

Federal Bank

Lower treasury and higher slippage dent earnings

January 15, 2018

Pritesh Bumb

priteshbumb@plindia.com / +91-22-66322232

R Sreesankar

rsreesankar@plindia.com / +91-22-66322214

Vidhi Shah

vidhishah@plindia.com / +91-22-66322258

Rating	BUY
Price	Rs113
Target Price	Rs134
Implied Upside	18.6%
Sensex	34,844
Nifty	10,742

(Prices as on January 15, 2018)

Trading data

Market Cap. (Rs bn)	219.7
Shares o/s (m)	1,939.6
3M Avg. Daily value (Rs m)	1109.5

Major shareholders

Promoters	0.00%
Foreign	36.35%
Domestic Inst.	34.83%
Public & Other	28.82%

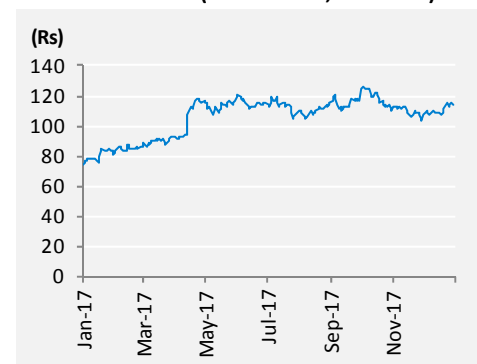
Stock Performance

(%)	1M	6M	12M
Absolute	5.2	(2.1)	56.1
Relative	1.1	(10.9)	28.2

How we differ from Consensus

EPS (Rs)	PL	Cons.	% Diff.
2019	7.1	7.4	-3.3
2020	9.0	9.2	-2.5

Price Performance (RIC: FED.BO, BB: FB IN)



Source: Bloomberg

FB's operational performance were in line though earnings were slightly below estimates (Rs2.61bn v/s PL: Rs2.71bn) on back of lower treasury gains. Bank saw slippages from both corporate & retail, with retail being led by one-off slippages from educational loans leading to slight deterioration in asset quality. Loan growth continued to be strong at 22% YoY and bank also saw decent CASA accretion. Bank continues to invest in technology initiatives, improving feet on street & turnaround time, which will help on better loan growth & operating leverage to play out on ratios. We have tweaked our earnings estimates slightly on lower other income & higher slippages and hence revised our TP lower to Rs134 (from Rs144) but see return ratios improving gradually keeping our "BUY" call intact.

- **Core profitability remains good; lower treasury hurts profits:** NII growth continued at 20% YoY on back of strong loan growth of 22% YoY & stable margins of 3.33%. Margins were slightly better sequentially on back of benefit from cost of funds and stable yields with management expecting it to remain in similar range ahead. Though PPOP was hurt by lower treasury gains but core PPOP was strong with 37% YoY growth also led by strong control on opex despite bank providing for wage revision related cost (2 months Rs120mn).
- **Strong business momentum continues:** Loans grew at 22% YoY despite higher base and led by all segments with very strong growth in corporate book. Kerala region contributed to strong growth in corporate & retail while SME book saw strong growth in non-Kerala geography as bank remained picky & cautious on Kerala based SME market. On liabilities, CASA saw decent growth of 4% YoY despite on higher base of demonetisation with SA growth from Kerala & non-Kerala markets.
- **Slippages up and remain challenging:** Slippages of Rs4.1bn was up from trend levels contributed from Retail/SME & relatively from corporate as well. Bank saw one-off slippages of Rs700mn from education loan book and bank expects 30-40% to recover in near term. Bank expects slippages to remain trending at Rs2.3-2.5bn with management cautioning on the restructured book of Rs14.2bn (1.7% of loans) which remains key monitorable for any further slippages and for any uneven slippage in corporate book.

