

Tata Consultancy Services (TCS) ACCUMULATE

Third consecutive quarter of all-round performance

Summary

TCS reported a third consecutive quarter of all-round performance in Q4FY21. Revenue grew by 4.2% QoQ in CC (3rd consecutive quarter of 4%+ QoQ growth), higher than our forecast of +3%. However, EBIT margin improvement of ~20bps QoQ to 26.8% was slightly lower than our forecast of 27.3%.

In Q4FY21, TCS has secured deals with an all-time high TCv of US\$9.2 bn taking the FY21 TCv to US\$31.6 bn, +17% YoY. TCS has maintained its positive outlook and is confident of achieving a double-digit YoY revenue growth in CC for FY22.

We fine-tune our forecast of revenue/EPS CAGR of 11.8%/14.4% over FY21-23. We maintain ACCUMULATE and TP to Rs3,530 based on PER of 30x FY23E.

Key Highlights and Investment Rationale

■ Q4FY21 sees 3rd consecutive quarter of 4%+ QoQ growth

Q4FY21 revenue grew by 4.2% QoQ in CC post a 4.8%/4.1% QoQ growth in Q2/Q3. All the verticals saw a QoQ growth in CC with BFSI (32.2% of revenue) outperforming with a 7% QoQ growth, benefiting from ramp-up of large deals. Similarly, all the geographies saw a QoQ growth with Continental Europe (16.8% of revenue) outperforming with 8.5% QoQ.

TCS continued to execute its world-class margin management capabilities and was more than able to offset the headwinds from ramp-up of large deals. Q4FY21 EBIT margin of 26.8%, a 22-quarter high, saw a QoQ improvement of ~20bps.

TCv of deal-wins saw even better performance to a new high of US\$9.2 bn, including US\$3.9 bn in BFSI, US\$1.4 bn in retail and US\$4.2 bn from the US. TCS confirmed that these included 1 large deal of US\$500-600mn and it also has good mix of US\$50 mn+ and US\$100 mn+ deals.

US\$50mn+ clients grew by 4 QoQ to 101 and LTM attrition declined further to 7.2%.

■ Double-digit revenue growth in FY22 and even beyond

Given the QoQ growth momentum, exit rate for Q4, strong TCv and deal-pipeline, we believe that TCS can easily achieve double-digit revenue growth in FY22. TCS allayed any concerns on supply-side constraints for achieving the same. In-fact it believes that there are significant opportunities across traditional outsourcing, growth & transformation and vendor consolidation deals. It aspires to grow in double-digits even beyond FY22. We have factored revenue growth of 13.2% for FY22E and 10.3% for FY23E.

Q4FY21 Result Review

TP	Rs3,530	
CMP	Rs3,241	
Potential upside / downside	+9%	
Previous Rating	ACCUMULATE	
V/s Consensus		
EPS (Rs)	FY22E	FY23E
IDBI Capital	106.4	117.5
Consensus	106.1	118.4
% difference	0.3	(0.8)

Shareholding Pattern (%)

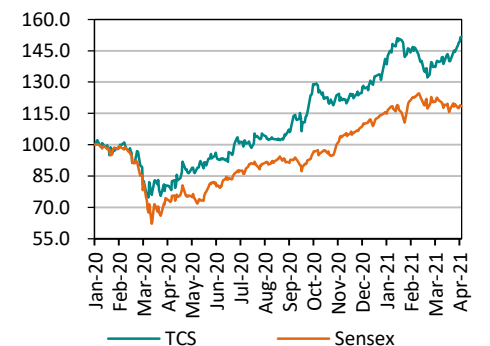
Promoters	72.1
FII	15.9
DII	7.7
Public	4.3

Price Performance (%)

	-1m	-3m	-12m
Absolute	5.5	2.1	83.6
Rel to Sensex	12.1	4.9	29.9

Key Stock Data	
Bloomberg / Reuters Sector	TCS IN/ TCS.BO IT Services
Shares o/s (mn)	3,752
Market cap. (Rs mn)	12,163,167
Market cap. (US\$ mn)	162,057
3-m daily avg Trd value (Rs mn)	7,040.4
52-week high / low	Rs3,359 / 1,678
Sensex / Nifty	47,883 / 14,311

Relative to Sensex (%)



