

9th January 2018



CENTRAL DEPOSITORY SERVICES LTD

**CAPITAL MARKET PLAY WITH
SIGNIFICANT OPERATING LEVERAGE**

Annuity based
revenue streams

High operating
leverage

High dividend payout
required to drive re-rating

Initiate with BUY;
TP - INR 450



Central Depository Services Ltd | BUY

Capital market play with significant operating leverage

CDSL's stable revenue base driven by repeat business in multiple offerings across DP's, corporates, capital market intermediaries, insurance companies and others has enabled the company to clock 18%+ CAGR top-line growth over FY14-FY17. Fixed cost model driven primarily by staff and IT costs enables the company to register strong margins in tandem with revenue growth. High FCF generation (FCF yield – c.3%+), stable dividend policy (40%) and a strong balance sheet (net cash – INR 5.5bn+) provide further support. We forecast a c.22% EPS CAGR over FY17-FY20E and value the stock at 30x FY20E (premium to exchanges given subdued risk profile) to arrive at a fair value of INR 450/share, implying an upside of 25%+. Management's commitment to further increase dividend payment is a pre-requisite for stock re-rating. Initiate with BUY.

- Stable revenue base driven by repeat business in multiple offerings:** CDSL has a high stability of operating income from the fixed annual charges collected from its diversified client base. Dematerialisation services for securities to DP, non-cash corporate actions such as bonus issue, splits provided to corporates, KYC services in respect of investors in Indian capital market, e-holding of insurance policies, e-voting, e-locker, and academic depository provide diversified rich annuity-based stable revenue to the company. The company has clocked an 18%+ CAGR top-line over the past four years. CDSL commands a 44% share in Demat accounts.
- Fixed costs; steady FCF generation:** CDSL operates in a largely fixed operating cost environment, wherein employee expenses and software development/maintenance costs constitute c.57% of its total costs. In FY16, SEBI revised the percentage of contribution to Investor Protection Fund (IPF) from 25% of profit before tax (excluding other income) to 5% with retrospective effect. CDSL's costs recorded a 3.9% CAGR over FY13-17, while its revenue increased 12.6% CAGR over the same period, resulting in its EBITDA margin increasing from 39.4% in FY13 to 54.4% in FY17. The company is likely to gain further momentum in EBITDA as revenue growth surpasses cost inflation. High cash flow from operations and limited capex is expected to keep CDSL's free cash flow positive around c.INR 1.5bn going forward, resulting in an FCF yield of 3.3%/4.1% for FY19E/FY20E, respectively.
- Diversification into high growth services in a fixed-cost model to drive earnings; Initiate with BUY:** CDSL's annuity based revenue stream, new growth avenues of Insurance & Academics, fixed operating costs, robust cash flow generation coupled with a strong balance sheet and stable dividend policy is likely to drive earnings growth leading to a re-rating of the scrip. **a)** Low pricing power, **b)** dependence on capital market volume, **c)** regulatory oversight, **d)** loss of KYC business after the appointment of Central Registry of Securitization Asset Reconstruction and Security Interest of India (CERSAI) are the key risks to our estimates. Return ratios are optically suppressed due to net cash of INR 5.5bn in the Balance Sheet. We forecast a 22.2% EPS CAGR over FY17-FY20E and value the stock at 30x FY20 to arrive at a fair value of INR 450/share, implying an upside of 25%+. Initiate with BUY.



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Recommendation and Price Target

Current Reco.	BUY
Previous Reco.	NR
Current Price Target (12M)	450
Upside/(Downside)	27.2%
Previous Price Target	NA
Change	NA

Key Data – CDSL IN

Current Market Price	INR354
Market cap (bn)	INR37.0/US\$0.6
Free Float	25%
Shares in issue (mn)	104.5
Diluted share (mn)	104.5
3-mon avg daily val (mn)	INR316.2/US\$5.0
52-week range	486/149
Sensex/Nifty	34,353/10,624
INR/US\$	63.4

Price Performance

%	1M	6M
Absolute	1.9	6.8
Relative*	-1.4	-2.5

* 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

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	1,229	1,460	1,747	2,117	2,554
Sales Growth (%)	16.5	18.8	19.7	21.2	20.6
EBITDA	639	794	1,048	1,361	1,734
EBITDA Margin (%)	52.0	54.4	60.0	64.3	67.9
Adjusted Net Profit	714	858	1,048	1,280	1,564
Diluted EPS (INR)	6.8	8.2	10.0	12.2	15.0
Diluted EPS Growth (%)	46.0	20.1	22.2	22.1	22.2
ROIC (%)	NA	NA	244.4	149.6	181.7
ROE (%)	16.0	16.9	18.6	20.3	21.9
P/E (x)	51.8	43.1	35.3	28.9	23.7
P/B (x)	7.7	6.9	6.2	5.5	4.9
EV/EBITDA (x)	50.6	40.1	30.4	22.9	17.5
Dividend Yield (%)	0.7	0.8	1.0	1.2	1.5