Key financials (Y/e March)	2017	2018	2019E	2020E
Net interest income	30,526	36,624	43,255	51,068
Growth (%)	21.7	20.0	18.1	18.1
Operating profit	19,249	23,018	27,333	32,190
PAT	8,308	10,083	13,821	17,446
EPS (Rs)	4.8	5.5	7.1	9.0
Growth (%)	74.1	14.1	29.5	26.2
Net DPS (Rs)	—	1.1	1.5	1.7

Profitability & Valuation	2017	2018	2019E	2020E
NIM (%)	2.91	2.97	3.08	3.20
RoAE (%)	9.8	9.5	10.9	12.6
RoAA (%)	0.79	0.82	0.99	1.09
P / BV (x)	2.2	1.8	1.7	1.5
P / ABV (x)	2.6	2.1	1.9	1.7
PE (x)	23.5	20.6	15.9	12.6
Net dividend yield (%)	—	1.0	1.3	1.5

Source: Company Data; PL Research

Exhibit 1: Q3FY18 – Strong earnings led by better core performance

	(Rs m)	Q3FY18	Q3FY17	YoY gr. (%)	Q2FY18	QoQ gr. (%)
<i>NII grew better at 20% YoY on robust loan growth of 22%</i>	Interest Income	25,012	22,814	9.6	23,796	5.1
	Interest Expended	15,512	14,900	4.1	14,807	4.8
	Net interest income (NII)	9,500	7,914	20.0	8,989	5.7
<i>Core fee income saw better growth led by loan processing fees and Fx income but saw low treasury gains this quarter</i>	-Treasury income	290	860	(66.3)	750	(61.3)
	Other income	2,286	2,633	(13.2)	2,872	(20.4)
	Total income	11,786	10,547	11.7	11,861	(0.6)
<i>Other opex was high mainly on technology investment & process related areas, while staff cost was lower despite providing on wage revision related</i>	Operating expenses	6,167	5,798	6.4	6,029	2.3
	-Staff expenses	3,005	3,197	(6.0)	3,127	(3.9)
	-Other expenses	3,163	2,601	21.6	2,902	9.0
	Operating profit	5,619	4,749	18.3	5,832	(3.7)
	Core operating profit	5,329	3,889	37.0	5,082	4.9
	Total provisions	1,624	1,588	2.3	1,768	(8.1)
	Profit before tax	3,995	3,161	26.4	4,064	(1.7)
	Tax	1,390	1,104	25.8	1,427	(2.7)
	Profit after tax	2,605	2,057	26.7	2,637	(1.2)
<i>Bank saw better growth in NR deposits and has been gaining market share in this area</i>	Balance sheet (Rs m)					
	Deposits	10,05,370	9,22,360	9.0	9,72,108	3.4
	Advances	8,49,530	6,96,290	22.0	8,06,459	5.3
<i>Advances grew at 22% YoY as bank sees strong growth from mid market segment</i>	Ratios (%)					
	Profitability ratios					
	NIM	3.3	3.3	1	3.3	2
	RoaA	0.9	0.8	8	1.0	(8)
	RoaE	8.7	9.5	(82)	9.0	(34)
<i>Bank saw high slippages from retail mainly education loans and corporate segment; however, it also saw strong recoveries and upgrades as well</i>	Asset Quality					
	Gross NPL (Rs m)	21,612	19,516	10.7	19,490	10.9
	Net NPL (Rs m)	11,567	11,024	4.9	10,664	8.5
	Gross NPL ratio	2.5	2.8	(25)	2.4	13
	Net NPL ratio	1.4	1.6	(22)	1.3	4
	Coverage ratio (Calc)	46.5	43.5	297	45.3	119
<i>CASA ratio was stable with decent growth from high base of demonetisation in Q3FY17</i>	Business & Other Ratios					
	Low-cost deposit mix	33.0	34.7	(170)	32.9	3
	Cost-income ratio	52.3	55.0	(265)	50.8	150
	Non int. inc / total income	19.4	25.0	(557)	24.2	(482)
	Credit deposit ratio	84.5	75.5	901	83.0	154
	CAR	14.4	12.3	213	14.6	(22)
	Tier-I	13.8	11.6	221	14.1	(25)

Source: Company Data, PL Research

Q3FY18 Concall Highlights

Balance sheet – Growth/outlook:

