

Punjab National Bank

Estimate change



TP change



Rating change



Motilal Oswal values your support in the Asiamoney Brokers Poll 2021 for India Research, Sales, Corporate Access and Trading team. We [request your ballot](#).



Bloomberg	PNB IN
Equity Shares (m)	11,011
M.Cap.(INRb)/(USD\$)	443.7 / 6
52-Week Range (INR)	46 / 26
1, 6, 12 Rel. Per (%)	-7/-2/-23
12M Avg Val (INR M)	4256

Financials & Valuations (INR b)

Y/E March	FY21	FY22E	FY23E
NII	304.8	304.3	331.1
OP	229.8	252.0	282.0
NP	20.2	55.7	87.5
NIM (%)	2.6	2.5	2.5
EPS (INR)	1.9	5.3	8.4
EPS Gr. (%)	225.5	175.4	57.2
BV/Sh. (INR)	83.0	87.8	95.5
ABV/Sh. (INR)	53.2	59.6	67.7
Ratios			
RoE (%)	2.3	6.0	8.8
RoA (%)	0.2	0.4	0.6
Valuations			
P/E(X)	20.9	7.6	4.8
P/BV (X)	0.5	0.5	0.4
P/ABV (X)	0.8	0.7	0.6

Shareholding pattern (%)

As On	Jun-21	Mar-21	Jun-20
Promoter	32.6	32.6	32.7
DII	3.0	3.3	4.9
FII	25.9	24.5	21.9
Others	38.6	39.6	40.6
FII Includes depository receipts			

CMP: INR40
TP: INR45 (+12%)
Neutral

Sees a recovery in operating performance; remains watchful of asset quality

Slippages remain elevated

- PNB reported a healthy performance, supported by a pick-up in NII and lower opex, even as provisions stood stable sequentially. Business growth remains under pressure, with a sequential decline in loans/deposits. However, margin witnessed ~5bp QoQ improvement to 2.73%.
- Slippages stood elevated (~6.2% annualized), led by the RAM segment. However, higher recoveries and upgradations limited the decline in asset quality ratios. Total restructured book stands ~2.02% of loans, while total SMA 1 and 2 stands elevated at 3.9%. While we expect asset quality outlook to improve, led by moderation in slippages/credit cost, subdued loan growth, higher SMA, and restructuring book keeps us watchful over the near term. We estimate a RoA/RoE of 0.6%/8.8% by FY23E and **resume coverage with a Neutral rating**.

Business growth muted; operating performance showing a recovery

- PNB reported a PAT of INR10.2b (+232% YoY/75% QoQ), aided by pick-up in NII, lower opex, and controlled provisions. NII grew 6.6% YoY and 4% QoQ to INR72.3b, with margin expanding by 5bp QoQ to 2.73%.
- Core fee income was flat YoY, but grew 8% QoQ to INR15b. Total other income stood at INR35.9b supported by higher treasury gains (INR11.2b) and recovery from written of assets (INR8.3b).
- Opex declined by ~8% YoY to ~INR47.2b, resulting in a 360bp QoQ moderation in C/I ratio to 43.6%. Thus, PPOP grew 16% YoY to INR61b.
- On the business front, loan growth was flat YoY (~2% QoQ decline) to ~INR6.6t, with Retail/MSME/Corporate declining by 2.7%/~4%/5% QoQ. Agri book though grew 13% QoQ. Deposit growth stood weak ~2% YoY (~1% QoQ decline), while CASA grew 7% YoY. CASA mix stood ~45.2% (-33bp QoQ).
- Slippages stood elevated at INR101.7b (annualized 6.2% of loans), led by RAM segment. However, higher recoveries and upgradations limited the deterioration in asset quality. The GNPA/NNPA ratio increased by 21bp/11bp QoQ to 14.3%/5.8%. PCR stood stable at 62.9%.
- SMA 2 (above INR50m) book stood at 1.7% of loans, while total SMA 1 and 2 book stood at INR260b (3.9% of loans). Total restructured loans stood at INR133.9b (2.02% of loans).

Highlights from the management commentary

- The bank is targeting a loan growth of 8-10%. It expects to post a profit of INR40-60b in FY22. Credit cost is likely to remain ~1.5% in FY22.
- Slippages breakup: Retail (INR15.48b), Agri (INR21.49b), MSME (INR31.22b), and others (INR14.22b).
- Total slippages are likely to remain at INR180-200b in FY22.

