks and 39 foreign banks. The period covered in study is three years from 2017 to 2019. The data has been condensed in tables for examining the discernible pattern under study.

9. COMPOSITION OF LOANS AND INVESTMENTS IN BANKS

While all banks deploy funds in loans and investments, their proportion varies from banks to banks. Certain amount of deployments in investments is mandated by regulation. At the same time, lending is primary function of banks and they take significant exposure in variety of loan assets. In both cases, banks are guided by their internal policies.

9.1. PUBLIC SECTOR BANKS

Table: 3. *Proportion of Loans and Investments in Public Sector Banks*

Sr No	Banks	% loans			% Investments		
		2019	**2018**	**2017**	**2019**	**2018**	**2017**
1	ALLAHABAD BANK	64	69	73	36	31	27
2	ANDHRA BANK	72	70	70	28	30	30
3	BANK OF BARODA	72	72	75	28	28	25
4	BANK OF INDIA	70	71	74	30	29	26
5	BANK OF MAHARASHTRA	58	66	71	42	34	29
6	CANARA BANK	74	73	69	26	27	31
7	CENTRAL BANK OF INDIA	54	60	60	46	40	40
8	CORPORATION BANK	67	63	69	33	37	31
9	DENA BANK	57	64	65	43	36	35
10	IDBI BANK LIMITED	61	65	67	39	35	33
11	INDIAN BANK	74	69	65	26	31	35

12	INDIAN OVERSEAS BANK	66	66	66	34	34	34
13	ORIENTAL BANK OF COMMERCE	67	66	73	33	34	27
14	PUNJAB AND SIND BANK	73	67	68	27	33	32
15	PUNJAB NATIONAL BANK	69	68	69	31	32	31
16	SYNDICATE BANK	73	72	75	27	28	25
17	UCO BANK	55	60	62	45	40	38
18	UNION BANK OF INDIA	70	70	72	30	30	28
19	UNITED BANK OF INDIA	52	55	55	48	45	45
20	VIJAYA BANK	76	75	68	24	25	32
	Public Sector Banks	**69**	**67**	**70**	**31**	**33**	**30**

Source: Compiled from Statistical Tables Relating to Banks in India (RBI, 2019)

It is interesting to note that while thirteen banks have shown declining trend in loans in the three years period under study, only five banks have registered incremental stance. Correspondingly, thirteen banks depict increasing tendency in investments and five banks are showing declining trend. Five banks have loans component in the range of 50-60%, six in 60-80 %, and nine in range of 70-80%. While minimum and maximum loans share is 52% and 76% respectively, the same for investments is 24% and 48%. In general, loans to investments ratio are 70 to 30 % in public sector banks. In percentage terms, maximum increase in two asset components is 13.8% and 44.8%, while the maximum decline is 18.3% and 25.7% respectively.

9.2. PRIVATE SECTOR BANKS

Table: 4. *Proportion of Loans and Investments in Private Sector Banks*

Sr No	**Banks**	**% loans**			**% Investments**		
		2019	**2018**	**2017**	**2019**	**2018**	**2017**
1	AXIS BANK	74	74	74	26	26	26
2	BANDHAN BANK	80	78	75	20	22	25
3	CATHOLIC SYRIAN BANK	72	69	58	28	31	42
4	CITY UNION BANK	81	78	77	19	22	23
5	DCB BANK	75	77	73	25	23	27
6	FEDERAL BANK	78	75	72	22	25	28
7	HDFC BANK	74	73	72	26	27	28
8	ICICI BANK	74	72	74	26	28	26
9	IDFC BANK	60	46	49	40	54	51

