

City Union Bank | BUY

Operationally Steady

CUBK reported a steady quarter in 3QFY19, with net profit up 15% YoY to INR 1.8bn (3% above JMFe). NII witnessed a healthy growth of 5.0% QoQ with NIM expansion of 9bps QoQ. However, PPOP growth was marginal at 3.5% YoY due to lower treasury income and higher opex (+21.4% YoY). As guided in previous quarters, the stressed paper mill account (c.0.3% of gross loans) slipped during the quarter which resulted in an increase in specific credit costs (+29bps QoQ to 1.1%). Loan growth continued to be healthy (+18% YoY), with growth witnessed across retail loans (+27% YoY), MSME (+14 YoY) and wholesale traders (+13% YoY). We expect margins to come off slightly (10bps compression over FY18-21E) driven by competition but a simultaneous improvement in credit costs (17bps compression over FY18-21E to 1%) should keep RoA on a stable track (1.6% over FY19-21E). Maintain BUY with TP of INR 220.

- Strong operating performance:** CUBK witnessed a sequential expansion in NIMs of 9bps QoQ, which coupled with a healthy loan growth of 3% QoQ led to an NII growth of 5.0% QoQ. The PPOP growth was lower at 3.5% YoY due to lower treasury income and higher opex (+21.4% YoY). Cost-to-income was slightly elevated at 43.0% largely on account of lower non-interest income and management indicated that it will remain along similar lines in 4QFY19 as well. We expect margins to come off slightly (10bps compression over FY18-21E) driven by competition but a simultaneous improvement in credit costs (17bps compression over FY18-21E to 1%) should keep RoA on a stable track (1.6% over FY19-21E).
- Healthy growth momentum :** Loan growth continued to be healthy (+18% YoY), with growth witnessed across retail loans (+27% YoY), MSME (+14 YoY) and wholesale traders (+13% YoY). Deposit growth was at 13% YoY, with CASA growing at 21% YoY. CASA ratio is now at 24% and the management expect the CASA mix to remain largely stable in near to medium term. We expect CUBK to continue on its steady growth path and once it achieves scale, gradually move to newer markets in South and West India.
- Asset quality remains healthy:** As guided in previous quarters, the stressed paper mill account (c.0.3% of gross loans), slipped to NPA which led to increase in the slippage rate to 2.4% during 3Q. The management guided that they do not expect any major haircut on this account. The asset quality continues to healthy with GNPL at 2.9% (+6bps QoQ). The specific credit costs during the quarter was marginally higher at 1.1% (+29bps QoQ) due to higher slippage while the total provisions were slightly elevated as the bank provided for un-provided portion of SWIFT fraud detected in 4QFY18 in this quarter (INR 88mn fraud of which INR 66mn was provided in 4QFY18 and balance INR 22mn provided in 3QFY19).



Sameer Bhise

sameer.bhise@jmfl.com | Tel: (91 22) 66303489

S Parameswaran

s.parameswaran@jmfl.com | Tel: (91 22) 66303075

Akshay Jain

akshay.jain@jmfl.com | Tel: (91 22) 66303099

Karan Singh CFA FRM

karan.uberoi@jmfl.com | Tel: (91 22) 66303082

Bunny Babjee

bunny.babjee@jmfl.com | Tel: (91 22) 66303263

Recommendation and Price Target

Current Reco.	BUY
Previous Reco.	BUY
Current Price Target (12M)	220
Upside/(Downside)	15.3%
Previous Price Target	220
Change	NA

Key Data – CUB IN

Current Market Price	INR191
Market cap (bn)	INR139.6/US\$2.0
Free Float	83%
Shares in issue (mn)	731.2
Diluted share (mn)	
3-mon avg daily val (mn)	INR163.7/US\$2.3
52-week range	207/134
Sensex/Nifty	35,657/10,662
INR/US\$	71.1

Price Performance

%	1M	6M	12M
Absolute	1.7	12.9	21.4
Relative*	2.9	18.2	22.8

* To the BSE Sensex

JM Financial Research is also available on:
Bloomberg - JMFR <GO>,
Thomson Publisher & Reuters
S&P Capital IQ and FactSet

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

Financial Summary						(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E	
Net Profit	5,027	5,920	6,907	7,967	9,471	
Net Profit (YoY) (%)	13.0%	17.8%	16.7%	15.3%	18.9%	
Assets (YoY) (%)	10.9%	13.2%	15.7%	17.5%	16.4%	
ROA (%)	1.5%	1.6%	1.6%	1.6%	1.6%	
ROE (%)	15.2%	15.3%	15.4%	15.3%	15.7%	
EPS	8.4	8.9	9.4	10.9	13.0	
EPS (YoY) (%)	12.5%	6.5%	6.1%	15.3%	18.9%	
PE (x)	22.8	21.4	20.2	17.5	14.7	
BV	59	63	66	76	89	
BV (YoY) (%)	16.4%	5.4%	5.4%	15.9%	16.3%	
P/BV (x)	3.22	3.05	2.89	2.50	2.15	