Financial snapshot

Year	FY19	FY20	FY21	FY22E	FY23E
Revenue	1,464,630	1,569,490	1,641,770	1,857,923	2,050,041
EBITDA	395,050	421,100	465,460	528,511	583,324
EBITDA (%)	27.0	26.8	28.4	28.4	28.5
Adj. PAT	314,720	323,400	332,140	393,689	434,650
EPS (Rs)	83.9	86.2	89.8	106.4	117.5
EPS Growth (%)	24.3	2.8	4.2	18.5	10.4
PE (x)	39.6	38.5	37.0	31.2	28.3
Dividend Yield (%)	39.6	38.5	37.0	31.2	28.3
EV/EBITDA (x)	0.9	2.2	1.1	2.6	2.9
RoE (%)	30.4	28.7	25.5	22.4	20.2
RoCE (%)	36.1	37.3	38.9	43.8	44.9

Source: Company; IDBI Capital Research

Exhibit 1: Financial snapshot

(Rs mn)

Year-end: March	Q4FY21	Q3FY21	QoQ (%)	Q4FY20	YoY (%)
Revenues (US\$ mn)	5,989	5,702	5.0	5,444	10.0
Revenues	437,050	420,150	4.0	399,460	9.4
COGS	248,600	237,490	4.7	224,410	10.8
Gross profit	188,450	182,660	3.2	175,050	7.7
SG&A	60,440	60,590	(0.2)	65,290	(7.4)
EBITDA	128,010	122,070	4.9	109,760	16.6
Depreciation & amortization	10,670	10,230	4.3	9,510	12.2
EBIT	117,340	111,840	4.9	100,250	17.0
Other income	7,930	5,080	56.1	4,870	62.8
PBT	125,270	116,920	7.1	105,120	19.2
Tax	32,450	29,650	9.4	24,190	34.1
Minority interest	360	260	38.5	440	(18.2)
Adjusted net profit	92,460	87,010	6.3	80,490	14.9
Diluted EPS (Rs)	25.0	23.2	7.6	21.5	16.3
As % of net revenue					
Gross profit	43.1	43.5		43.8	
SG&A	13.8	14.4		16.3	
EBITDA	29.3	29.1		27.5	
EBIT	26.8	26.6		25.1	
Adjusted net profit	21.2	20.7		20.1	
Tax rate	25.9	25.4		23.0	

Revenue growth of 4.2% QoQ in CC was a beat to our forecast.

EBIT margin improved by 20bps QoQ to 26.8% and was a slight miss to our forecast.

Source: Company; IDBI Capital Research

Exhibit 2: Actual vs. estimates

Year to March	Q4FY21	Q4FY21E	Variance (%)
Revenue (US\$ mn)	5,989	5,917	1.2
Revenue (Rs mn)	437,050	431,393	1.3
EBIT (Rs mn)	117,340	117,732	(0.3)
EBIT margin (%)	26.8	27.3	(44)bps
PAT (Rs mn)	92,460	95,262	(2.9)
PAT margin (%)	21.2	22.1	(93)bps
EPS (Rs)	25.0	25.4	(1.7)

Source: Company; IDBI Capital Research

Exhibit 3: Earning Revision

(Year to March)	FY22E			FY23E		
	New	New	Chg (%)	New	New	Chg (%)
Total Revenue (US\$ mn)	25,107	24,625	2.0	27,703	27,139	2.1
Total Revenue (Rs mn)	1,857,923	1,822,246	2.0	2,050,041	2,008,265	2.1
EBIT margin (%)	26.2	26.3	(6) bps	26.3	26.6	(35) bps
EPS (Rs/sh)	106.4	105.4	1.0	117.5	117.7	(0.2)