Research Analyst: Nitin Aggarwal (Nitin.Aggarwal@MotilalOswal.com) | Himanshu Taluja (Himanshu.Taluja@motilaloswal.com)

Alpesh Mehta (Alpesh.Mehta@MotilalOswal.com); **Yash Agarwal** (Yash.Agarwal@motilaloswal.com)

Investors are advised to refer through important disclosures made at the last page of the Research Report.

Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Valuation and view

PNB reported a healthy performance, supported by a pick-up in NII, higher other income, and lower opex, even as provisions stood stable QoQ. Business growth remains muted, however margin witnessed a sequential uptick. The bank expects growth to pick up, led by RAM segments, while the Corporate book too would undergo a gradual recovery. Asset quality was largely stable, despite higher slippages, supported by recoveries and upgrades. SMA 1 and 2 book stands elevated at 3.9% of loans, while restructured book, at 2.02% of loans (expect a further restructuring of INR15-20b), keeps us watchful over the near term. We estimate a RoA/RoE of 0.6%/8.8% by FY23E. **We resume coverage with a Neutral rating and a TP of INR45 (0.6x FY23E ABV).**

Quarterly performance**(INR b)**

Y/E March	FY21				FY22				FY21	FY22E
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE		
Net Interest Income	67.8	84.4	83.1	69.4	72.3	74.2	77.6	80.2	304.8	304.3
Change (YoY, %)	63.8	98.1	90.9	48.3	6.6	-12.1	-6.7	15.6	74.8	-0.2
Other Income	36.5	24.4	29.7	37.4	35.9	36.3	37.6	38.8	128.1	148.6
Total Income	104.4	108.9	112.9	106.8	108.2	110.5	115.2	119.0	432.9	452.9
Operating Expenses	51.6	52.1	49.0	50.5	47.2	48.8	51.2	53.7	203.1	201.0
Operating Profit	52.8	56.7	63.9	56.3	61.0	61.7	64.0	65.3	229.8	252.0
Change (YoY, %)	51.7	59.3	69.8	43.3	15.5	8.7	0.1	16.0	55.9	9.6
Other Provisions	46.9	47.0	54.3	46.9	46.8	44.5	40.8	36.4	195.0	168.5
Profit before Tax	5.9	9.8	9.6	9.5	14.2	17.2	23.2	28.9	34.8	83.5
Tax	2.9	3.6	4.5	3.6	4.0	5.7	7.6	10.5	14.6	27.8
Net Profit	3.1	6.2	5.1	5.9	10.2	11.5	15.5	18.4	20.2	55.7
Change (YoY, %)	-69.7	22.4	NM	NM	231.8	85.6	206.9	213.7	501.3	175.4
Operating Parameters										
Deposits	10,749	10,697	10,822	11,063	10,976	11,262	11,462	11,727	11,063	11,727
Loans	6,562	6,527	6,605	6,742	6,613	6,843	6,945	7,079	6,742	7,079
Deposit Growth (%)	59.8	53.7	52.7	57.2	2.1	5.3	5.9	6.0	57.2	6.0
Loan Growth (%)	55.6	52.5	55.2	42.9	0.8	4.9	5.1	5.0	42.9	5.0
Asset Quality										
Gross NPA (%)	14.1	13.4	13.0	14.1	14.3	14.0	13.7	13.1	14.1	13.1
Net NPA (%)	5.4	4.8	4.0	5.7	5.8	5.7	5.5	5.2	5.8	5.2
PCR (%)	65.3	67.9	71.8	63.1	62.9	63.0	63.0	63.9	62.4	63.9