Source: Company data, JM Financial. Note: Valuations as of 28/Jan/2019

City Union Bank 3Q19: Key quarterly trends

Exhibit 1. CUBK 3Q19 : Key quarterly trends

Earnings Table (Rs mn)	3Q'18	2Q'19	3Q'19	YoY (%)	QoQ (%)
NII	3,651	3,980	4,181	14.5%	5.0%
Fee based Income	612	688	712	16.3%	3.5%
Trading Profits	344	213	208	-39.5%	-2.3%
Misc Income	0	1	0	-547.4%	-37.5%
Non-Interest income	1,217	1,186	1,198	-1.5%	1.1%
Total Income	4,868	5,166	5,379	10.5%	4.1%
Employee Cost	799	930	927	16.1%	-0.3%
Other Operating Expenses	1,105	1,276	1,383	25.2%	8.4%
Total Operating Expenses	1,904	2,206	2,311	21.4%	4.7%
Operating Profit	2,965	2,959	3,069	3.5%	3.7%
Loan Loss Provisions	810	550	770	-4.9%	40.0%
Standard Asset Provisions	20	27	30	50.0%	11.1%
Provisions on Investments(AFS)	0	0	0	#DIV/0!	#DIV/0!
Other Provisions	27	103	-13	147.0%	112.2%
Total Provisions	857	680	788	-8.1%	15.9%
PBT	2,108	2,280	2,281	8.2%	0.1%
Tax	560	600	500	-10.7%	-16.7%
PAT (Pre-Extraordinaries)	1,548	1,680	1,781	15.1%	6.0%
Extraordinaries (Net of Tax)	0	0	0	0.0%	0.0%
Reported Profit	1,548	1,680	1,781	15.1%	6.0%
Balance sheet (Rs bn)					
Deposits	313.4	345.3	355.0	13.3%	2.8%
Net Advances	256.8	294.3	302.7	17.9%	2.9%
Total Assets	376.2	415.3	422.3	12.3%	1.7%
Low-cost Deposits (%)	22.3%	23.6%	23.9%	1.6%	0.2%
Loan-Deposit ratio (%)	81.9%	85.2%	85.3%	3.3%	0.1%
Key Ratios					
Credit Quality					
Gross NPAs (Rs. mn.)	8,598	8,479	8,919	3.7%	5.2%
Net NPAs (Rs. mn.)	4,478	4,978	5,276	17.8%	6.0%
Gross NPA (%)	3.30%	2.85%	2.91%	-0.38%	0.06%
Net NPA (%)	1.74%	1.69%	1.74%	0.00%	0.05%
Loan Loss Provisions (%)	1.41%	0.85%	1.14%	-0.26%	0.30%
Coverage Ratio (%)	47.9%	41.3%	40.8%	-7.1%	-0.4%
Capital Adequacy					
Tier I (%)	14.47%	14.71%	14.39%	-0.08%	-0.32%
CAR (%)	14.93%	15.11%	14.79%	-0.14%	-0.32%
Du-pont Analysis					
NII / Assets (%)	3.94%	3.91%	3.99%	0.06%	0.08%
Non-Interest Inc. / Assets (%)	1.31%	1.17%	1.14%	-0.17%	-0.02%
Operating Cost / Assets (%)	2.05%	2.17%	2.21%	0.16%	0.04%
Operating Profits / Assets (%)	3.20%	2.91%	2.93%	-0.26%	0.02%
Provisions / Assets (%)	0.92%	0.67%	0.75%	-0.17%	0.08%
ROA (%)	1.71%	1.72%	1.78%	0.07%	0.06%

Source: Company, JM Financial

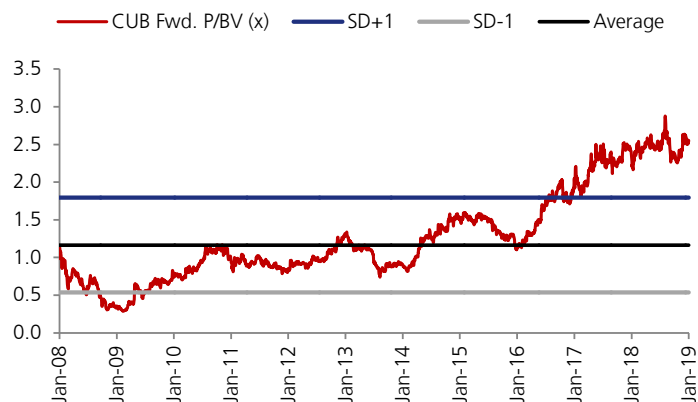
Valuation summary

Exhibit 2. CUBK: Valuation summary

Initial no of years (yrs)	10
Growth rate for the first 10 years (%)	16.3%
Payout ratio for the first 10 years (%)	7%
Perpetual growth rate (%)	5%
Perpetual payout ratio (%)	72.0%
K1	0.78
K2	13.39
FY21E BVPS (Rs)	88.9
Target P/BV (x)	2.5x
Fair value (rounded off)	220