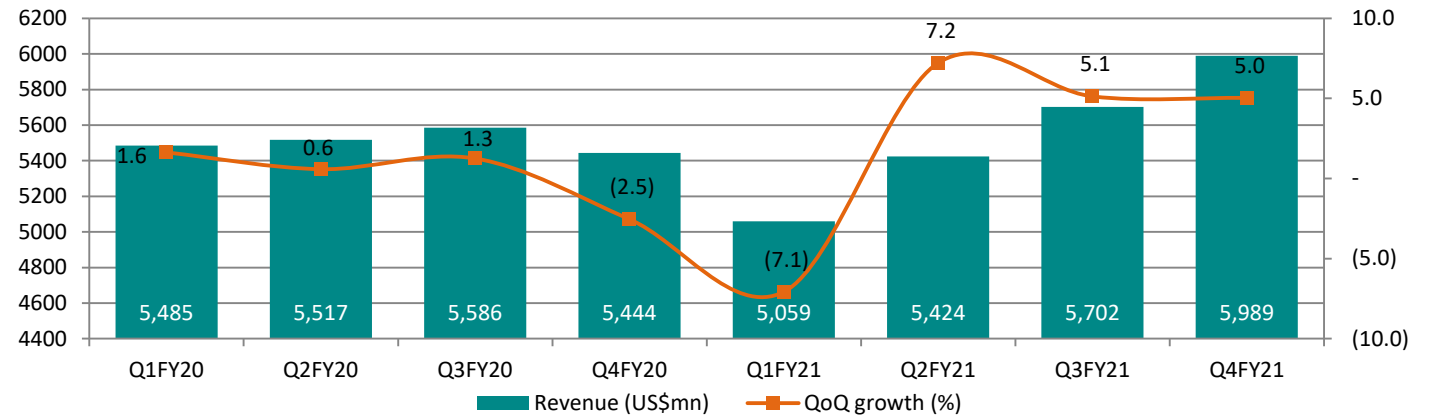
Source: Company; IDBI Capital Research

Exhibit 4: US\$50 mn clients +4 QoQ to 101

No. of large clients	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21	Q3FY21	Q4FY21
USD1m+	1,014	1,032	1,053	1,072	1,066	1,076	1,077	1,096
USD5m+	551	554	557	565	564	565	565	569
USD10m+	384	398	395	391	382	386	386	387
USD20m+	219	225	232	240	230	228	229	228
USD50m+	100	101	102	105	100	97	97	101
USD100m+	44	47	47	49	48	49	48	48