E: MOFSL estimates

Quarterly snapshot

	FY20				FY21				FY22	Change (%)	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	YoY	QoQ
Profit & Loss, INR m											
Net Interest Income	41,414	42,638	43,551	46,775	67,816	84,449	83,130	69,376	72,266	7	4
Other Income	20,753	22,647	24,048	25,293	36,548	24,410	29,739	37,422	35,941	-2	-4
Total Income	62,167	65,285	67,599	72,069	1,04,363	1,08,859	1,12,868	1,06,798	1,08,207	4	1
Operating Expenses	27,352	29,666	29,970	32,743	51,563	52,110	48,960	50,454	47,220	-8	-6
Employee	16,817	16,748	17,515	18,537	33,072	32,413	29,275	26,998	29,557	-11	9
Others	10,536	12,918	12,455	14,206	18,491	19,698	19,685	23,457	17,663	-4	-25
Operating Profit	34,814	35,620	37,629	39,325	52,801	56,749	63,908	56,343	60,987	16	8
Core Operating Profit	29,794	30,430	35,599	35,255	39,561	48,669	51,478	46,593	49,807	26	7
Provisions	20,233	29,289	41,460	49,016	46,859	46,962	54,326	46,860	46,781	0	0
Others	-718	-5,204	-1,933	6,873	5,945	3,150	20,186	-10,859	12,011	102	-211
PBT	14,581	6,331	-3,831	-9,691	5,942	9,788	9,582	9,483	14,206	139	50
Taxes	4,395	1,260	1,091	-2,718	2,857	3,580	4,522	3,619	3,971	39	10
PAT	10,186	5,071	-4,923	-6,972	3,085	6,208	5,060	5,863	10,235	232	75
Balance Sheet, INR b											
Deposits	6,725	6,958	7,085	7,038	10,749	10,697	10,822	11,063	10,976	2	-1
Loans	4,218	4,279	4,255	4,718	6,562	6,527	6,605	6,742	6,613	1	-2
Asset Quality, INR b											
GNPA	773	795	768	735	1,018	963	945	1,044	1,041	2	0
NNPA	302	327	305	272	353	309	266	386	386	9	0
Slippages	54	81	74	50	25	23	12	242	102	311	-58
Ratios											
	FY20				FY21				FY22	Change (bps)	
Asset Quality Ratios (%)	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	YoY	QoQ
GNPA	16.5	16.8	16.3	14.2	14.1	13.4	13.0	14.1	14.3	22	21
NNPA	7.2	7.7	7.2	5.8	5.4	4.8	4.0	5.7	5.8	45	11
PCR (Cal.)	60.9	58.9	60.3	63.0	65.3	67.9	71.8	63.1	62.9	-241	-13
PCR (Incl. TWO)	74.6	73.6	75.3	77.8	80.8	83.0	85.2	80.1	80.3	-49	12
Credit Cost	1.8	2.8	3.9	4.1	3.3	2.9	1.9	3.2	2.8	-52	-37
Business Ratios (%)											
Fees to Total Income	25.3	26.7	32.6	29.4	22.3	15.0	15.3	25.9	22.9	55	-303
Cost to Core Income	47.9	49.4	45.7	48.2	56.6	51.7	48.7	52.0	48.7	-792	-332
Tax Rate	30.1	19.9	-28.5	28.1	48.1	36.6	47.2	38.2	28.0	-2,013	-1,021
CASA	42.8	43.5	43.7	44.1	43.5	44.1	44.7	45.5	45.2	170	-33
Loan/Deposit	62.7	61.5	60.1	67.0	61.0	61.0	61.0	60.9	60.2	-80	-70
Profitability Ratios (%)											
Yield on loans	7.6	7.8	7.9	8.0	7.6	8.1	7.7	6.8	6.9	-73	12
Yield On Investments	7.4	7.3	7.0	6.9	6.5	6.6	6.3	6.5	6.3	-22	-17
Yield on Funds	6.4	6.4	6.3	6.1	6.2	6.4	6.1	5.7	5.6	-60	-8
Cost of Deposits	5.2	5.3	5.2	5.0	4.9	4.5	4.2	4.2	4.1	-85	-15
Cost of Funds	4.4	4.3	4.3	4.1	4.2	3.8	3.6	3.6	3.5	-71	-12
Margin	2.4	2.4	2.3	2.4	2.5	3.2	3.1	2.7	2.7	23	5
Other details											
Branches	7,036	7,040	7,039	6,563	10,930	10,932	10,925	10,769	10,641	-289	-128
ATM	8,906	8,985	9,071	9,168	13,856	13,878	13,914	13,781	13,690	-166	-91

Highlights from the management commentary

Balance Sheet and P&L related

- While Corporate growth remains muted, the management expects it to pick up in coming quarters. The bank has sanctioned loans worth ~INR500b.
- The bank expects CD ratio to inch up to ~69%.
- The management's target is to grow advances at 8-10%.
- The bank expects to post a profit of INR40-60b in FY22.
- Credit cost is likely to moderate over the next three quarters.
- The bank expects credit cost to remain ~1.5% in FY22.