- **Loan book** – Loan book growth continued to be strong at 22% YoY and as guided by management. Loan book has been largely RM led model with manager number reaching at 330 and ratio of business sourcing at 70:30 between RM & branches. Loan book continued strong growth for corporate but other segments also saw decent contribution. **Outlook:** Management continues to see its credit growth at similar pace as seen currently.
- **Liabilities** - CASA deposits grew at 3.7% YoY partly due to demonetisation impact. Bank is growing strong in NR deposits more than industry growth and continues to see the momentum. Bank's also saw strong growth in borrowings on refinancing some loans from NABARD/SIDBI benefitting cost of funds especially from CRR/SLR front.

Margins:

- Margins remain stable at 3.33% partly as yields are held up due to growth in better yielding book and high CD ratio. Bank's incremental yields were at 10% in Agri, 10.4% in retail, 11.4% in biz banking, 10.2% in commercial banking and 9% in the corporate book. Bank also got some benefit from lower cost of funds from refinancing.

Fees/Opex:

- **Fees** – Core fees growth was decent at 22% YoY mainly on loan processing fees and also saw better Fx income. **Outlook:** Bank continues to see strong growth in the fee income segment.
- **Opex** – Non-staff cost remained at higher levels of +20% YoY on marketing, technology expenses and also specific people related expenditure. Bank has started providing for wages this quarter of Rs110-120 mn (for two months). **Outlook** - Bank will continue to see slightly high expenses in FY18 on the investment in non-branch led expenditure and hence C/I Ratio will remain in the range of 50% till end of FY18 or Q1FY19.

Asset quality:

- **Stress accretion** – Slippages were higher than usual run rate mainly in retail and corporate segments as three accounts of Rs300-350 mn each slipped but sees recovery in one account in the next quarter. Eight quarter average of corporate slippages for the bank ranged between Rs500-700 mn. Retail book saw slippages mainly from education book as highlighted earlier in anticipation of subsidy announcement by State Govt. 30% recovery from education loans is expected by the bank in the next quarter and bank had already pro-actively provisioned in Q2FY18 and hence saw less provision in Q3FY18. Bank saw good recoveries and upgrades this quarter than usual run rate which led to stable asset quality.

- **Restructured advances** – Outstanding standard restructured book slightly increased to Rs1.42 bn (1.7% of loans) with two accounts amounting Rs700-800 mn added in this quarter. O/s std restructured book constitutes ~56% infra, ~18% aviation and remaining is mainly iron/steel and textile. Bank expects two accounts to come out of moratorium in last quarter amounting to Rs3bn pertaining to aviation sector.
- Bank has exposure to two accounts out of total NCLT accounts having an exposure of Rs550 mn of which 60% provision has been made. Bank has undergone RBI inspection on divergence. While the report is not yet out, the bank does not expect any changes in classification as a result of inspection.

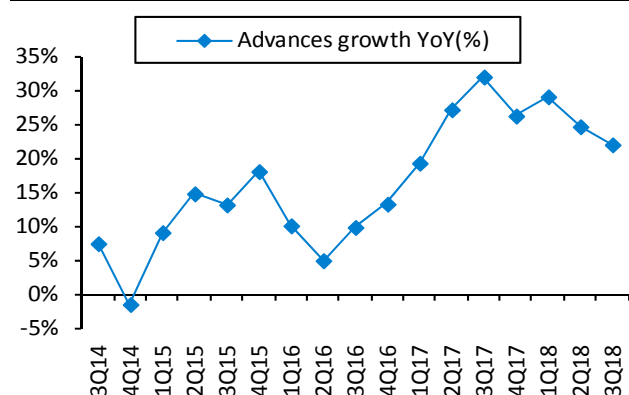
Exhibit 2: Break-up of Advances portfolio