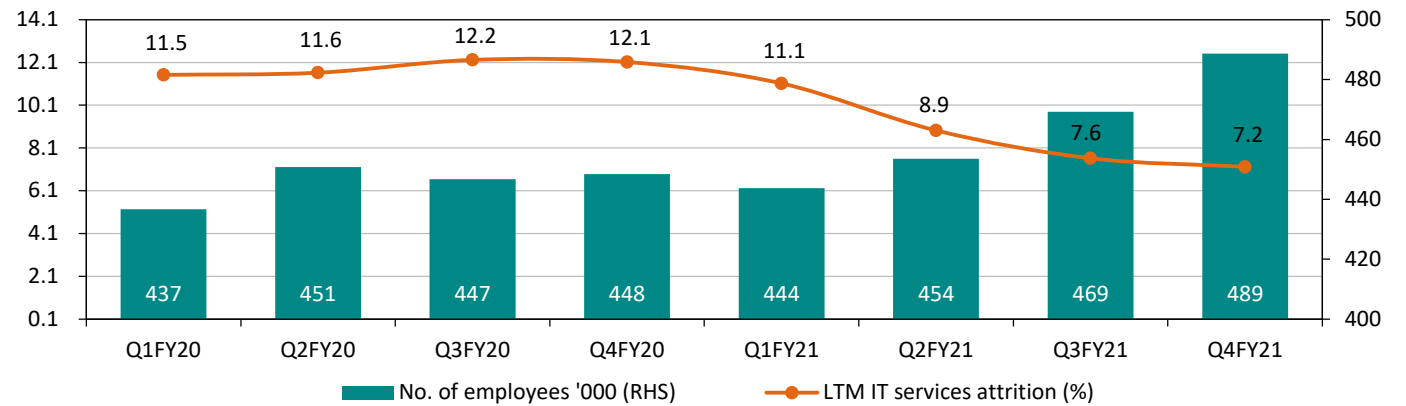
Source: Company; IDBI Capital Research

Exhibit 5: Q4FY21 revenue growth was higher than our forecast



Source: Company; IDBI Capital Research

Exhibit 6: Employee details and IT services attrition trend



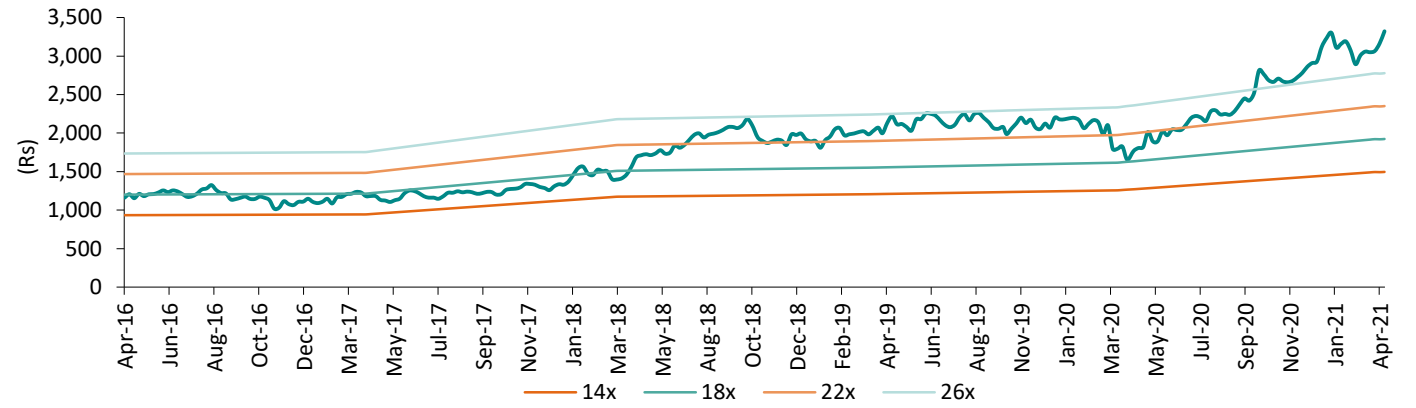
Source: Company; IDBI Capital Research

Exhibit 7: Revenue growth across various segments (%)

	% of revenue (%)	QoQ in CC (%)	YoY in CC (%)
Total revenue		4.2	5.9
by geography			
North America	48.6	3.9	5.9
Latin America	1.6	2.5	1.5
UK	16.0	3.4	1.0
Continental Europe	16.8	8.5	11.7
India	5.6	2.8	11.2
Asia Pacific	9.4	1.0	1.5
MEA	2.0	4.2	10.6
by vertical			
BFSI	32.2	7.0	13.3
Retail & CPG	14.5	4.0	0.9
Communication & Media	6.5	1.8	(4.0)
Manufacturing	9.6	3.9	1.3
Life Sciences & Healthcare	9.7	3.8	19.3
Technology & Services	8.4	2.8	3.9
Regional Markets & Others	19.1	1.7	0.8

Source: Company; IDBI Capital Research

Exhibit 8: One-year forward PER trend



Source: Company; IDBI Capital Research

Financial Summary

Profit & Loss Account

(Rs mn)

Year-end: March	FY20	FY21	FY22E	FY23E
Net sales	1,569,490	1,641,770	1,857,923	2,050,041
<i>Growth (%)</i>	7.2	4.6	13.2	10.3
Operating expenses	(1,148,390)	(1,176,310)	(1,329,412)	(1,466,717)
EBITDA	421,100	465,460	528,511	583,324
<i>Growth (%)</i>	6.6	10.5	13.5	10.4
Depreciation	(35,300)	(40,650)	(41,626)	(44,876)
EBIT	385,800	424,810	486,885	538,448
Interest paid	(9,240)	(6,380)	(5,600)	(5,600)
Other income	45,920	29,610	34,909	36,891
Pre-tax profit	422,480	448,040	516,194	569,739
Tax	(98,010)	(114,580)	(121,306)	(133,889)
<i>Effective tax rate (%)</i>	23.2	25.6	23.5	23.5
Minority Interest	(1,070.0)	(1,320.0)	(1,200.0)	(1,200.0)
Net profit	323,400	332,140	393,689	434,650
Adjusted net profit	323,400	332,140	393,689	434,650
<i>Growth (%)</i>	2.8	2.7	18.5	10.4
<i>Shares o/s (mn nos)</i>	3,752	3,699	3,699	3,699

Cash Flow Statement

(Rs mn)