10	INDUSIND BANK	76	74	75	24	26	25
11	JAMMU & KASHMIR BANK	74	75	70	26	25	30
12	KARNATAKA BANK	77	75	65	23	25	35
13	KARUR VYSYA BANK	77	74	73	23	26	27
14	KOTAK MAHINDRA BANK	74	72	75	26	28	25
15	LAKSHMI VILAS BANK	70	71	73	30	29	27
16	NAINITAL BANK	70	66	60	30	34	40
17	RBL BANK	76	72	69	24	28	31
18	SOUTH INDIAN BANK	77	75	70	23	25	30
19	TAMILNAD MERCANTILE BANK	74	70	66	26	30	34
20	DHANALAKSHMI BANK	61	58	61	39	42	39
21	YES BANK	73	75	73	27	25	27
22	**PRIVATE SECTOR BANKS**	**73**	**72**	**72**	**27**	**28**	**28**

Source: Compiled from Statistical Tables Relating to Banks in India (RBI, 2019)

An analysis of table reveals that, in contrast to public sector banks, private banks have shown an opposite trend. Out of 21 banks, 15 banks have increased their loans component in the period and correspondingly same number reduced their investments exposure. Maximum percentage increase and decline in loans is respectively 24.1% and 4.1%. The same for investments is 34.3% and 11.1%. The loan to investment ratio in this case is 72 to 28% leaning towards loans. Majority of banks (19 out of 21) are in higher proportion of more than 70%, as compared to nine in public sector counterparts.

9.3. FOREIGN BANKS IN INDIA

Table: 5. *Proportion of Loans and Investments in Foreign Banks in India*

Sr No	Banks	% loans			% Investments		
		2019	**2018**	**2017**	**2019**	**2018**	**2017**
1	AB BANK	62	60	61	38	40	39
2	ABU DHABI COMMERCIAL BANK	65	67	77	35	33	23
3	AMERICAN EXPRESS BANKING CORP.	70	73	69	30	27	31
4	AUSTRALIA AND	40	56	55	60	44	45

	NEW ZEALAND BANKING GROUP						
5	BANK OF AMERICA , NATIONAL ASSOCIATION	46	51	64	54	49	36
6	BANK OF BAHRAIN & KUWAIT B.S.C.	75	78	75	25	22	25
7	BANK OF CEYLON	83	84	80	17	16	20
8	BANK OF NOVA SCOTIA	45	60	54	55	40	46
9	BARCLAYS BANK P	56	53	58	44	47	42
10	BNP PARIBAS	56	59	65	44	41	35
11	CITIBANK N.A	39	42	49	61	58	51
12	COOPERATIEVE RABOBANK U.A.	77	82	72	23	18	28
13	CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK	69	68	74	31	32	26
14	CREDIT SUISSE AG	21	18	18	79	82	82
15	CTBC BANK CO.,	74	75	85	26	25	15
16	DBS BANK	46	50	68	54	50	32
17	DEUTSCHE BANK	65	67	71	35	33	29
18	DOHA BANK QSC	75	78	67	25	22	33
19	FIRSTRAND BANK	26	20	26	74	80	74
20	HONGKONG AND SHANGHAI BANKING CORPN.	49	48	50	51	52	50
21	INDUSTRIAL AND COMMERCIAL BANK OF CHINA	40	33	43	60	67	57
22	INDUSTRIAL BANK OF KOREA	79	88	81	21	12	19
23	JPMORGAN CHASE BANK NATIONAL ASSOCIATION	49	44	44	51	56	56

24	KEB HANA BANK	75	75	79	25	25	21
25	KRUNG THAI BANK PUBLIC COMPANY	4	3	9	96	97	91
26	MASHREQ BANK	66	73	62	34	27	38
27	MIZUHO BANK	76	76	70	24	24	30
28	PT BANK MAYBANK INDONESIA TBK	56	48	69	44	52	31
29	SBER BANK	72	81	66	28	19	34
30	SBM BANK (MAURITIUS)	59	69	63	41	31	37
31	SHINHAN BANK	80	79	76	20	21	24
32	SOCIETE GENERALE	40	67	58	60	33	42
33	SONALI BANK	73	77	73	27	23	27
34	STANDARD CHARTERED BANK	55	62	65	45	38	35
35	SUMITOMO MITSUI BANKING CORPORATION	61	59	65	39	41	35
36	THE ROYAL BANK OF SCOTLAND	0	0	3	100	100	97
37	UNITED OVERSEAS BANK	66	39	73	34	61	27
38	WESTPAC BANKING CORPORATION	28	49	33	72	51	67
39	WOORI BANK	71	80	60	29	20	40
	FOREIGN BANKS	**51**	**53**	**58**	**49**	**47**	**42**