Advances break-up (Rs m)	Q3FY18	Q3FY17	YoY gr. (%)	Q2FY18	QoQ gr. (%)
Advances	8,92,100	7,19,800	23.9	8,40,960	6.1
Retail	2,42,930	2,13,090	14.0	2,32,550	4.5
SME	1,84,930	1,53,510	20.5	1,76,510	4.8
Agriculture	87,710	67,750	29.5	84,150	4.2
Corporate	3,76,530	2,85,450	31.9	3,47,750	8.3
Retail Loans break-up					
Housing	1,07,580	85,670	25.6	1,00,800	6.7
Gold	18,900	20,890	(9.5)	19,210	(1.6)
Mortgage	44,260	36,270	22.0	42,190	4.9
Others	72,190	70,260	2.7	70,350	2.6

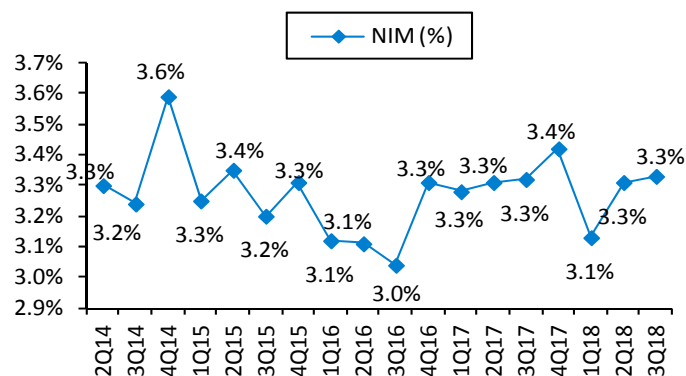
Strong growth in SME and corporate segment mainly from mid market geography

Within Retail, strong growth continues from housing and mortgage lending

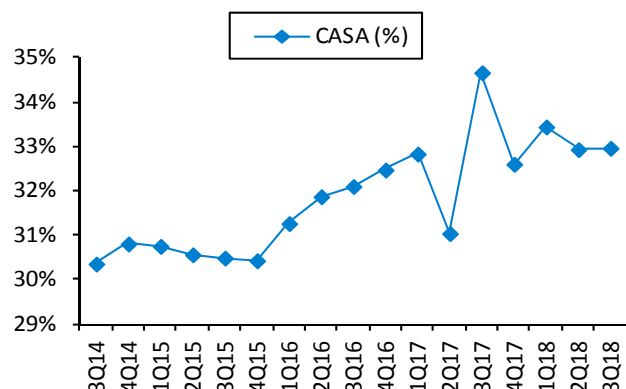
Source: Company Data, PL Research

Exhibit 3: Advances growth of 22% YoY led by SME and corporate book


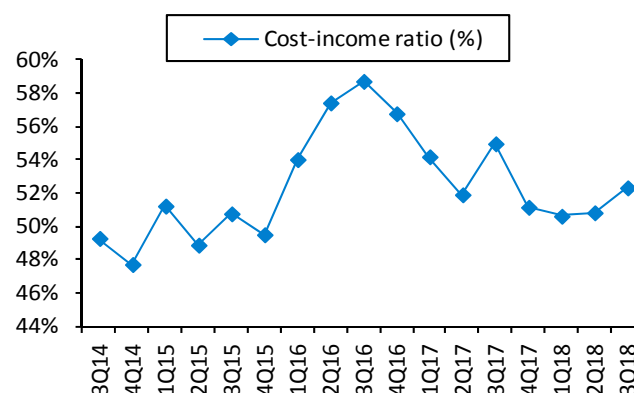
Source: Company Data, PL Research

Exhibit 4: NIMs remain stable as yields are held at the same level


Source: Company Data, PL Research

Exhibit 5: CASA Ratio remains stable led by demonetisation impact


Source: Company Data, PL Research

Exhibit 6: C/I increases due to the denominator effect as bank sees low treasury gains but will remain at 50% level at end of FY18