Source: Company data, JM Financial. Note: Valuations as of 08/Jan/2018

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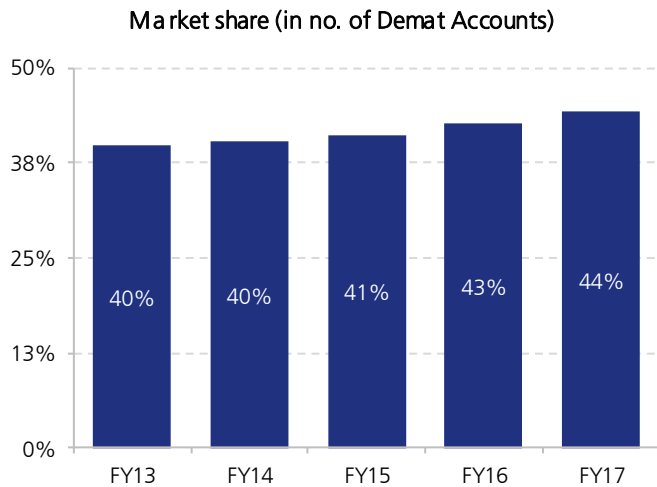
A) Story in charts

Exhibit 1. Revenue drivers (as a % of top-line)

	FY13	FY14	FY15	FY16	FY14-FY17		Description
					FY17	CAGR (%)	
Annual Issuer Charges	43%	43%	34%	39%	35%	11%	<u>Fixed fee charged to corporates annually</u> : facilitates holding of securities in electronic form by offering dematerialisation for a wide range of securities such as equity shares, preference shares, mutual fund units, debt instruments, government securities
Transaction charges	24%	22%	27%	21%	21%	16%	<u>Charged to DPs based on number of debit transactions</u> : enables securities transactions (including off-market transfer and pledge) to be processed by book entry
IPO/Corporate Action Charges	5%	6%	6%	9%	11%	45%	<u>Charged to corporates</u> : provides range of non-cash corporate actions such as bonus issue, subdivision of holdings and conversion of securities in a merger, amalgamation or in an initial public offering
Online data charges	13%	10%	14%	13%	13%	28%	<u>Charged to capital market intermediaries</u> : offers KYC services in respect of investors in Indian capital markets to capital market intermediaries including to mutual funds
Others	15%	18%	20%	19%	19%	19%	services such as e-voting, e-Locker, account maintenance charges