Asset quality related

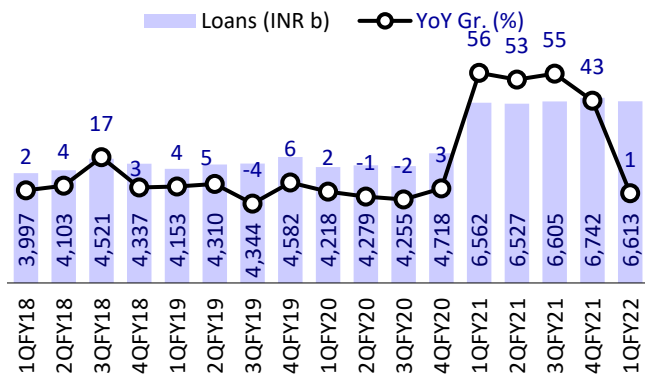
- **Slippages breakup:** Retail (INR15.48b), Agri (INR21.49b), MSME (INR31.22b), and others (INR14.22b).
- Collection efficiency has improved from Jun'21 levels.
- The bank expects slippages to subside going forward. Retail/MSME slippages are likely to have peaked out and are expected to moderate going forward.
- The MSME segment is likely to remain stressed and improve by Mar'22.
- **Restructuring 2.0** stands at INR66.02b, with Retail/Small business/MSME ~INR33.96b/INR3.2b/INR28.86b. The bank expects additional restructuring of INR15-20b by Sep'21.
- **Restructuring 1.0** stands ~INR67.87b, with Retail/Corporate/MSME at INR7.57b/INR49.31b/INR10.99b.
- **Total slippages are likely to remain at INR180-200b in FY22.**
- Loans worth ~INR7b were upgraded due to restructuring, while one account of INR5b (MMTC) got upgraded in 1QFY22.
- Home loan NPAs are likely to fall meaningfully over the next few quarters as collection efficiency improves.
- Total SMA 1 stands at INR66b, SMA 2 (below INR50m) at INR78b, and SMA 2 (above INR50m) stands at INR125b. Total SMA 1 and 2 book stands at INR260b.
- Reduction in NPAs from NCLT proceedings is expected to be ~INR120b, with cash recoveries of ~INR50b. Usual recoveries of INR30b are expected quarterly. In total, it expects cash recoveries of INR140b, with a total reduction of INR220b in GNPA's.

Exhibit 1: DuPont Analysis: Return ratios to remain under pressure

Annual DuPont	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Interest Income	6.81	6.46	6.66	6.70	7.72	6.34	6.33
Interest Expense	4.65	4.45	4.43	4.53	4.81	4.00	3.96
Net Interest Income	2.16	2.01	2.23	2.17	2.91	2.34	2.37
Fee income	0.91	0.76	0.82	0.95	0.81	0.78	0.84
Trading and others	0.38	0.44	0.14	0.20	0.42	0.37	0.38
Other Income	1.29	1.20	0.96	1.16	1.23	1.14	1.21
Total Income	3.45	3.20	3.18	3.33	4.14	3.49	3.58
Operating Expenses	1.35	1.82	1.50	1.49	1.94	1.55	1.56
Employees	0.78	1.23	0.90	0.87	1.16	0.97	0.97
Others	0.57	0.58	0.59	0.62	0.78	0.58	0.59
Operating Profit	2.10	1.39	1.69	1.84	2.20	1.94	2.02
Core operating Profit	1.72	0.95	1.55	1.63	1.78	1.57	1.64
Provisions	1.81	4.02	3.68	1.74	1.86	1.30	1.08
NPA	1.83	3.29	3.17	1.80	1.63	1.28	1.06
Others	-0.02	0.73	0.51	-0.06	0.23	0.02	0.02
PBT	0.29	-2.63	-1.99	0.09	0.33	0.64	0.94
Tax	0.10	-0.98	-0.70	0.05	0.14	0.21	0.31
RoA	0.19	-1.65	-1.29	0.04	0.19	0.43	0.63
Leverage (x)	18.9	17.9	17.9	15.0	13.6	13.9	14.0
RoE	3.6	-29.6	-23.2	0.6	2.6	6.0	8.8