Year-end: March	FY20	FY21	FY22E	FY23E
Pre-tax profit	422,480	448,040	516,194	569,739
Depreciation	14,850	21,420	41,626	44,876
Tax paid	(102,360)	(125,730)	(121,306)	(133,889)
Chg in working capital	(4,660)	45,460	(18,872)	(16,099)
Other operating activities	(47,148)	(39,302)	(27,409)	(27,568)
Cash flow from operations (a)	283,162	349,888	390,233	437,059
Capital expenditure	(20,720)	(26,160)	(25,000)	(25,000)
Chg in investments	230	30	-	-
Other investing activities	-	-	-	-
Cash flow from investing (b)	(20,490)	(26,130)	(25,000)	(25,000)
Equity raised/(repaid)	-	(160,000)	-	-
Debt raised/(repaid)	-	-	-	-
Dividend (incl. tax)	(327,592)	(136,865)	(325,517)	(362,507)
Chg in minorities	630	(800)	-	-
Other financing activities	-	-	-	-
Cash flow from financing (c)	(326,962)	(297,718)	(325,517)	(362,507)
Net chg in cash (a+b+c)	(64,290)	26,040	39,716	49,552

Balance Sheet

(Rs mn)

Year-end: March	FY20	FY21	FY22E	FY23E
Net fixed assets	138,400	143,140	126,514	106,638
Investments	2,160	2,130	2,130	2,130
Other non-curr assets	133,800	126,640	139,344	153,753
Current assets	906,350	996,370	1,115,623	1,235,180
Inventories	50	80	80	80
Sundry Debtors	366,620	369,900	417,396	460,557
Cash and Bank	372,790	398,830	438,546	488,098
Loans and advances	84,750	115,010	132,345	146,030
Total assets	1,180,710	1,268,280	1,383,611	1,497,701
Shareholders' funds	841,260	864,330	932,502	1,004,645
Share capital	3,752	3,699	3,699	3,699
Reserves & surplus	837,508	860,631	928,803	1,000,946
Total Debt	-	-	-	-
Secured loans	-	-	-	-
Unsecured loans	-	-	-	-
Other liabilities	64,160	49,110	49,110	49,110
Curr Liab & prov	269,060	348,090	394,049	434,796
Current liabilities	197,350	229,250	259,563	286,403
Provisions	71,710	118,840	134,486	148,393
Total liabilities	333,220	397,200	443,159	483,906
Total equity & liabilities	1,180,710	1,268,280	1,383,611	1,497,701
Book Value (Rs)	224	234	252	272

Source: Company; IDBI Capital Research

Financial Ratios

Year-end: March	FY20	FY21	FY22E	FY23E
Adj. EPS (Rs)	86.2	89.8	106.4	117.5
Adj. EPS growth (%)	2.8	4.2	18.5	10.4
EBITDA margin (%)	26.8	28.4	28.4	28.5
Pre-tax margin (%)	26.9	27.3	27.8	27.8
ROE (%)	37.3	38.9	43.8	44.9
ROCE (%)	42.8	46.4	51.0	52.5
Turnover & Leverage ratios (x)				
Asset turnover (x)	1.4	1.3	1.4	1.4
Leverage factor (x)	1.3	1.4	1.5	1.5
Net margin (%)	20.6	20.2	21.2	21.2
Net Debt/Equity (x)	(0.4)	(0.5)	(0.5)	(0.5)
Working Capital & Liquidity ratio				
Inventory days	0	0	0	0
Receivable days	85	82	82	82
Payable days	21	24	24	24

Valuation

Year-end: March	FY20	FY21	FY22E	FY23E
P/E (x)	38.5	37.0	31.2	28.3
Price / Book value (x)	14.8	14.2	13.2	12.2
PCE (x)	34.8	33.0	28.2	25.6
EV / Net sales (x)	7.7	7.2	6.4	5.8
EV / EBITDA (x)	28.7	25.5	22.4	20.2
Dividend Yield (%)	2.2	1.1	2.6	2.9



Notes

Dealing	(91-22) 6836 1111	dealing@idbicapital.com
---------	-------------------	-------------------------

Key to Ratings Stocks:

BUY: Absolute return of 15% and above; **ACCUMULATE:** 5% to 15%; **HOLD:** Upto ±5%; **REDUCE:** -5% to -15%; **SELL:** -15% and below.

IDBI Capital Markets & Securities Ltd.