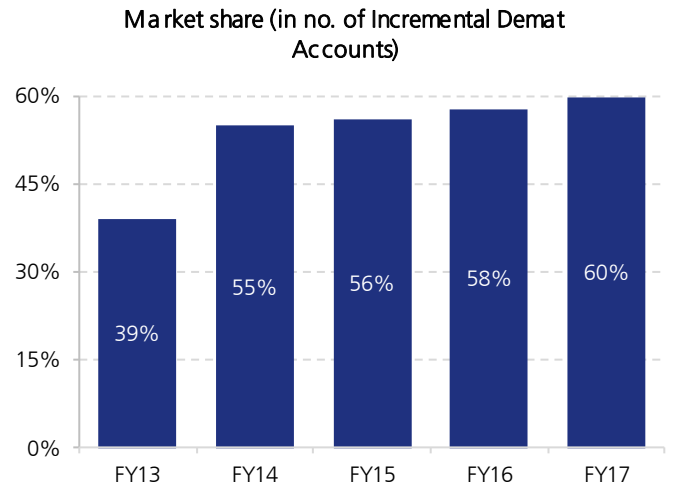
Source: Company, JM Financial

Exhibit 2. CDSL's market share (by demat accounts) on an uptrend



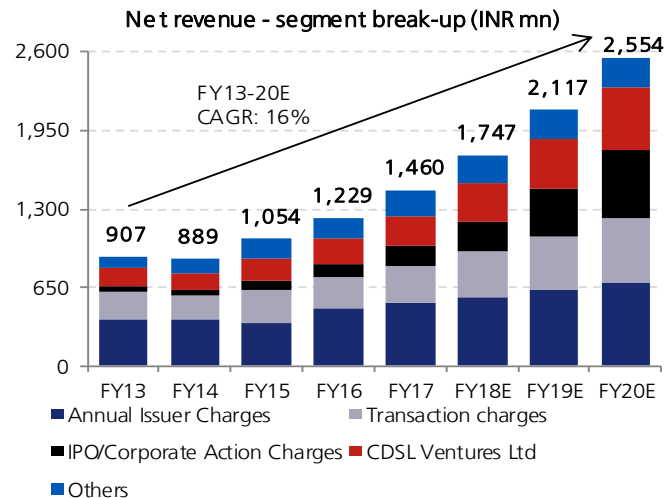
Source: Company, JM Financial

Exhibit 3. CDSL adding higher demats over the past four years



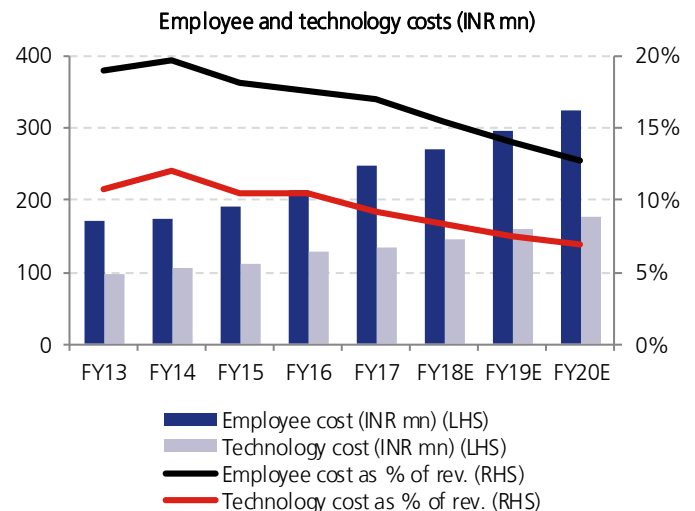
Source: Company, JM Financial

Exhibit 4. Net revenue CAGR at 18%+ over FY14-17



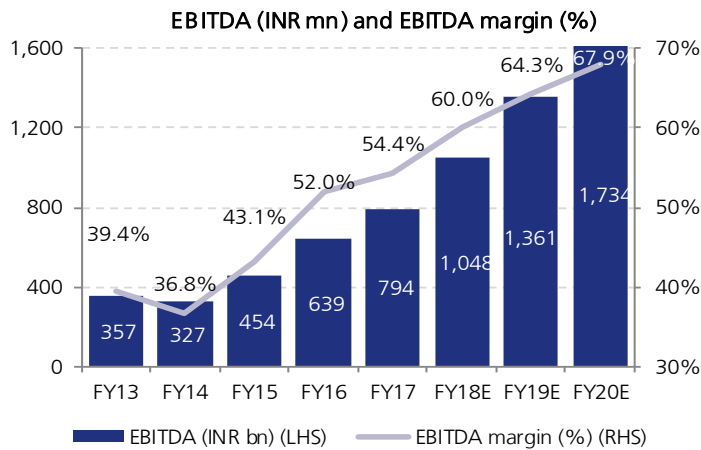
Source: Company, JM Financial

Exhibit 5. Employee and IT costs constitute c.25% of revenue



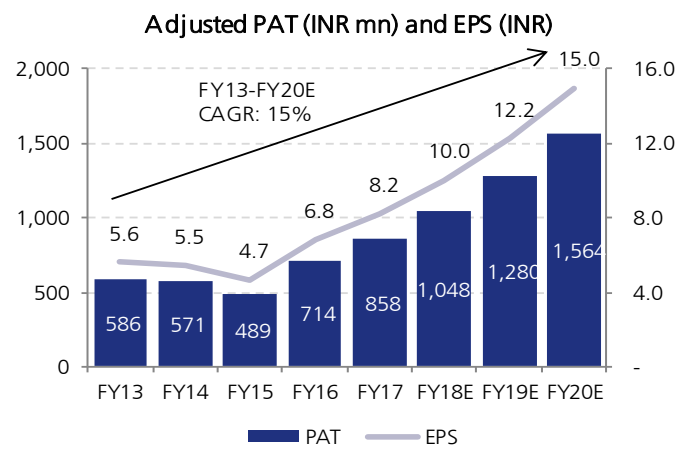
Source: Company, JM Financial

Exhibit 6. High operating leverage to aid margin expansion



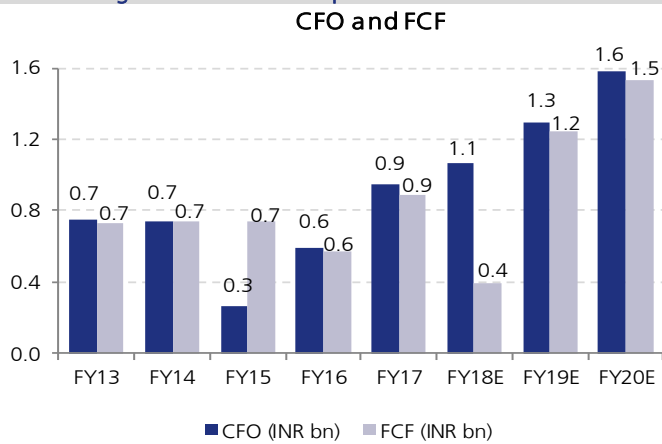
Source: Company, JM Financial

Exhibit 7. PAT expected to increase 22.2% CAGR over FY17-20E



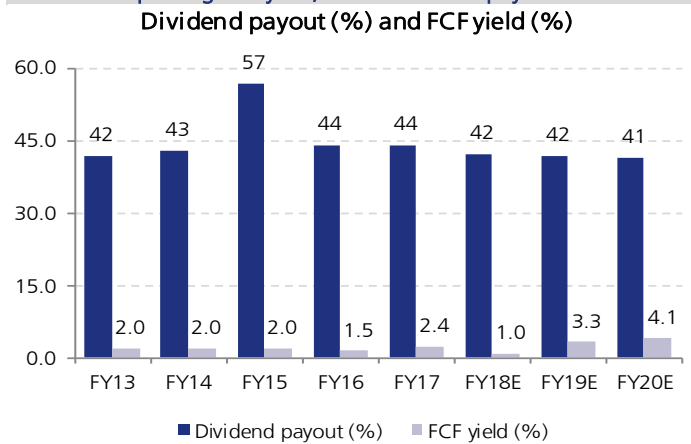
Source: Company, JM Financial

Exhibit 8. High CFO and lower capex to drive FCF



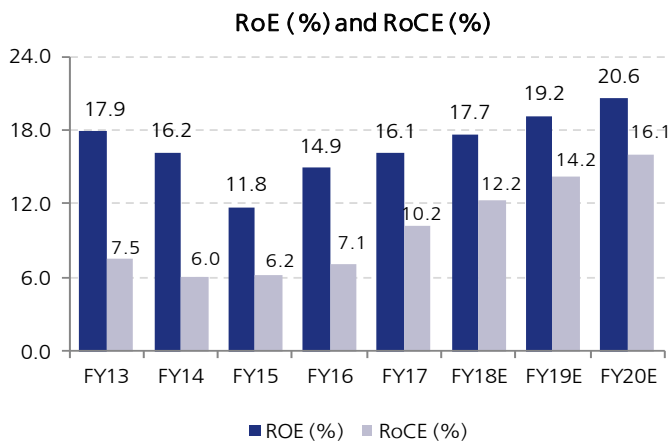