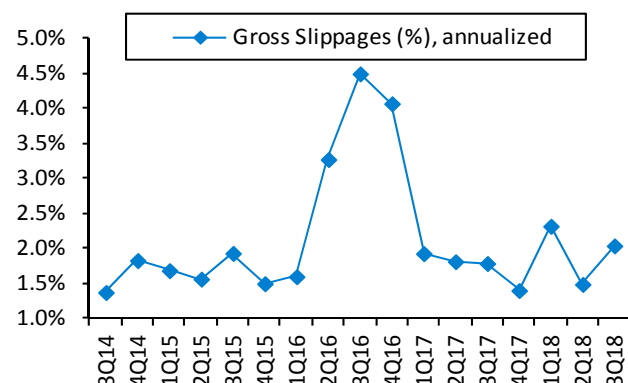
Source: Company Data, PL Research

Exhibit 7: Asset quality saw slight deterioration on higher slippages from large corporate and retail segments but saw higher recoveries/upgrades as well

Movement of NPL	Q3FY18	Q3FY17	YoY gr. (%)	Q2FY18	QoQ gr. (%)
Opening advances	18,197	14,987	21.4	17,473	4.1
Additions	2,890	5,710	(49.4)	2,680	7.8
Reduction	1,572	3,856	(59.2)	1,956	(19.6)
Closing	19,516	16,841	15.9	18,197	7.2
Slippages (%)	1.94	1.66		1.41	
Segmental fresh slippages:					
Retail	1,500	860	74.4	1,060	41.5
Agri	420	140	200.0	510	(17.6)
SME	1,220	1,190	2.5	1,070	14.0
Corporate	980	550	78.2	200	390.0
Retail (% annualized)	2.47	1.61	53.0	1.82	35.5
Agri (% annualized)	0.91	0.83	9.9	2.42	(62.5)
SME (% annualized)	1.79	3.10	(42.3)	2.42	(26.2)
Corporate (% annualized)	1.04	0.77	35.1	0.23	352.5

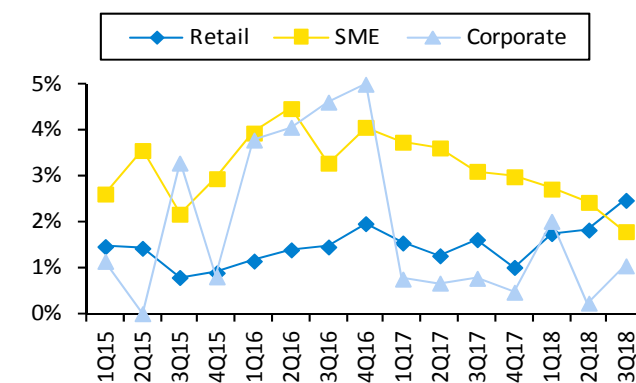
Source: Company Data, PL Research

Exhibit 8: Delinquency rate slightly elevated as saw high slippages coming from...



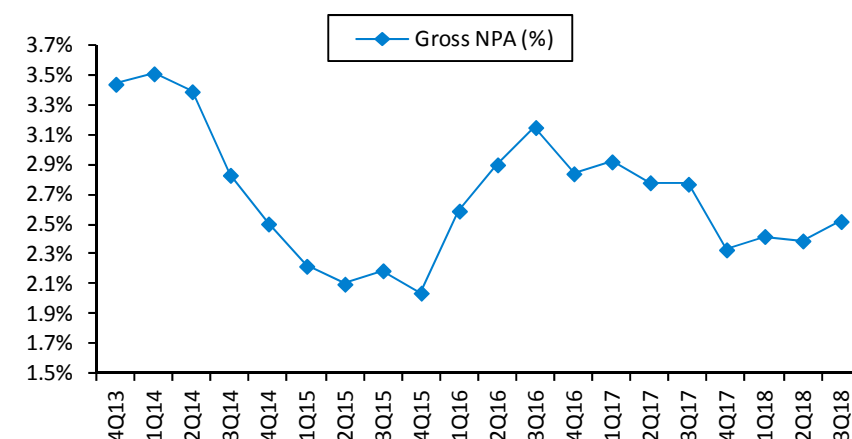
Source: Company Data, PL Research

Exhibit 9: ...retail education loans and corporate whereas SME book trends downwards