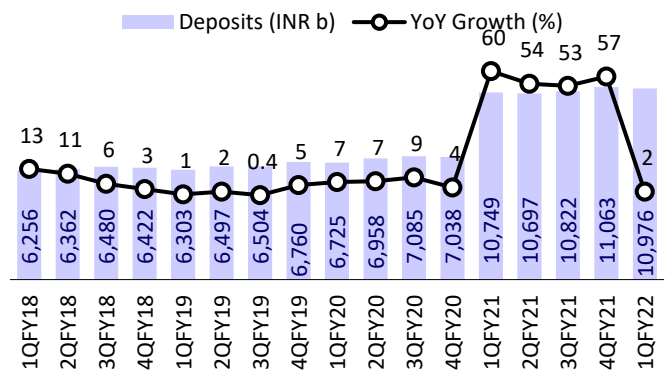
Story in charts

Exhibit 2: Loan growth flat YoY (-1.9% QoQ)



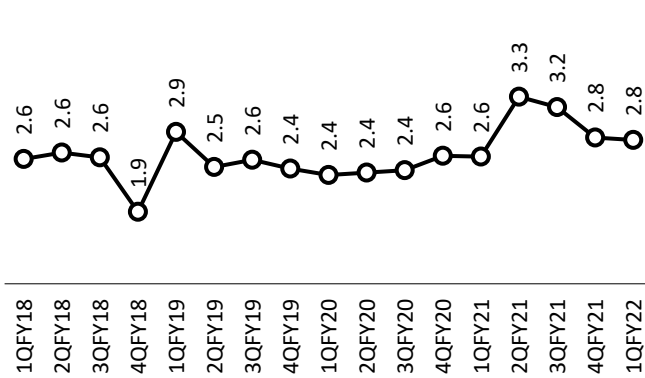
Merged numbers from 1QFY21 onwards Source: MOFSL, Company

Exhibit 3: Deposit growth muted at 2.1% YoY (-1% QoQ)



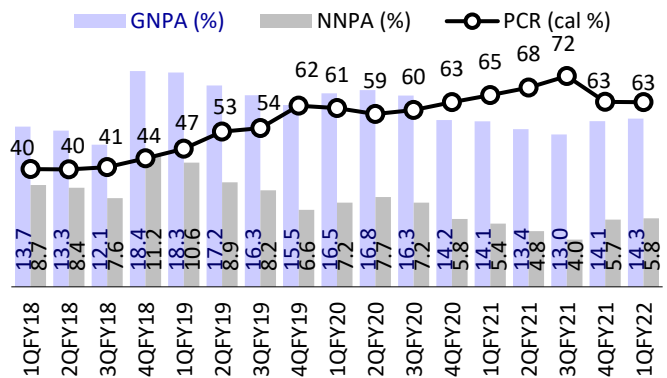
Merged numbers from 1QFY21 onwards Source: MOFSL, Company