Equity Research Desk

6th Floor, IDBI Tower, WTC Complex, Cuffe Parade, Colaba, Mumbai – 400 005. Phones: (91-22) 2217 1700; Fax: (91-22) 2215 1787; Email: info@idbicapital.com

SEBI Registration: BSE & NSE (Cash & FO) – INZ000007237, NSDL – IN-DP-NSDL-12-96, Research – INH000002459, CIN – U65990MH1993GOI075578

Compliance Officer: Christina D’souza; Email: compliance@idbicapital.com; Telephone: (91-22) 2217 1907

Disclaimer

This report has been published by IDBI Capital Markets & Securities Ltd.(hereinafter referred to as “IDBI Capital”) for private circulation. This report should not be reproduced or copied or made available to others. No person associated with IDBI Capital is obligated to call or initiate contact with you for the purposes of elaborating or following up on the information contained in this report. The information contained herein is strictly confidential and meant for 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 the prior written consent of IDBI Capital.

Recipients may not receive this report at the same time as other recipients. IDBI Capital will not treat recipients as customers by virtue of their receiving this report.

The information contained herein is from the public domain or sources believed to be reliable, but we do not make any representation or warranty that it is accurate, complete or up-to-date and it should not be relied upon as such. While reasonable care has been taken to ensure that information given is at the time believed to be fair and correct and opinions based thereupon are reasonable, due to the very nature of research it cannot be warranted or represented that it is accurate or complete and it should not be relied upon as such. In so far as this report includes current or historical information, it is believed to be reliable, although its accuracy and completeness cannot be guaranteed.

Opinions expressed are current opinions as of the date appearing on this material only. While we endeavor to update on a reasonable basis, the information discussed in this material, IDBI Capital, its directors, employees are under no obligation to update or keep the information current. Further there may be regulatory, compliance, or other reasons that prevent us from doing so.

Prospective investors and others are cautioned that any forward-looking statements are not predictions and may be subject to change without notice.

IDBI Capital, its directors and employees and any person connected with it, will not in any way be responsible for the contents of this report or for any losses, costs, expenses, charges, including notional losses/lost opportunities incurred by a recipient as a result of acting or non-acting on any information/material contained in the report.

This is not an offer to sell or a solicitation to buy any securities or an attempt to influence the opinion or behavior of investors or recipients or provide any investment/tax advice.

This report is for information only and has not been prepared based on specific investment objectives. The securities discussed in this report may not be suitable for all investors. Investors must make their own investment decision based on their own investment objectives, goals and financial position and based on their own analysis.

Trading in stocks, stock derivatives, and other securities is inherently risky and the recipient agrees to assume complete and full responsibility for the outcomes of all trading decisions that the recipient makes, including but not limited to loss of capital.

Opinions, projections and estimates in this report solely constitute the current judgment of the author of this report as of the date of this report and do not in any way reflect the views of IDBI Capital, its directors, officers, or employees.

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 IDBI Capital and associates 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 report may come are required to inform themselves of and to observe such restriction.

E-mail is not a secure method of communication. IDBI Capital cannot accept responsibility for the accuracy or completeness of any e-mail message or any attachment(s).

This transmission could contain viruses, be corrupted, destroyed, incomplete, intercepted, lost or arrived late. IDBI Capital, its directors or employees or associates accept no liability for any damage caused, directly or indirectly, by this email.

Analyst Disclosures

I, Urmil Shah, hereby certify that the views expressed in this report accurately reflect my personal views about the subject companies and / or securities. I also certify that no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report. Principally, I will be responsible for the preparation of this research report and have taken reasonable care to achieve and maintain independence and objectivity in making any recommendations herein.

Other Disclosure

IDBI Capital Markets & Securities Ltd.(hereinafter referred to as “IDBI Capital”) was incorporated in the year 1993 under Companies Act, 1956 and is a wholly owned subsidiary of IDBI Bank Limited. IDBI Capital is one of India’s leading securities firm which offers a full suite of products and services to individual, institutional and corporate clients namely Stock broking (Institutional and Retail) , Distribution of financial products, Merchant Banking, Corporate Advisory Services, Debt Arranging & Underwriting, Portfolio Manager Services and providing Depository Services. IDBI Capital is a registered trading and clearing member of BSE Ltd. (BSE) and National Stock Exchange of India Limited (NSE). IDBI Capital is also a SEBI registered Merchant Banker, Portfolio Manager and Research Analyst. IDBI Capital is also a SEBI registered depository participant with National Securities Depository Limited (NSDL) and is also a Mutual Fund Advisor registered with Association of Mutual Funds in India (AMFI).