Source: Compiled from Statistical Tables Relating to Banks in India (RBI, 2019)

Foreign banks operating in India have shown a mixed trend. As far loans are concerned, eleven banks are in increasing trend and twenty four are declining in three year period under study. Maximum increase in loans is 18.3%. However, loans have shown decline as high as 32 and 55% in two banks and in one bank, loan share vanished all together meaning that all deployment is shifted to investments. One bank has even reduced loans deployment to zero level and another one has just four percent. Thirteen banks have loan deployment less than 50%. In investments twelve banks are showing reducing pattern and twenty four banks are going upward. Maximum increase in investments is 68% and maximum decline is also 24% which are significantly higher than Indian banks. Investments deployment in five foreign banks is less than 20%. The ratio of two in this category is 54 / 46 %, much different from two categories of Indian banks.

A summary position of all bank groups is given in following table:

Table 6: *Percentage share of loans and investments in bank groups*

		% loans			**% Investments**		
Sr No	**Bank group**	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**
1	Public Sector Banks	69	67	70	31	33	30
2	Private Sector Banks	73	72	72	27	28	28
3	Foreign Banks	51	53	58	49	47	42
4	All Banks	**69**	**68**	**69**	**31**	**32**	**31**

Source: Compiled from Statistical Tables Relating to Banks in India (RBI, 2019)

It is evident that proportion of deployment of funds by banks in loans and investments is quite close in foreign banks. The private banks are relatively more pronounced towards loans (72%) as compared to public sector banks where the ratio is 69%.

Another aspect examined is what proportion of total assets, banks deploy in loans and investments. The status is presented in following table:

Table 7: *Proportion of total assets deployed in loans and investments*

Sr No	**Bank Group**	**% of Loans**	**% of Investments**	**Total**
1	Public sector Banks	58.31	26.59	84.90
2	Private Sector Banks	62.80	23.02	85.82
3	Foreign Banks	37.54	36.28	73.82
4	All scheduled Banks	**58.49**	**26.02**	**84.51**

Source: Compiled from Statistical Tables Relating to Banks in India (RBI, 2019)

Both public and private sector banks deploy nearly 85% of their total assets in their main productive components of loans and investments, though the ratio between two differs. In public sector banks, loans share comprise about 58%, the same in private sector banks is higher at 63%. In foreign banks, both components share equally at 37%, loans being much less than Indian banks and investments being at higher level. Overall pattern for all banks is similar to public sector banks at 58% to 27% between loans and investments.

10. CONCLUSION

The funds generated by banks are deployed in investments and loans in proportion which vary from banks to bank. The relative share is decided by policies, regulatory provisions and business perspective. Regulatory guidelines exist in India both for loans and investments and banks have to comply with the same. Loans being the main business activity for banks, they constitute higher share of funds deployment in Indian banks. The investments, on the other hand, both SLR and non- SLR, supplement the loans on asset side. They, besides fulfilling regulatory guidelines, provide liquidity cushion, are easy to shuffle in case of need. The investments constitute a good source of income through treasury operations. While loans register better return, the same is slightly less from investments. There is also increase and decrease in relative proportion of loans and investments from year to year without any steady pattern. At group level, private sector banks take the lead in higher share in loans, about 72%, with public sector banks running close at 69%. The foreign banks have depicted a deployment in two asset classes in a narrow compass. They take more aggressive stance in investments due to their better expertise in this segment, business strategies at home turf, business perspective in the country of operations.

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