Exhibit 4: Domestic NIM moderates by 3bp QoQ to 2.8%



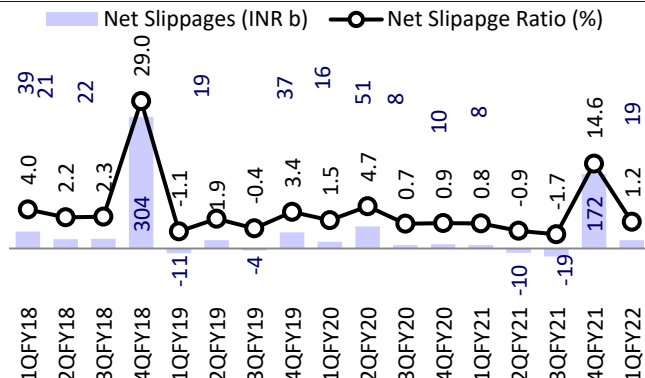
Source: MOFSL, Company

Exhibit 5: GNPA/NNPA ratio increases to 14.3%/5.8%



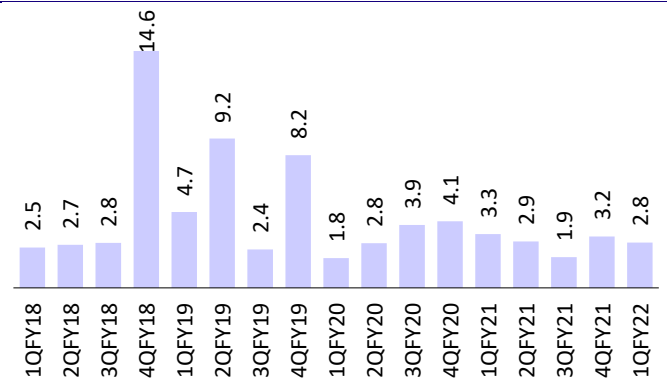
Source: MOFSL, Company

Exhibit 6: Net annualized slippage ratio moderates to 1.2%



Source: MOFSL, Company

Exhibit 7: Annualized credit cost stands at 2.8%



Source: MOFSL, Company

Financials and valuations

Income Statement							(INR b)
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Interest Income	472.8	480.0	513.1	538.0	807.5	823.6	883.8
Interest Expense	322.8	330.7	341.5	363.6	502.7	519.3	552.7
Net Interest Income	149.9	149.2	171.6	174.4	304.8	304.3	331.1
Growth (%)	-2.1	-0.5	15.0	1.6	74.8	-0.2	8.8
Non-Interest Income	89.5	88.8	73.8	92.7	128.1	148.6	169.4
Total Income	239.4	238.0	245.3	267.1	432.9	452.9	500.6
Growth (%)	7.9	-0.6	3.1	8.9	62.1	4.6	10.5
Operating Expenses	93.8	135.1	115.4	119.7	203.1	201.0	218.6
Pre Provision Profit	145.7	102.9	130.0	147.4	229.8	252.0	282.0
Growth (%)	19.2	-29.3	26.2	13.4	55.9	9.6	11.9
Core PPOP	100.2	70.4	119.0	131.1	186.3	204.1	229.4
Growth (%)	9.0	-29.8	69.1	10.1	42.1	9.6	12.4
Provisions (excl. tax)	125.5	298.7	283.4	140.0	195.0	168.5	150.8
PBT	20.1	-195.8	-153.5	7.4	34.8	83.5	131.2
Tax	6.9	-73.0	-53.7	4.0	14.6	27.8	43.7
Tax Rate (%)	34.1	37.3	35.0	54.5	41.9	33.3	33.3
PAT	13.2	-122.8	-99.8	3.4	20.2	55.7	87.5

Balance Sheet							
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Equity Share Capital	4.3	5.5	9.2	13.5	21.0	21.0	21.0
Reserves and Surplus	414.2	405.2	438.7	610.1	888.4	939.1	1,019.1
Net Worth	418.5	410.7	447.9	623.6	909.4	960.0	1,040.0
Deposits	6,217.0	6,422.3	6,760.3	7,038.5	11,063.3	11,727.1	12,782.6
Growth (%)	12.4	3.3	5.3	4.1	57.2	6.0	9.0
of which CASA Dep.	2,600.2	2,632.5	2,850.4	3,024.7	4,927.8	5,265.5	5,790.5
Growth (%)	26.5	1.2	8.3	6.1	62.9	6.9	10.0
Borrowings	407.6	608.5	393.3	502.3	428.4	437.3	452.8
Other Liabilities and Prov.	160.2	216.8	148.1	142.4	205.2	246.3	295.5
Total Liabilities	7,203.3	7,658.3	7,749.5	8,306.7	12,606.3	13,370.8	14,570.9
Current Assets	883.3	954.6	752.9	759.9	1,113.5	1,204.3	1,310.3
Investments	1,867.3	2,003.1	2,021.3	2,404.7	3,929.8	4,204.9	4,583.4
Growth (%)	18.3	7.3	0.9	19.0	63.4	7.0	9.0
Loans	4,194.9	4,337.3	4,582.5	4,718.3	6,742.3	7,079.4	7,716.6
Growth (%)	1.7	3.4	5.7	3.0	42.9	5.0	9.0
Fixed Assets	62.7	63.5	62.2	72.4	110.2	121.2	133.4
Other Assets	195.1	299.8	330.6	351.4	710.5	760.9	827.4
Total Assets	7,203.3	7,658.3	7,749.5	8,306.7	12,606.3	13,370.8	14,570.9