Source: Company Data, PL Research

Exhibit 10: Asset quality sees slight elevation due to high slippages but also sees better upgrade/recoveries



Source: Company Data, PL Research

Exhibit 11: ROEs to see gradual improvement over FY18E-20E as business operating parameters showing some signs of improvement

ROA Tree	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
NII/Assets	3.6%	3.1%	3.2%	3.2%	3.0%	3.1%	3.1%	3.2%	3.3%
Fees/Assets	0.8%	0.7%	0.8%	0.8%	0.8%	0.8%	0.7%	0.8%	0.8%
Investment profits/Assets	0.2%	0.3%	0.2%	0.3%	0.2%	0.3%	0.2%	0.1%	0.1%
Net revenues/Assets	4.6%	4.1%	4.1%	4.4%	4.0%	4.2%	4.1%	4.2%	4.3%
Opex/Assets	-1.8%	-1.8%	-2.0%	-2.2%	-2.3%	-2.2%	-2.1%	-2.1%	-2.2%
Provisions/Assets	-0.6%	-0.4%	-0.4%	-0.1%	-0.9%	-0.6%	-0.6%	-0.5%	-0.4%
Taxes/Assets	-0.7%	-0.6%	-0.5%	-0.7%	-0.3%	-0.5%	-0.5%	-0.6%	-0.6%
Total Costs/Assets	-3.1%	-2.8%	-3.0%	-3.0%	-3.4%	-3.3%	-3.2%	-3.1%	-3.1%
ROA	1.4%	1.3%	1.2%	1.4%	0.6%	0.8%	0.9%	1.0%	1.1%
Equity/Assets	9.9%	9.5%	9.4%	9.9%	9.6%	8.6%	9.0%	9.5%	9.1%
ROE	14.4%	13.9%	12.6%	13.7%	6.0%	9.8%	9.5%	10.9%	12.6%

Source: Company Data, PL Research

Exhibit 12: Change in estimates table – We tweak our estimates business growth, reduced other income mainly from treasury and slightly higher slippages

(Rs mn)	Old			Revised			% Change		
	FY18E	FY19E	FY20E	FY18E	FY19E	FY20E	FY18E	FY19E	FY20E
Net interest income	37,005	44,226	52,357	36,624	43,255	51,068	(1.0)	(2.2)	(2.5)
Operating profit	24,715	30,052	36,608	23,018	27,333	32,190	(6.9)	(9.0)	(12.1)
Net profit	10,755	15,449	20,283	10,084	13,823	17,448	(6.2)	(10.5)	(14.0)
EPS (Rs)	5.9	8.0	10.5	5.5	7.1	9.0	(6.2)	(10.5)	(14.0)
ABVPS (Rs)	55.6	62.1	71.2	54.5	60.4	68.1	(2.0)	(2.7)	(4.4)
Price target (Rs)	144			134			(7.3)		
Recommendation	BUY			BUY					

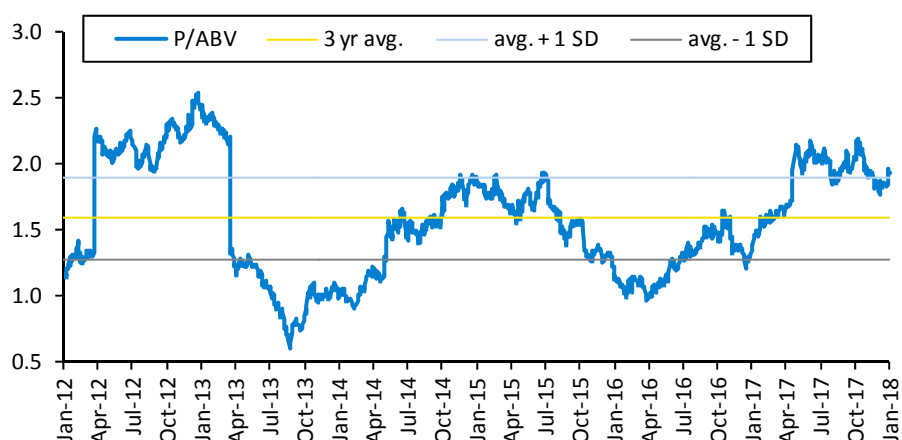
Source: Company Data, PL Research

Exhibit 13: We reduce our TP to Rs134 (from Rs144) based on 2.1x Sep-19E ABV from 2.2 Sep-19E

