

Bank of Baroda (BOB IN)

Rating: BUY | CMP: Rs74 | TP: Rs82

January 28, 2021

Q3FY21 Result Update

☑ Change in Estimates | ■ Target | ■ Reco

Change in Estimates

	Current		Previous	
	FY22E	FY23E	FY22E	FY23E
Rating	BUY		BUY	
Target Price	82		82	
NII (Rs. m)	3,20,998	3,48,511	3,16,580	3,44,970
% Chng.	1.4	1.0		
Op. Profit (Rs. m)	2,22,563	2,37,528	2,13,207	2,28,520
% Chng.	4.4	3.9		
EPS (Rs.)	11.0	12.8	8.7	10.5
% Chng.	26.6	21.1		

Key Financials - Standalone

Y/e Mar	FY20	FY21E	FY22E	FY23E
NII (Rs m)	2,74,513	2,99,769	3,20,998	3,48,511
Op. Profit (Rs m)	1,96,914	2,11,467	2,22,563	2,37,528
PAT (Rs m)	14,504	32,949	50,960	58,996
EPS (Rs.)	1.5	7.1	11.0	12.8
Gr. (%)	(8.2)	374.5	54.7	15.8
DPS (Rs.)	-	-	1.0	2.0
Yield (%)	-	-	1.4	2.7
NIM (%)	3.0	2.7	2.7	2.7
RoAE (%)	2.4	4.5	6.6	7.2
RoAA (%)	0.1	0.3	0.4	0.4
P/BV (x)	0.5	0.5	0.5	0.4
P/ABV (x)	0.7	0.6	0.6	0.5
PE (x)	49.3	10.4	6.7	5.8
CAR (%)	13.3	13.3	13.4	13.3

Key Data

BOB.BO | BOB IN

52-W High / Low	Rs.94 / Rs.36
Sensex / Nifty	47,410 / 13,968
Market Cap	Rs.342bn / \$ 4,692m
Shares Outstanding	4,621m
3M Avg. Daily Value	Rs.5886.36m

Shareholding Pattern (%)

Promoter's	71.60
Foreign	4.32
Domestic Institution	11.30
Public & Others	12.78
Promoter Pledge (Rs bn)	-

Stock Performance (%)

	1M	6M	12M
Absolute	21.7	58.7	(19.8)
Relative	20.6	27.7	(29.6)

Pritesh Bumb

priteshbumb@plindia.com | 91-22-66322232

Anmol Das

anmolDas@plindia.com |

Stress under control; needs vigil

Quick Pointers:

- Restructuring at 140bps of loans has been on lower side, could move to max 200bps of loans.

- Asset quality indicators still remain stressed mainly in retail/corporate

BOB's reported an Rs10.6bn of PAT (PLe: Rs16.9bn) as higher provisions and marginally lower PPOP dent earnings. On Pro-forma basis bank would have seen GNPA/NNPA move up by 30/63bps QoQ with slippages of Rs112bn (Rs83bn unrecognized). Positive was lower restructuring at 140bps of loans with guidance of 200bps of loans by Q1FY22 which is lower than expected but majorly remains from corporate book. Bank SMA 1&2 book also remains higher at 3.3% of loans, keeping threat on asset quality. Management has mentioned they need to keep close vigil on retail/MSME as restructuring is lower and stress could come with a lag. Improved PCR, improved growth trends post-merger, strong CASA are positives, while sub optimal NIMs, slippages remaining high and capital are key hindrances. Retain BUY with PT of Rs82 (unchanged) based on 0.6x Mar-23 ABV.