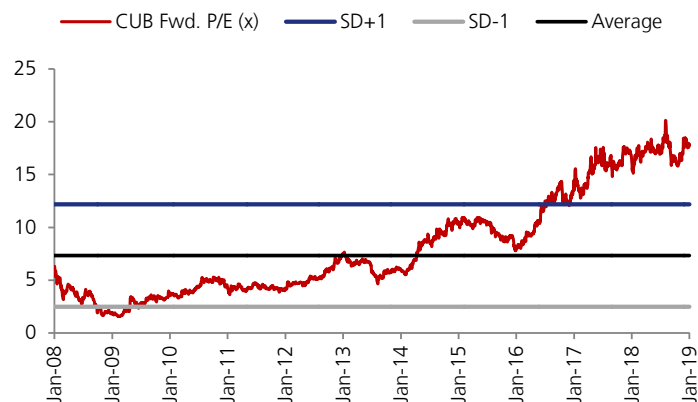
Source: Company, JM Financial

Exhibit 3. One year fwd price to book (x)



Source: Company, JM Financial

Exhibit 4. One year fwd price to earnings (x)



Source: Company, JM Financial

Exhibit 5. CUBK : Net stress on loan book

Stressed assets	INR mn	% of net loans
Net NPA	5,276	1.8%
Other stress :		
Security Receipts	3,269	1.1%
(less provision on SR)	1,510	0.5%
Standard restructured	0	0.0%
Net stress (Net NPA + other unprovided stress)	7,035	2.4%

Source: Company, JM Financial

Exhibit 6. CUBK 3Q19: Deposit composition

Deposits Composition (Rs bn)	3Q'18	2Q'19	3Q'19	YoY (%)	QoQ (%)
Current	23	27	26	12.5%	-5.3%
Saving	47	54	59	25.4%	8.3%
Time	243	264	270	11.0%	2.5%
Total Deposits	313	345	355	13.3%	2.8%
Current	7%	8%	7%	-0.1%	-0.6%
Saving	15%	16%	17%	1.6%	0.8%
CASA	22%	24%	24%	1.6%	0.2%
Time	78%	76%	76%	-1.6%	-0.2%
Total	100%	100%	100%		