Asset Quality	FY17	FY18	FY18	FY20	FY21	FY22E	FY23E
GNPA	553.7	866.2	784.7	734.8	1,044.2	1,014.8	991.3
NNPA	327.0	490.1	303.5	276.4	393.0	366.3	355.2
GNPA Ratio	12.5	18.4	15.5	14.2	14.1	13.1	11.9
NNPA Ratio	7.8	11.3	6.6	5.9	5.8	5.2	4.6
Slippage Ratio	5.4	10.4	4.5	4.5	4.2	3.2	2.7
Credit Cost	3.05	5.73	5.48	3.11	2.84	2.40	2.00
PCR (Excl. Tech. write-off)	40.9	43.4	61.3	62.4	62.4	63.9	64.2

Financials and valuations

Ratios

Y/E March	FY17	FY18	FY18	FY20	FY21	FY22E	FY23E
Yield and Cost Ratios (%)							
Avg. Yield on Earning Assets	7.3	6.7	7.0	7.1	6.9	6.8	6.8
Avg. Yield on loans	7.9	7.5	7.9	7.7	7.8	7.8	7.8
Avg. Yield on Investments	7.3	7.5	7.3	7.1	6.6	6.5	6.4
Avg. Cost of Int. Bear. Liab.	5.1	4.8	4.8	4.9	4.4	4.4	4.4
Avg. Cost of Deposits	5.1	4.8	4.9	5.0	4.3	4.4	4.3
Interest Spread	2.3	1.9	2.2	2.1	2.5	2.4	2.4
Net Interest Margin	2.3	2.1	2.4	2.3	2.6	2.5	2.5

Capitalization Ratios (%)

CAR	12.0	9.8	10.1	14.1	14.3	13.1	12.4
Tier I	9.3	7.7	7.9	11.9	11.5	10.4	9.9
Tier II	2.7	2.1	2.3	2.2	2.8	2.6	2.5

Business and Efficiency Ratios (%)

Loans/Deposit Ratio	67.5	67.5	67.8	67.0	60.9	60.4	60.4
CASA Ratio	41.8	41.0	42.2	43.0	44.5	44.9	45.3
Cost/Assets	1.3	1.8	1.5	1.4	1.6	1.5	1.5
Cost/Total Income	39.2	56.8	47.0	44.8	46.9	44.4	43.7
Cost/Core income	41.1	65.7	49.2	47.7	52.2	-0.4	-0.4
Int. Expense/Int. Income	68.3	68.9	66.6	67.6	62.3	63.1	62.5
Fee Income/Total Income	17.1	23.6	25.6	28.6	19.5	22.2	23.3
Non Int. Inc./Total Income	37.4	37.3	30.1	34.7	29.6	32.8	33.8
Empl. Cost/Total Expense	57.8	67.9	60.3	58.1	60.0	62.4	62.0
Investment/Deposit Ratio	30.0	31.2	29.9	34.2	35.5	35.9	35.9

Valuation ratios

RoE	3.6	-29.5	-23.2	0.6	2.3	6.0	8.8
RoA	0.2	-1.7	-1.3	0.0	0.2	0.4	0.6
RoRWA	0.3	-2.7	-2.3	0.1	0.4	0.9	1.3
Book Value (INR)	188	141	93	89	83	88	95
Growth (%)	0.5	-24.8	-34.3	-4.7	-6.4	5.8	8.7
Price-to-BV (x)	0.2	0.3	0.4	0.5	0.5	0.5	0.4
Adjusted BV (INR)	70	6	40	55	53	60	68
Price-to-ABV (x)	0.6	6.5	1.0	0.7	0.8	0.7	0.6
EPS (INR)	6.2	-50.3	-27.1	0.6	1.9	5.3	8.4
Price-to-Earnings (x)	6.5	-0.8	-1.5	68.0	20.9	7.6	4.8
Dividend Per Share (INR)	0.0	0.0	0.0	0.0	0.0	0.5	0.7
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0	1.2	1.8

NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd.. (PIMPL). MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://onlinereports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (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 company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act") and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co.Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company
- received compensation/other benefits from the subject company in the past 12 months
- other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 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 company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 71934200/ 022-71934263; Website www.motilaloswal.com CIN no.: L67190MH2005PLC153397. Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai- 400 064. Tel No: 022 7188 1000.

Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA000007100; Insurance Corporate Agent: CA0579;PMS:INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs, Insurance Products and IPOs. Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Research & Advisory services is backed by proper research. Please read the Risk Disclosure Document prescribed by the Stock Exchanges carefully before investing. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.: 022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.