- **PPOP growth was steady:** NII grew by 9% YoY/3% QoQ on a much sharper reduction in cost of funds, domestic operations were strong with better yields and decline in deposit cost leading to improvement in NIMs by 11bps QoQ to 2.87%. Decent growth in NII was offset by lower other income and higher staff opex as it continues to provide on AS-15 & wage revision, although continued help from treasury deliver PPOP growth of 13% YoY.
- **Slippages on higher side; stress asset ratio under control:** Slippages were at Rs112bn including unrecognized Rs80bn on pro-forma basis, these pro-forma slippages should see Rs30bn of upgrade to restructured mainly being from corporate book, while improved recovery/upgrades to help lower stress. Few headline asset quality trends are still worrisome with 3.3% of loans (post pro-forma NPA) are SMA1&2 and has increased from FY20 levels. Although, restructuring in Q3 was low at 1.42% of loans and by FY22-Q1FY22 should see marginal additions to restructured pool, but keeping overall stress pool under control. PCR on pro-forma basis remained at 65-70% levels, while has covered for the slippages as well. Management retained its caution stance on asset quality in retail/SME.
- **Business momentum was good – comes as surprise:** Loan book grew by 7% YoY/4% QoQ in-line with sector and certain private banks was a good surprise. Growth was from corporate with incremental share going to AAA rated corporates, MSME growing on back of ECLGS with disbursement of Rs87bn (1.4% of loans), while retail growing sharply by 28% YoY. On liabilities side, bank grows cautiously its deposit book only in line with loan book growth, focus continues on CASA which grew by 13% YoY/3% QoQ with improved ratio of 41.2% from 39.8% in Q2FY21 and de-growing/repaying the wholesale deposit funding.

Exhibit 1: Q3FY21 Financials - Higher Provisions impact on Profits

P&L (Rs m)	Q3FY21	Q3FY20	YoY gr. (%)	Q2FY21	QoQ gr. (%)
Interest Income	1,77,687	1,90,679	(6.8)	1,79,176	(0.8)
Interest Expense	1,00,200	1,19,389	(16.1)	1,04,101	(3.7)
Net Interest Income (NII)	77,487	71,291	8.7	75,075	3.2
- Treasury income	9,250	5,960	55.2	10,060	(8.1)
Other income	28,955	27,412	5.6	28,023	3.3
Total income	1,06,442	98,702	7.8	1,03,098	3.2
Operating expenses	50,536	49,117	2.9	47,580	6.2
-Staff expenses	28,002	25,941	7.9	25,503	9.8
-Other expenses	22,534	23,176	(2.8)	22,077	2.1
Operating profit	55,906	49,585	12.7	55,518	0.7
Core operating profit	44,606	42,715	4.4	43,138	3.4
Total provisions	39,567	71,554	(44.7)	30,016	31.8
Profit before tax	16,340	(21,969)	(174.4)	25,502	(35.9)
Tax	5,729	(7,900)	(172.5)	8,716	(34.3)
Profit after tax	10,611	(14,069)	(175.4)	16,786	(36.8)
Balance sheet (Rs m)					
Deposits	95,45,608	89,61,616	6.5	95,43,402	0.0
Advances	69,86,516	65,44,651	6.8	66,98,511	4.3
Profitability ratios					
RoaA	0.4	(0.5)	89	0.6	(22)
NIM	2.9	2.8	7	2.9	1
Yield on Advances	7.1	7.9	(80)	7.1	1
Cost of Deposits	3.9	4.9	(101)	4.0	(14)
Asset Quality					
Gross NPA (Rs m)	6,31,816	7,31,397	(13.6)	6,56,980	(3.8)
Net NPA (Rs m)	1,66,677	2,65,040	(37.1)	1,67,949	(0.8)
Gross NPL ratio	8.5	10.4	(195)	9.1	(66)
Net NPL ratio	2.4	4.1	(166)	2.5	(12)
Coverage ratio	73.6	63.8	986	74.4	(82)
Business & Other Ratios					
Low-cost deposit mix	41.2	38.8	236	39.8	142
Cost-income ratio	47.5	49.8	(229)	46.2	133
Non int. inc / total income	27.2	27.8	(57)	27.2	2
Credit deposit ratio	73.2	73.0	16	70.2	300
CAR	12.9	13.5	(55)	13.3	(33)
Tier-I	10.6	11.5	(88)	10.8	(18)

Source: Company, PL

Q3FY21 Analyst Meet Highlights

Business Operations:

- Integration of Dena Bank and Vijaya Bank branches has completed across all bank branches.
- 1,300 branches and 500 ATMs have been closed as a result of the merger, to have a network of 5,500 branches overall. Also, the management expects Rs 13bn of cost savings during the current financial year and Rs100bn of cost savings over the next 5 years.
- Collection efficiency stood at 92% excluding the previous periods collections against 91% in previous quarter.