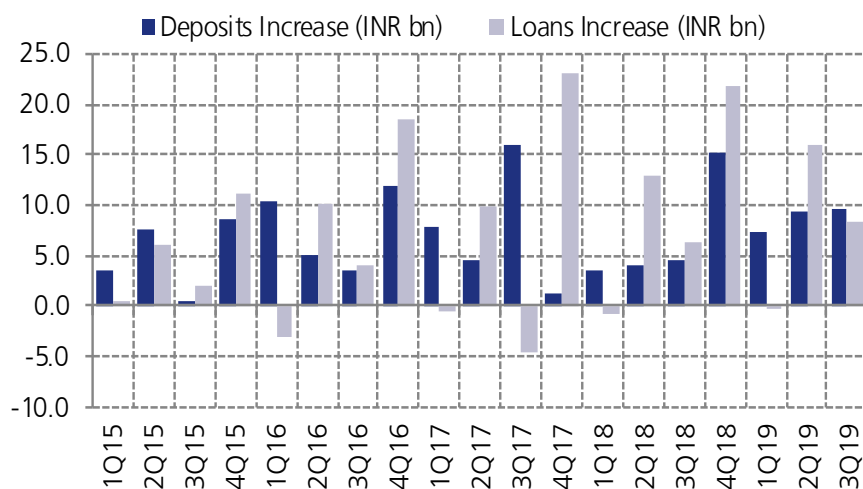
Source: Company, JM Financial

Exhibit 7. CUBK 3Q19: Loan mix and growth trends

Loan book (INR bn)	3Q'18	2Q'19	3Q'19	YoY (%)	QoQ (%)
Agriculture	35,479	44,276	45,150	27.3%	2.0%
Includes Jewel Loans of	19,325	23,168	24,270	25.6%	4.8%
MSME	90,340	1,00,563	1,03,246	14.3%	2.7%
Retail traders	8,479	11,252	10,795	27.3%	-4.1%
Wholesale traders	37,042	40,500	41,734	12.7%	3.0%
Large Industries	18,640	19,467	20,181	8.3%	3.7%
Commercial Real Estate	13,310	14,592	15,468	16.2%	6.0%
Loans collateralized by deposits	4,556	4,959	4,892	7.4%	-1.4%
Infrastructure	1,792	1,943	3,493	94.9%	79.8%
NBFC	2,431	2,427	2,087	-14.2%	-14.0%
Others	18,687	21,487	21,777	16.5%	1.3%
Retail Loans	30,135	36,384	38,173	26.7%	4.9%
Personal Loans	9,128	13,103	14,562	59.5%	11.1%
Jewel loan (non-agri)	3,131	3,556	3,493	11.6%	-1.8%
Housing Loans	17,876	19,725	20,118	12.5%	2.0%
Gross loans	2,60,891	2,97,850	3,06,996	17.7%	3.1%
Loan book mix (%)	3Q'18	2Q'19	3Q'19	YoY (%)	QoQ (%)
Agriculture	13.6%	14.9%	14.7%	1.1%	-0.2%
Includes Jewel Loans of	7.4%	7.8%	7.9%	0.5%	0.1%
MSME	34.6%	33.8%	33.6%	-1.0%	-0.1%
Commercial Real Estate	3.3%	3.8%	3.5%	0.3%	-0.3%
Retail traders	14.2%	13.6%	13.6%	-0.6%	0.0%
Wholesale traders	7.1%	6.5%	6.6%	-0.6%	0.0%
Large Industries	5.1%	4.9%	5.0%	-0.1%	0.1%
Loans collateralized by deposits	1.7%	1.7%	1.6%	-0.2%	-0.1%
Infrastructure	0.7%	0.7%	1.1%	0.5%	0.5%
NBFC	0.9%	0.8%	0.7%	-0.3%	-0.1%
Others	7.2%	7.2%	7.1%	-0.1%	-0.1%
Retail Loans	11.6%	12.2%	12.4%	0.9%	0.2%
Personal Loans	3.5%	4.4%	4.7%	1.2%	0.3%
Jewel loan (non-agri)	1.2%	1.2%	1.1%	-0.1%	-0.1%
Housing Loans	6.9%	6.6%	6.6%	-0.3%	-0.1%
Gross loans	100%	100%	100%		

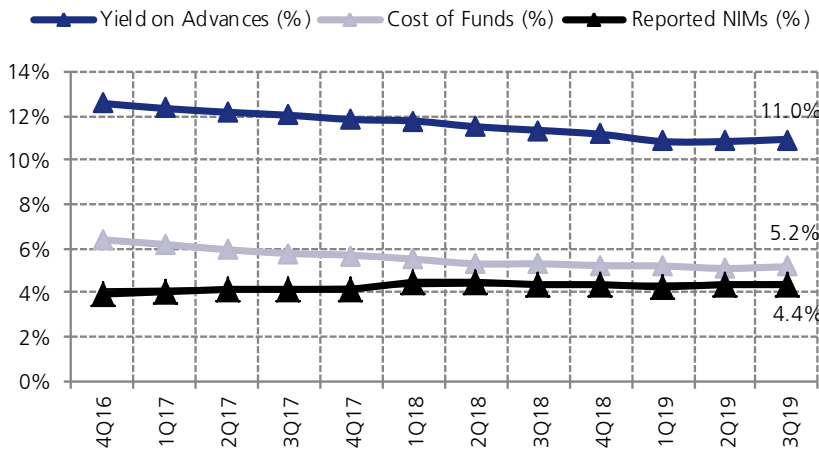
Source: Company, JM Financial

Exhibit 8. CUBK 3Q19: Trends in accretion to loans and deposits



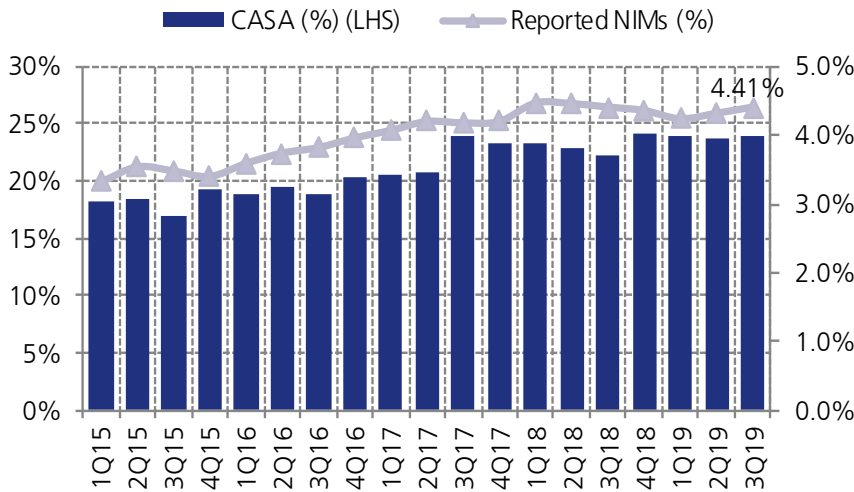
Source: Company, JM Financial

Exhibit 9. CUBK 3Q19: Yields and margins (%)