PT calculation and upside	
Fair price - EVA	134
Fair price - P/ABV	133
Average of the two	134
Target P/ABV	2.1
Target P/E	16.6
Current price, Rs	113
Upside (%)	18%
Dividend yield (%)	1%
Total return (%)	19%

Source: Company Data, PL Research

Exhibit 14: FB one year forward P/ABV chart



Source: Company Data, PL Research

Income Statement (Rs m)

Y/e March	2017	2018	2019E	2020E
Int. Earned from Adv.	65,457	76,750	91,263	108,230
Int. Earned from Inv.	18,014	18,811	18,840	18,500
Others	3,303	3,064	3,399	3,305
Total Interest Income	86,774	98,625	113,502	130,035
Interest expense	56,247	62,001	70,247	78,967
NII	30,526	36,624	43,255	51,068
Growth (%)	21.7	20.0	18.1	18.1
Treasury Income	3,087	2,400	1,800	1,440
NTNII	7,732	8,634	10,669	12,650
Non Interest Income	10,818	11,034	12,469	14,090
Total Income	97,592	109,659	125,971	144,125
Growth (%)	14.1	12.4	14.9	14.4
Operating Expense	22,095	24,641	28,391	32,968
Operating Profit	19,249	23,018	27,333	32,190
Growth (%)	35.2	19.6	18.7	17.8
NPA Provisions	4,051	5,673	4,869	4,645
Investment Provisions	296	450	—	—
Total Provisions	6,184	7,504	6,067	5,754
PBT	13,065	15,514	21,266	26,437
Tax Provisions	4,757	5,431	7,445	8,990
Effective Tax Rate (%)	36.4	35.0	35.0	34.0
PAT	8,308	10,083	13,821	17,446
Growth (%)	74.7	21.4	37.1	26.2

Balance Sheet (Rs m)

Y/e March	2017	2018	2019E	2020E
Par Value	2	2	2	2
No. of equity shares	1,724	1,940	1,940	1,940
Equity	3,448	3,879	3,879	3,879
Networth	89,424	121,862	132,182	145,661
Adj. Networth	80,014	109,801	121,197	136,082
Deposits	976,646	1,074,310	1,213,971	1,396,066
Growth (%)	23.4	10.0	13.0	15.0
Low Cost deposits	320,528	347,973	398,066	463,360
% of total deposits	32.8	32.4	32.8	33.2
Total Liabilities	1,149,769	1,317,940	1,487,894	1,704,891
Net Advances	733,363	887,369	1,060,406	1,261,883
Growth (%)	26.2	21.0	19.5	19.0
Investments	281,961	283,646	274,716	277,678
Total Assets	1,149,769	1,317,940	1,487,894	1,704,891

Source: Company Data, PL Research.

Quarterly Financials (Rs m)

Y/e March	Q4FY17	Q1FY18	Q2FY18	Q3FY18
Interest Income	23,160	23,241	23,796	25,012
Interest Expense	14,736	15,234	14,807	15,512
Net Interest Income	8,424	8,007	8,989	9,500
Non Interest Income	2,821	3,291	2,872	2,286
CEB	1,710	1,460	1,540	1,540
Treasury	540	1,120	750	290
Net Total Income	11,245	11,298	11,861	11,786
Operating Expenses	5,753	5,719	6,029	6,167
Employee Expenses	2,630	2,985	3,127	3,005
Other Expenses	3,123	2,735	2,902	3,163
Operating Profit	5,492	5,579	5,832	5,619
Core Operating Profit	4,952	4,459	5,082	5,329
Provisions	1,227	2,364	1,768	1,624
Loan loss provisions	770	2,300	1,400	1,200
Investment Depreciation	230	34	168	190
Profit before tax	4,265	3,214	4,064	3,995
Tax	1,699	1,113	1,427	1,390
PAT before EO	2,566	2,102	2,637	2,605
Extraordinary item	—	—	—	—
PAT	2,566	2,102	2,637	2,605