Assets/Liabilities:

- Advances growth in the retail segment came majorly from Car Loans and Home Loans segment growing in double digits each.
- Gold Loans increased by 29.3% YoY and on incremental basis consist 40% of the overall Agri book. The Management expects it to continue growing in double digits in the near future as well.
- Unsecured Retail book constituted >1% of the book, thereby limiting unknown part of its stress.
- Deposits growth was driven by both Savings and Term Deposits owing to the pandemic. However, bank kept deposit mobilization at check considering the increased liquidity

Asset Quality

- MSME and retail book posing challenge of restructuring for the bank due to the granularity of the book. However, among the corporate accounts for restructuring (82%), there are 6 accounts of amounts more than Rs5bn. Total restructuring Advances stood at 1.39% at Rs 95bn of standard advances, with corporate restructuring alone comprising of 82% at Rs77.5bn of the total restructuring.
- Fresh Slippages of Rs39.96bn came entirely from international books of which 20% has already been provided for.
- SMA 1 & 2 has increased significantly for the bank to 4.41% of standard advances against 2.33% in 3Q20.
- Pro-forma slippages not recognized were at Rs83bn (Total Rs113bn, although Rs30bn should be upgraded to restructured. Pro forma GNPA /NNPA stood at 9.63% and 3.36% for the bank

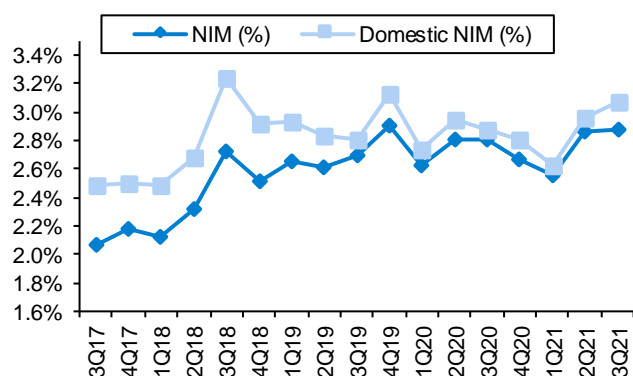
Others

- The Bank is planning to raise minimum of Rs20bn in 4Q21 through QIP route.

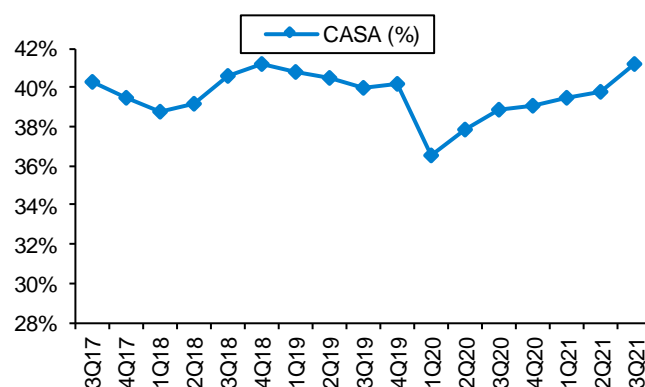
Exhibit 2: Overall Loan growth strong sequentially led by corporate/SME

Loan break up (Rs mn)	Q3FY21	Q3FY20	YoY gr. (%)	Q2FY21	QoQ gr. (%)
Domestic Advances	6,469,650	5,673,760	14.0	6,052,450	6.9
Corporate	2,903,680	2,708,960	7.2	2,722,190	6.7
SME	953,380	870,410	9.5	911,950	4.5
Retail	1,299,720	1,019,950	27.4	1,269,140	2.4
Agri	964,550	845,480	14.1	938,180	2.8
Other/Misc	348,320	228,960	52.1	210,990	65.1
Advances Mix					
Domestic Advances	93	87	591	90	2
Corporate	42	41	17	41	2
SME	14	13	35	14	0
Retail	19	16	302	19	(2)
Agri	14	13	89	14	(1)
Other/Misc	5	3	149	3	58