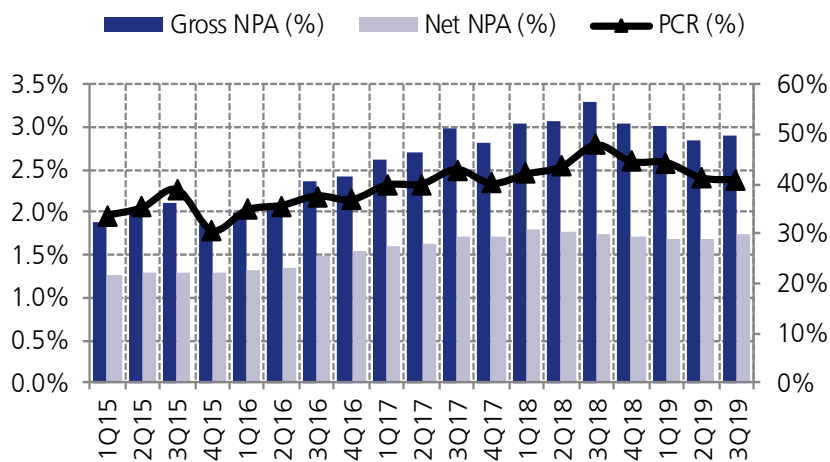
Source: Company, JM Financial

Exhibit 10. CUBK 3Q19: Trends in CASA and NIMs



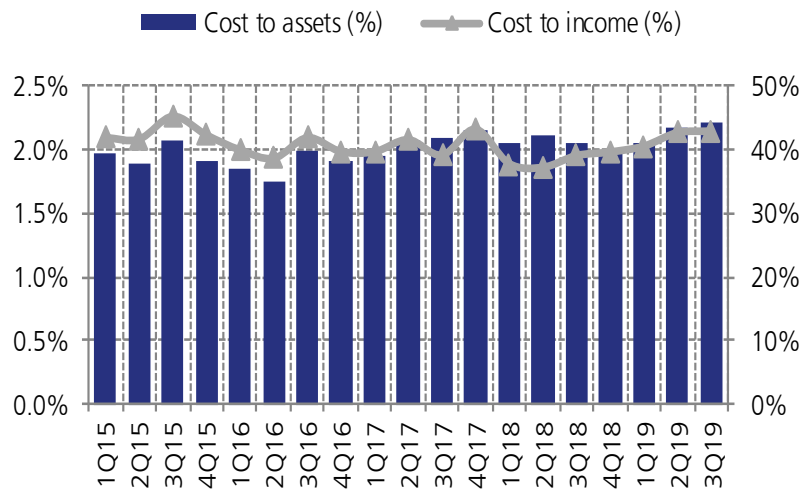
Source: Company, JM Financial

Exhibit 11. CUBK 3Q19: NPL trends and coverage (%)



Source: Company, JM Financial

Exhibit 12. CUBK 2Q19: Cost ratios (%)



Source: Company, JM Financial

Financial Tables (Standalone)

Profit & Loss						(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E	
Net Interest Income	11,988	14,303	16,053	18,627	22,069	
Profit on Investments	1,078	938	800	1,000	705	
Exchange Income	978	744	632	727	872	
Fee & Other Income	2,783	3,639	3,661	4,210	5,014	
Non-Interest Income	4,839	5,321	5,093	5,937	6,591	
Total Income	16,826	19,624	21,146	24,564	28,660	
Operating Expenses	6,890	7,546	8,727	9,955	11,356	
Pre-provisioning Profits	9,937	12,078	12,419	14,609	17,303	
Loan-Loss Provisions	2,595	3,045	2,751	3,623	4,294	
Provisions on Investments	490	957	150	27	27	
Others Provisions	-75	175	184	193	183	
Total Provisions	3,010	4,178	3,085	3,843	4,504	
PBT	6,927	7,900	9,334	10,766	12,799	
Tax	1,900	1,980	2,427	2,799	3,328	
PAT (Pre-Extraordinaries)	5,027	5,920	6,907	7,967	9,471	
Extra ordinaries (Net of Tax)	0	0	0	0	0	
Reported Profits	5,027	5,920	6,907	7,967	9,471	
Dividend paid	217	265	292	292	366	
Retained Profits	4,810	5,656	6,615	7,675	9,106	