Key Ratios

Y/e March	2017	2018	2019E	2020E
CMP (Rs)	113	113	113	113
Equity Shrs. Os. (m)	1,724	1,940	1,940	1,940
Market Cap (Rs m)	195,248	219,655	219,655	219,655
M/Cap to AUM (%)	17.0	16.7	14.8	12.9
EPS (Rs)	4.8	5.5	7.1	9.0
Book Value (Rs)	52	63	68	75
Adj. BV (100%) (Rs)	44	55	60	68
P/E (x)	23.5	20.6	15.9	12.6
P/BV (x)	2.2	1.8	1.7	1.5
P/ABV (x)	2.6	2.1	1.9	1.7
DPS (Rs)	—	1.1	1.5	1.7
Dividend Yield (%)	—	1.0	1.3	1.5

Profitability (%)

Y/e March	2017	2018	2019E	2020E
NIM	2.9	3.0	3.1	3.2
RoAA	0.8	0.8	1.0	1.1
RoAE	9.8	9.5	10.9	12.6

Efficiency

Y/e March	2017	2018	2019E	2020E
Cost-Income Ratio (%)	53.4	51.7	50.9	50.6
C-D Ratio (%)	75.1	82.6	87.4	90.4
Business per Emp. (Rs m)	107	107	108	110
Profit per Emp. (Rs lacs)	5.2	5.5	6.6	7.2
Business per Branch (Rs m)	878	805	747	698
Profit per Branch (Rs m)	4	4	5	5

Asset Quality

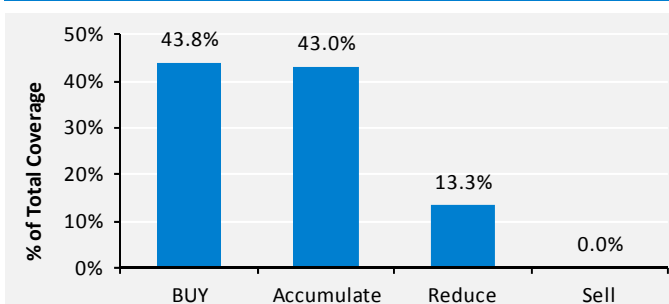
Y/e March	2017	2018	2019E	2020E
Gross NPAs (Rs m)	17,271	22,411	22,065	21,425
Net NPAs (Rs m)	9,410	12,061	10,986	9,579
Gr. NPAs to Gross Adv. (%)	2.4	2.5	2.1	1.7
Net NPAs to Net Adv. (%)	1.3	1.4	1.0	0.8
NPA Coverage (%)	45.5	46.2	50.2	55.3

Source: Company Data, PL Research.

**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

Rating Distribution of Research Coverage**PL's Recommendation Nomenclature**

BUY	: Over 15% Outperformance to Sensex over 12-months
Accumulate	: Outperformance to Sensex over 12-months
Reduce	: Underperformance to Sensex over 12-months
Sell	: Over 15% underperformance to Sensex over 12-months
Trading Buy	: Over 10% absolute upside in 1-month
Trading Sell	: Over 10% absolute decline in 1-month
Not Rated (NR)	: No specific call on the stock
Under Review (UR)	: Rating likely to change shortly

DISCLAIMER/DISCLOSURES**ANALYST CERTIFICATION**

We/I, Mr. Pritesh Bumb (MBA, M.com), Mr. R Sreesankar (B.Sc.), Ms. Vidhi Shah (CA), 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.

Terms & conditions and other disclosures:

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 of 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. R Sreesankar (B.Sc.), Ms. Vidhi Shah (CA), 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.

DISCLAIMER/DISCLOSURES (FOR US CLIENTS)**ANALYST CERTIFICATION**

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

Terms & conditions and other disclosures:

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.