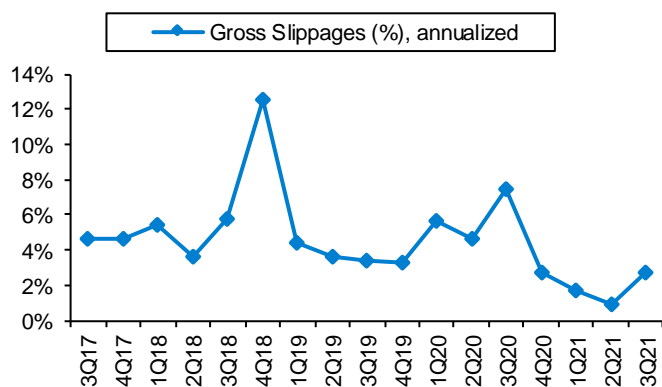
Source: Company, PL Note – Retail incl pool purchases in last two quarters

Exhibit 3: NIMs were steady, marginally better in domestic


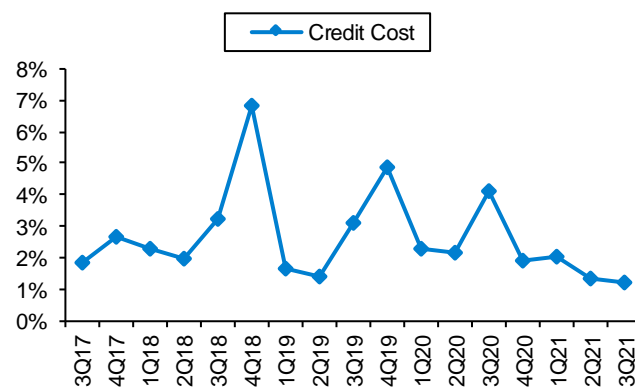
Source: Company, PL; Note: Fig. older than 1Q20 are for the non-amalgamated entity, hence not comparable

Exhibit 4: CASA Ratio has moved to decent levels


Source: Company, PL; Note: Fig. older than 1Q20 are for the non-amalgamated entity, hence not comparable

Exhibit 5: Slippage rate climbs due to International assets


Source: Company, PL; Note: Fig. older than 1Q20 are for the non-amalgamated entity, hence not comparable

Exhibit 6: Credit costs remain stable on NPA speculations


Source: Company, PL; Note: Fig. older than 1Q20 are for the non-amalgamated entity, hence not comparable

Exhibit 7: Return ratios – Return ratios will remain dismal due to higher credit cost

ROAE decomposition	2017	2018	2019	2020	2021E	2022E	2023E
NII/Assets	2.08%	2.30%	2.62%	3.01%	2.68%	2.70%	2.73%
Fees/Assets	0.64%	0.70%	0.71%	0.83%	0.66%	0.73%	0.75%
Investment profits/Assets	0.40%	0.29%	0.14%	0.30%	0.27%	0.20%	0.19%
Net revenues/Assets	3.12%	3.29%	3.48%	4.13%	3.61%	3.64%	3.68%
OpEx/Assets	-1.43%	-1.51%	-1.59%	-1.98%	-1.72%	-1.77%	-1.81%
Provisions/Assets	-1.31%	-2.20%	-1.80%	-2.35%	-1.44%	-1.22%	-1.16%
Taxes/Assets	-0.17%	0.05%	-0.04%	0.26%	-0.15%	-0.22%	-0.24%
Total Costs/Assets	-1.22%	-1.87%	-1.52%	-1.92%	-1.43%	-1.34%	-1.35%
ROAA	0.21%	-0.36%	0.06%	0.06%	0.29%	0.43%	0.46%
Equity/Assets	6.19%	6.21%	6.63%	6.72%	6.58%	6.52%	6.45%
ROAE	3.8%	-6.3%	1.0%	1.0%	4.9%	7.1%	7.7%