Source: Company, JM Financial

Key Ratios					
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Growth (YoY) (%)					
Deposits	10.9%	9.1%	14.5%	16.5%	16.0%
Advances	13.2%	16.9%	18.0%	19.0%	18.0%
Total Assets	10.9%	13.2%	15.7%	17.5%	16.4%
NII	22.2%	19.3%	12.2%	16.0%	18.5%
Non-interest Income	18.0%	10.0%	-4.3%	16.6%	11.0%
Operating Expenses	23.5%	9.5%	15.6%	14.1%	14.1%
Operating Profits	19.2%	21.5%	2.8%	17.6%	18.4%
Core Operating profit	12.4%	25.7%	4.3%	17.1%	22.0%
Provisions	30.5%	38.8%	-26.1%	24.6%	17.2%
Reported PAT	13.0%	17.8%	16.7%	15.3%	18.9%
Yields / Margins (%)					
Interest Spread	3.12%	3.39%	3.26%	3.18%	3.14%
NIM	3.73%	3.97%	3.88%	3.85%	3.87%
Profitability (%)					
Non-IR to Income	28.8%	27.1%	24.1%	24.2%	23.0%
Cost to Income	40.9%	38.5%	41.3%	40.5%	39.6%
ROA	1.50%	1.57%	1.60%	1.59%	1.61%
ROE	15.2%	15.3%	15.4%	15.3%	15.7%
Assets Quality (%)					
Slippages	2.31%	2.45%	2.00%	2.00%	2.00%
Gross NPA	2.83%	3.03%	2.68%	2.59%	2.42%
Net NPAs	1.71%	1.70%	1.50%	1.37%	1.35%
Provision Coverage	40.1%	44.6%	44.7%	47.9%	44.8%
Specific LLP	1.12%	1.17%	0.90%	1.00%	1.00%
Net NPAs / Networth	11.4%	11.4%	10.2%	9.6%	9.6%
Capital Adequacy (%)					
Tier I	15.35%	15.79%	15.60%	15.18%	14.96%
CAR	15.83%	16.22%	15.97%	15.49%	15.22%

Source: Company, JM Financial

Balance Sheet						(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E	
Equity Capital	601	665	731	731	731	
Reserves & Surplus	35,101	40,968	47,516	55,191	64,296	
Deposits	3,01,157	3,28,526	3,76,163	4,38,229	5,08,346	
Borrowings	5,310	17,359	21,699	27,123	33,904	
Other Liabilities	10,538	11,855	16,004	21,606	24,847	
Total Liabilities	3,52,708	3,99,372	4,62,113	5,42,880	6,32,124	
Investments	70,315	78,791	86,531	1,00,809	1,16,952	
Net Advances	2,38,327	2,78,528	3,28,663	3,91,109	4,61,508	
Cash & Equivalents	28,790	26,364	28,117	32,975	38,314	
Fixed Assets	2,151	2,231	2,120	1,908	1,717	
Other Assets	13,126	13,458	16,681	16,080	13,633	
Total Assets	3,52,708	3,99,372	4,62,113	5,42,880	6,32,124	

Source: Company, JM Financial

Dupont Analysis					
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
NII / Assets	3.57%	3.80%	3.73%	3.71%	3.76%
Other Income / Assets	1.44%	1.42%	1.18%	1.18%	1.12%
Total Income / Assets	5.02%	5.22%	4.91%	4.89%	4.88%
Cost / Assets	2.05%	2.01%	2.03%	1.98%	1.93%
PBP / Assets	2.96%	3.21%	2.88%	2.91%	2.95%
Provisions / Assets	0.90%	1.11%	0.72%	0.76%	0.77%
PBT / Assets	2.07%	2.10%	2.17%	2.14%	2.18%
Tax rate	27.4%	25.1%	26.0%	26.0%	26.0%
ROA	1.50%	1.57%	1.60%	1.59%	1.61%
RoRWAs	2.33%	2.41%	2.43%	2.37%	2.38%
Leverage	9.9	9.6	9.6	9.7	9.7
ROE	15.2%	15.3%	15.4%	15.3%	15.7%