IDBI Capital and its associates IDBI Bank Ltd. (Holding Company), IDBI Intech Ltd. (Fellow Subsidiary), IDBI Asset Management Ltd. (Fellow Subsidiary) and IDBI Trusteeship Services Ltd. (Fellow Subsidiary).

IDBI Group is a full-serviced banking, integrated investment banking, investment management, brokerage and financing group. Details in respect of which are available on www.idbicapital.com IDBI Capital along with its associates are leading underwriter of securities and participants in virtually all securities trading markets in India. We and our associates have investment banking and other business relationships with a significant percentage of the companies covered by our Research Department. Investors should assume that IDBI Capital and/or its associates are seeking or will seek investment banking or other business from the company or companies that are the subject of this material. IDBI Capital generally prohibits its analysts, persons reporting to analysts, and their dependent family members having a financial conflict of interest in the securities or derivatives of any companies that the analysts cover. Additionally, IDBI Capital generally prohibits its analysts and persons reporting to analysts from serving as an officer, director, or advisory board member of any companies that the analysts cover. Our sales people, traders, and other professionals 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. Directors of IDBI Capital or its associates may have interest in the Companies under recommendation in this report either as Director or shareholder. Additionally, other important information regarding our relationships with the company or companies that are the subject of this material is provided herein. This material should not be construed as an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. We are not soliciting any action based on this material. It is for the general information of clients of IDBI Capital. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Before acting on any advice or recommendation in this material, clients should consider whether it is suitable for their particular circumstances and, if necessary, seek professional advice. The price and value of the investments referred to in this material and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide for future performance, future returns are not guaranteed and a loss of original capital may occur. We and our associates, officers, directors, and employees, including persons involved in the preparation or issuance of this material, may from time to time have “long” or “short” positions in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. For the purpose of calculating whether IDBI Capital and its associates holds beneficially owns or controls, including the right to vote for directors, 1% or more of the equity shares of the subject issuer of a research report, the holdings does not include accounts managed by IDBI Asset Management Company/ IDBI Mutual Fund.

IDBI Capital hereby declares that our activities were neither suspended nor we have materially defaulted with any Stock Exchange authority with whom we are registered in last five years. However SEBI, Exchanges and Depositories have conducted the routine inspection and based on their observations have issued advice letters or levied minor penalty on IDBI Capital for certain operational deviations. We have not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has our certificate of registration been cancelled by SEBI at any point of time. IDBI Capital, its directors or employees or associates, may from time to time, have positions in, or options on, and buy and sell securities referred to herein. IDBI Capital or its associates, during the normal course of business, from time to time, may solicit from or perform investment banking or other services for any company mentioned in this document or their connected persons or 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 their affiliate companies or act as advisor or lender / borrower to such company(ies)/associates companies or have other potential conflict of interest. This report may provide hyperlinks to other websites. Except to the extent to which the report refers to the website of IDBI Capital, IDBI Capital states that it has not reviewed the linked site and takes no responsibility for the content contained in such other websites. Accessing such websites shall be at recipient's own risk. IDBI Capital encourages the practice of giving independent opinion in research report preparation by the analyst and thus strives to minimize the conflict in preparation of research report. Accordingly, neither IDBI Capital nor Research Analysts have any material conflict of interest at the time of publication of this report. We offer our research services to primarily institutional investors and their employees, directors, fund managers, advisors who are registered with us. The Research Analyst has not served as an officer, director or employee of Subject Company. We or our associates may have received compensation from the subject company in the past 12 months. We or our associates may have managed or co-managed public offering of securities for the subject company in the past 12 months. We or our associates may have received compensation for investment banking or merchant banking or brokerage services from the subject company in the past 12 months. We or our associates may 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 12 months. We or our associates may have received any compensation or other benefits from the Subject Company or third party in connection with the research report. Research Analyst or his/her relative’s may have financial interest in the subject company. IDBI Capital or its associates may have financial interest in the subject company. Research Analyst or his/her relatives does not have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of Research Report. IDBI Capital or its associates may have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of Research Report. The Subject Company may have been a client during twelve months preceding the date of distribution of the research report. Price history of the daily closing price of the securities covered in this note is available at www.bseindia.com; www.nseindia.com and www.economicstimes.indiatimes.com/markets/stocks/stock-quotes.