Source: Company, PL Note – FY20 represents merged numbers

Exhibit 8: We improve our loan growth assumption for FY21, increase credit cost while adjust for treasury, lower opex

Earnings Estimate Changes (Rs mn)	Old			Revised			% Change		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Net interest income	2,98,058	3,16,580	3,44,970	2,99,769	3,20,998	3,48,511	0.6	1.4	1.0
Operating profit	2,05,995	2,13,207	2,28,520	2,11,467	2,22,563	2,37,528	2.7	4.4	3.9
Net profit	38,323	40,242	48,707	32,949	50,960	58,996	(14.0)	26.6	21.1
Loan Growth (%)	4.1	6.1	8.0	6.0	6.1	8.0	1.9	0.0	0.0
Credit Cost (bps)	190.0	190.0	180.0	220.0	190.0	180.0	30.0	-	-
EPS (Rs)	8.3	8.7	10.5	7.1	11.0	12.8	(14.0)	26.6	21.1
ABVPS (Rs)	124.9	127.6	139.4	114.0	122.6	138.8	(8.7)	(3.9)	(0.4)
Price target (Rs)	82			82			(0.0)		
Recommendation	BUY			BUY					

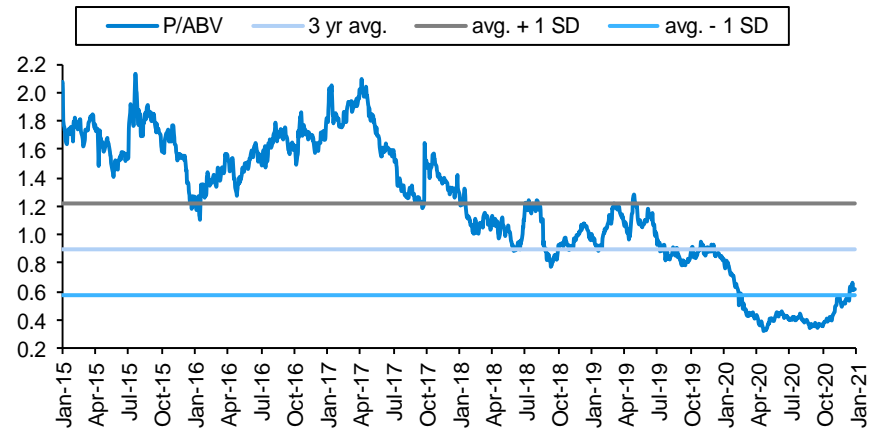
Source: Company Data, PL

Exhibit 9: We retain our TP at Rs82 (unchanged) based on 0.6x Mar-23 P/ABV

PT calculation and upside	
Terminal growth	5.0%
Market risk premium	7.0%
Risk-free rate	6.3%
Adjusted beta	1.10
Cost of equity	14.0%
Fair price - P/ABV	82
Target P/ABV	0.6
Target P/E	6.4
Current price, Rs	74
Upside (%)	11%
Dividend yield (%)	3%
Total return (%)	14%

Source: Company, PL

Exhibit 10: BOB - One year forward P/ABV trends



Source: Company, PL

Income Statement (Rs. m)

Y/e Mar	FY20	FY21E	FY22E	FY23E
Int. Earned from Adv.	5,41,158	5,21,034	5,53,803	5,99,182
Int. Earned from invt.	1,80,974	1,71,219	1,93,904	2,15,542
Others	20,018	19,964	20,398	20,564
Total Interest Income	7,59,837	7,26,851	7,83,881	8,52,973
Interest Expenses	4,85,324	4,27,082	4,62,883	5,04,462
Net Interest Income	2,74,513	2,99,769	3,20,998	3,48,511
Growth(%)	46.9	9.2	7.1	8.6
Non Interest Income	1,03,173	1,04,205	1,11,499	1,20,419
Net Total Income	3,77,686	4,03,974	4,32,497	4,68,930
Growth(%)	53.9	(3.7)	7.7	8.7
Employee Expenses	87,695	1,02,603	1,12,864	1,24,150
Other Expenses	76,480	73,421	80,763	90,455
Operating Expenses	1,80,772	1,92,507	2,09,934	2,31,402
Operating Profit	1,96,914	2,11,467	2,22,563	2,37,528
Growth(%)	46.0	7.4	5.2	6.7
NPA Provision	1,65,171	1,56,381	1,43,160	1,45,159
Total Provisions	2,05,893	1,61,392	1,45,116	1,48,140
PBT	(8,979)	50,075	77,447	89,388
Tax Provision	(23,483)	17,126	26,487	30,392
Effective tax rate (%)	261.5	34.2	34.2	34.0
PAT	14,504	32,949	50,960	58,996
Growth(%)	84.6	127.2	54.7	15.8