Source: Company, JM Financial

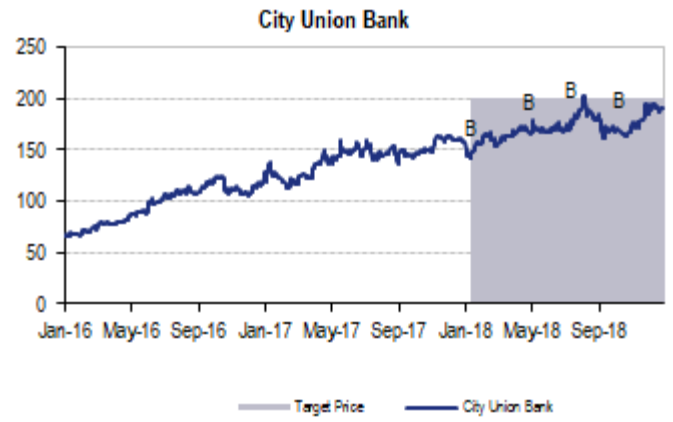
Valuations					
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Shares in Issue	601.1	664.7	731.2	731.2	731.2
EPS (INR)	8.4	8.9	9.4	10.9	13.0
EPS (YoY) (%)	12.5%	6.5%	6.1%	15.3%	18.9%
PER (x)	22.8	21.4	20.2	17.5	14.7
BV (INR)	59	63	66	76	89
BV (YoY) (%)	16.4%	5.4%	5.4%	15.9%	16.3%
ABV (INR)	57	61	64	75	87
ABV (YoY) (%)	16.5%	6.1%	5.7%	16.6%	15.8%
P/BV (x)	3.22	3.05	2.89	2.50	2.15
P/ABV (x)	3.34	3.15	2.98	2.55	2.21
DPS (INR)	0.4	0.4	0.4	0.4	0.5
Div. yield (%)	0.2%	0.2%	0.2%	0.2%	0.3%

Source: Company, JM Financial

History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
7-Feb-18	Buy	200	
25-May-18	Buy	200	0.0
9-Aug-18	Buy	200	0.0
4-Nov-18	Buy	200	0.0
9-Jan-19	Buy	220	10.0

Recommendation History



APPENDIX I

JM Financial Institutional Securities Limited

(formerly known as JM Financial Securities Limited)

Corporate Identity Number: U67100MH2017PLC296081

Member of BSE Ltd., National Stock Exchange of India Ltd. and Metropolitan Stock Exchange of India Ltd.

SEBI Registration Nos.: Stock Broker - INZ000163434, Research Analyst – INH000000610

Registered Office: 7th Floor, Cnergy, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India.

Board: +9122 6630 3030 | Fax: +91 22 6630 3488 | Email: jmfinancial.research@jmfl.com | www.jmfl.com

Compliance Officer: Mr. Sunny Shah | Tel: +91 22 6630 3383 | Email: sunny.shah@jmfl.com

Definition of ratings	
Rating	Meaning
Buy	Total expected returns of more than 15%. Total expected return includes dividend yields.
Hold	Price expected to move in the range of 10% downside to 15% upside from the current market price.
Sell	Price expected to move downwards by more than 10%

Research Analyst(s) Certification

The Research Analyst(s), 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 or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures

This research report has been prepared by JM Financial Institutional Securities Limited (JM Financial Institutional Securities) to provide information about the company(ies) and sector(s), if any, covered in the report and may be distributed by it and/or its associates solely for the purpose of information of the select recipient of this report. This report and/or any part thereof, may not be duplicated in any form and/or reproduced or redistributed without the prior written consent of JM Financial Institutional Securities. This report has been prepared independent of the companies covered herein.

JM Financial Institutional Securities is registered with the Securities and Exchange Board of India (SEBI) as a Research Analyst and a Stock Broker having trading memberships of the BSE Ltd. (BSE), National Stock Exchange of India Ltd. (NSE) and Metropolitan Stock Exchange of India Ltd. (MSEI). No material disciplinary action has been taken by SEBI against JM Financial Institutional Securities in the past two financial years which may impact the investment decision making of the investor.

JM Financial Institutional Securities renders stock broking services primarily to institutional investors and provides the research services to its institutional clients/investors. JM Financial Institutional Securities and its associates are part of a multi-service, integrated investment banking, investment management, brokerage and financing group. JM Financial Institutional Securities and/or its associates might have provided or may provide services in respect of managing offerings of securities, corporate finance, investment banking, mergers & acquisitions, broking, financing or any other advisory services to the company(ies) covered herein. JM Financial Institutional Securities and/or its associates might have received during the past twelve months or may receive compensation from the company(ies) mentioned in this report for rendering any of the above services.

JM Financial Institutional Securities and/or 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 company(ies) mentioned herein 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 company(ies) covered under this report or (c) act as an advisor or lender/borrower to, or may have any financial interest in, such company(ies) or (d) considering the nature of business/activities that JM Financial Institutional Securities is engaged in, it may have potential conflict of interest at the time of publication of this report on the subject company(ies).

Neither JM Financial Institutional Securities nor its associates or the Research Analyst(s) named in this report or his/her relatives individually own one per cent or more securities of the company(ies) covered under this report, at the relevant date as specified in the SEBI (Research Analysts) Regulations, 2014.