Balance Sheet (Rs. m)

Y/e Mar	FY20	FY21E	FY22E	FY23E
Face value	2	2	2	2
No. of equity shares	4,627	4,627	4,627	4,627
Equity	9,254	9,254	9,254	9,254
Networth	7,18,562	7,51,512	7,97,845	8,47,587
Growth(%)	40.9	4.6	6.2	6.2
Adj. Networth to NNPA's	2,15,766	2,33,032	2,42,336	2,06,325
Deposits	94,59,844	99,32,836	1,06,28,135	1,14,78,386
Growth(%)	48.1	5.0	7.0	8.0
CASA Deposits	33,38,237	35,75,821	38,47,385	40,40,392
% of total deposits	35.3	36.0	36.2	35.2
Total Liabilities	1,15,79,155	1,22,28,317	1,30,63,416	1,40,83,622
Net Advances	69,01,207	73,15,280	77,54,197	83,74,532
Growth(%)	47.2	6.0	6.0	8.0
Investments	27,46,146	29,05,841	32,94,945	35,97,812
Total Assets	1,15,79,155	1,22,28,317	1,30,63,416	1,40,83,622
Growth (%)	48.3	5.6	6.8	7.8

Asset Quality

Y/e Mar	FY20	FY21E	FY22E	FY23E
Gross NPAs (Rs m)	6,93,814	7,33,608	7,45,911	7,03,986
Net NPAs (Rs m)	2,15,766	2,33,032	2,42,336	2,06,325
Gr. NPAs to Gross Adv.(%)	9.4	9.4	9.0	7.9
Net NPAs to Net Adv. (%)	3.1	3.2	3.1	2.5
NPA Coverage %	68.9	68.2	67.5	70.7

Profitability (%)

Y/e Mar	FY20	FY21E	FY22E	FY23E
NIM	3.0	2.7	2.7	2.7
RoAA	0.1	0.3	0.4	0.4
RoAE	2.4	4.5	6.6	7.2
Tier I	10.7	10.8	11.0	11.1
CRAR	13.3	13.3	13.4	13.3

Source: Company Data, PL Research

Quarterly Financials (Rs. m)

Y/e Mar	Q4FY20	Q1FY21	Q2FY21	Q3FY21
Interest Income	1,86,984	1,84,944	1,79,176	1,77,687
Interest Expenses	1,19,003	1,16,781	1,04,101	1,00,200
Net Interest Income	67,982	68,163	75,075	77,487
YoY growth (%)	34.2	4.9	6.8	8.7
CEB	13,930	8,680	12,060	11,530
Treasury	-	-	-	-
Non Interest Income	28,347	18,183	28,023	28,955
Total Income	2,15,331	2,03,127	2,07,199	2,06,642
Employee Expenses	19,545	22,418	25,503	28,002
Other expenses	25,576	20,726	22,077	22,534
Operating Expenses	45,120	43,144	47,580	50,536
Operating Profit	51,208	43,202	55,518	55,906
YoY growth (%)	32.6	1.0	4.0	12.7
Core Operating Profits	-	-	-	-
NPA Provision	31,900	34,575	22,773	20,800
Others Provisions	68,441	56,277	30,016	39,567
Total Provisions	68,441	56,277	30,016	39,567
Profit Before Tax	(17,233)	(13,075)	25,502	16,340
Tax	(22,299)	(4,435)	8,716	5,729
PAT	5,066	(8,640)	16,786	10,611
YoY growth (%)	(151.1)	(221.3)	127.9	(175.4)
Deposits	94,59,844	93,44,613	95,43,402	95,45,608
YoY growth (%)	48.1	4.3	6.7	6.5
Advances	69,01,207	68,66,718	66,98,511	69,86,516
YoY growth (%)	47.2	8.4	5.1	6.8

Key Ratios

Y/e Mar	FY20	FY21E	FY22E	FY23E
CMP (Rs)	74	74	74	74
EPS (Rs)	1.5	7.1	11.0	12.8
Book Value (Rs)	142	149	159	170
Adj. BV (70%)(Rs)	110	114	123	139
P/E (x)	49.3	10.4	6.7	5.8
P/BV (x)	0.5	0.5	0.5	0.4
P/ABV (x)	0.7	0.6	0.6	0.5
DPS (Rs)	-	-	1.0	2.0
Dividend Payout Ratio (%)	-	-	9.1	15.7
Dividend Yield (%)	-	-	1.4	2.7

Efficiency

Y/e Mar	FY20	FY21E	FY22E	FY23E
Cost-Income Ratio (%)	47.9	47.7	48.5	49.3
C-D Ratio (%)	73.0	73.6	73.0	73.0
Business per Emp. (Rs m)	194	203	214	229
Profit per Emp. (Rs lacs)	2	4	6	7
Business per Branch (Rs m)	1,725	1,806	1,910	2,048
Profit per Branch (Rs m)	2	3	5	6

Du-Pont

Y/e Mar	FY20	FY21E	FY22E	FY23E
NII	2.66	2.37	2.39	2.42
Total Income	3.66	3.20	3.22	3.26
Operating Expenses	1.75	1.52	1.56	1.61
PPoP	1.91	1.67	1.66	1.65
Total provisions	2.08	1.28	1.08	1.03
RoAA	0.05	0.26	0.38	0.41
RoAE	0.97	4.89	7.14	7.74

Source: Company Data, PL Research

Price Chart

Recommendation History



No.	Date	Rating	TP (Rs.)	Share Price (Rs.)
1	11-Jan-21	BUY	82	66
2	09-Oct-20	BUY	65	44
3	11-Aug-20	BUY	65	49
4	08-Jul-20	BUY	83	53
5	14-Apr-20	BUY	83	50

Analyst Coverage Universe

Sr. No.	Company Name	Rating	TP (Rs)	Share Price (Rs)
1	Axis Bank	Accumulate	750	673
2	Bank of Baroda	BUY	82	66
3	Federal Bank	Accumulate	88	77
4	HDFC Bank	BUY	1,690	1,467
5	HDFC Life Insurance Company	Reduce	650	687
6	ICICI Bank	BUY	614	542
7	ICICI Prudential Life Insurance Company	Reduce	485	526
8	IDFC First Bank	Sell	32	44
9	IndusInd Bank	Accumulate	1,026	940
10	Kotak Mahindra Bank	Hold	1,912	1,794
11	Max Financial Services	Accumulate	760	727
12	Punjab National Bank	Hold	37	35
13	SBI Life Insurance Company	BUY	1,080	858
14	South Indian Bank	BUY	10	9
15	State Bank of India	BUY	325	286

PL's Recommendation Nomenclature (Absolute Performance)

Buy	: > 15%
Accumulate	: 5% to 15%
Hold	: +5% to -5%
Reduce	: -5% to -15%
Sell	: < -15%
Not Rated (NR)	: No specific call on the stock
Under Review (UR)	: Rating likely to change shortly

ANALYST CERTIFICATION

(Indian Clients)

We/I, Mr. Pritesh Bumb- MBA, M.com, Mr. Anmol Das- PGPM (Finance), B. Tech. (Electronics and Communications Engineering) Research Analysts, authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

(US Clients)

The research analysts, with respect to each issuer and its securities covered by them in this research report, certify that: All of the views expressed in this research report accurately reflect his or her or their personal views about all of the issuers and their securities; and No part of his or her or their compensation was, is or will be directly related to the specific recommendation or views expressed in this research report.