The Research Analyst(s) principally responsible for the preparation of this research report and members of their household are prohibited from buying or selling debt or equity securities, including but not limited to any option, right, warrant, future, long or short position issued by company(ies) covered under this report. The Research Analyst(s) principally responsible for the preparation of this research report or their relatives (as defined under SEBI (Research Analysts) Regulations, 2014); (a) do not have any financial interest in the company(ies) covered under this report or (b) did not receive any compensation from the company(ies) covered under this report, or from any third party, in connection with this report or (c) do not have any other material conflict of interest at the time of publication of this report. Research Analyst(s) are not serving as an officer, director or employee of the company(ies) covered under this report.

While reasonable care has been taken in the preparation of this report, it does not purport to be a complete description of the securities, markets or developments referred to herein, and JM Financial Institutional Securities does not warrant its accuracy or completeness. JM Financial Institutional Securities may not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. This report is provided for information only and is not an investment advice and must not alone be taken as the basis for an investment decision.

The investment discussed or views expressed or recommendations/opinions given herein may not be suitable for all investors. The user assumes the entire risk of any use made of this information. The information contained herein may be changed without notice and JM Financial Institutional Securities reserves the right to make modifications and alterations to this statement as they may deem fit from time to time.

This report is neither an offer nor solicitation of an offer to buy and/or sell any securities mentioned herein and/or not an official confirmation of any transaction.

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 JM Financial Institutional Securities and/or its affiliated company(ies) 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 a certain category of investors. Persons in whose possession this report may come, are required to inform themselves of and to observe such restrictions.

Persons who receive this report from JM Financial Singapore Pte Ltd may contact Mr. Ruchir Jhunjunwala (ruchir.jhunjunwala@jmf.com) on +65 6422 1888 in respect of any matters arising from, or in connection with, this report.

Additional disclosure only for U.S. persons: JM Financial Institutional Securities has entered into an agreement with JM Financial Securities, Inc. ("JM Financial Securities"), a U.S. registered broker-dealer and member of the Financial Industry Regulatory Authority ("FINRA") in order to conduct certain business in the United States in reliance on the exemption from U.S. broker-dealer registration provided by Rule 15a-6, promulgated under the U.S. Securities Exchange Act of 1934 (the "Exchange Act"), as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission ("SEC") (together "Rule 15a-6").

This research report is distributed in the United States by JM Financial Securities in compliance with Rule 15a-6, and as a "third party research report" for purposes of FINRA Rule 2241. In compliance with Rule 15a-6(a)(3) this research report is distributed only to "major U.S. institutional investors" as defined in Rule 15a-6 and is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research report and are not a major U.S. institutional investor, you are instructed not to read, rely on, or reproduce the contents hereof, and to destroy this research or return it to JM Financial Institutional Securities or to JM Financial Securities.

This research report is a product of JM Financial Institutional Securities, which is the employer of the research analyst(s) solely responsible for its content. The research analyst(s) preparing this research report is/are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore, the analyst(s) are not subject to supervision by a U.S. broker-dealer, or otherwise required to satisfy the regulatory licensing requirements of FINRA and may not be subject to the Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

JM Financial Institutional Securities only accepts orders from major U.S. institutional investors. Pursuant to its agreement with JM Financial Institutional Securities, JM Financial Securities effects the transactions for major U.S. institutional investors. Major U.S. institutional investors may place orders with JM Financial Institutional Securities directly, or through JM Financial Securities, in the securities discussed in this research report.

Additional disclosure only for U.K. persons: Neither JM Financial Institutional Securities nor any of its affiliates is authorised in the United Kingdom (U.K.) by the Financial Conduct Authority. As a result, this report is for distribution only to persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the matters to which this report relates may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This report is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons.

Additional disclosure only for Canadian persons: This report is not, and under no circumstances is to be construed as, an advertisement or a public offering of the securities described herein in Canada or any province or territory thereof. Under no circumstances is this report to be construed as an offer to sell securities or as a solicitation of an offer to buy securities in any jurisdiction of Canada. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the registration requirement in the relevant province or territory of Canada in which such offer or sale is made. This report is not, and under no circumstances is it to be construed as, a prospectus or an offering memorandum. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon these materials, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence. If you are located in Canada, this report has been made available to you based on your representation that you are an "accredited investor" as such term is defined in National Instrument 45-106 Prospectus Exemptions and a "permitted client" as such term is defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada nor should it be construed as being tailored to the needs of the recipient. Canadian recipients are advised that JM Financial Securities, Inc., JM Financial Institutional Securities Limited, their affiliates and authorized agents are not responsible for, nor do they accept, any liability whatsoever for any direct or consequential loss arising from any use of this research report or the information contained herein.