DISCLAIMER

Indian Clients

Prabhudas Lilladher Pvt. Ltd, Mumbai, India (hereinafter referred to as "PL") is engaged in the business of Stock Broking, Portfolio Manager, Depository Participant and distribution for third party financial products. PL is a subsidiary of Prabhudas Lilladher Advisory Services Pvt Ltd. which has its various subsidiaries engaged in business of commodity broking, investment banking, financial services (margin funding) and distribution of third party financial/other products, details in respect of which are available at www.plindia.com.

This document has been prepared by the Research Division of PL and is meant for use by the recipient only as information and is not for circulation. This document is not to be reported or copied or made available to others without prior permission of PL. It should not be considered or taken as an offer to sell or a solicitation to buy or sell any security.

The information contained in this report has been obtained from sources that are considered to be reliable. However, PL has not independently verified the accuracy or completeness of the same. Neither PL nor any of its affiliates, its directors or its employees accepts any responsibility of whatsoever nature for the information, statements and opinion given, made available or expressed herein or for any omission therein.

Recipients of this report should be aware that past performance is not necessarily a guide to future performance and value of investments can go down as well. The suitability or otherwise of any investments will depend upon the recipient's particular circumstances and, in case of doubt, advice should be sought from an independent expert/advisor.

Either PL or its affiliates or its directors or its employees or its representatives or its clients or their relatives may have position(s), make market, act as principal or engage in transactions of securities of companies referred to in this report and they may have used the research material prior to publication.

PL may from time to time solicit or perform investment banking or other services for any company mentioned in this document.

PL is in the process of applying for certificate of registration as Research Analyst under Securities and Exchange Board of India (Research Analysts) Regulations, 2014

PL submits that no material disciplinary action has been taken on us by any Regulatory Authority impacting Equity Research Analysis activities.

PL or its research analysts or its associates or his relatives do not have any financial interest in the subject company.

PL or its research analysts or its associates or his relatives do not have actual/beneficial ownership of one per cent or more securities of the subject company at the end of the month immediately preceding the date of publication of the research report.

PL or its research analysts or its associates or his relatives do not have any material conflict of interest at the time of publication of the research report.

PL or its associates might have received compensation from the subject company in the past twelve months.

PL or its associates might have managed or co-managed public offering of securities for the subject company in the past twelve months or mandated by the subject company for any other assignment in the past twelve months.

PL or its associates might have received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months.

PL or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months

PL or its associates might have received any compensation or other benefits from the subject company or third party in connection with the research report.

PL encourages independence in research report preparation and strives to minimize conflict in preparation of research report. PL or its analysts did not receive any compensation or other benefits from the subject Company or third party in connection with the preparation of the research report. PL or its Research Analysts do not have any material conflict of interest at the time of publication of this report.

It is confirmed that Mr. Pritesh Bumb- MBA, M.com, Mr. Anmol Das- PGPM (Finance), B. Tech. (Electronics and Communications Engineering) Research Analysts of this report have not received any compensation from the companies mentioned in the report in the preceding twelve months

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

The Research analysts for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

The research analysts for this report has not served as an officer, director or employee of the subject company PL or its research analysts have not engaged in market making activity for the subject company

Our sales people, traders, and other professionals or affiliates may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest.

PL and its associates, their directors and employees may (a) from time to time, have a long or short position in, and buy or sell the securities of the subject company or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company or act as an advisor or lender/borrower to the subject company or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

US Clients

This research report is a product of Prabhudas Lilladher Pvt. Ltd., which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by Prabhudas Lilladher Pvt. Ltd. only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, Prabhudas Lilladher Pvt. Ltd. has entered into an agreement with a U.S. registered broker-dealer, Marco Polo Securities Inc. ("Marco Polo").

Transactions in securities discussed in this research report should be effected through Marco Polo or another U.S. registered broker dealer.

Prabhudas Lilladher Pvt. Ltd.

3rd Floor, Sadhana House, 570, P. B. Marg, Worli, Mumbai-400 018, India | Tel: (91 22) 6632 2222 Fax: (91 22) 6632 2209

www.plindia.com