Source: Company, JM Financial, JM Financial; Note: Low FCF in FY18E driven by purchase of office premises worth INR 630mn

Exhibit 9. Improving FCF yield; stable dividend payout



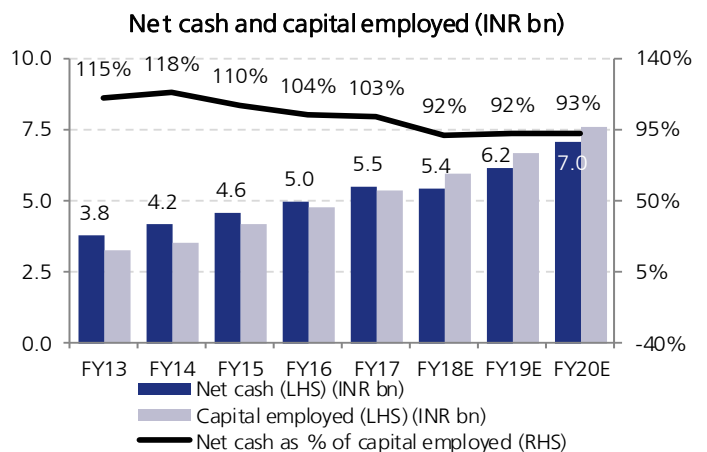
Source: Company, JM Financial, JM Financial

Exhibit 10. Return ratios impacted by high net cash in the BS



Source: Company, JM Financial

Exhibit 11. Net cash forms 90%+ of capital employed



Source: Company, JM Financial

Exhibit 12. Target price; Initiate with BUY

	FY20E
EPS (INR)	15.0
P/E multiple	30
Fair value (INR/share)	450

Source: JM Financial

B) CDSL company profile – leading depository

- **Brief Background:** Central Depository Services (India) Limited (CDSL) commenced operations in 1999 with the objective to provide convenient, dependable and secure depository services at affordable costs to all market participants. The company was initially promoted by the Bombay Stock Exchange (BSE), which later diluted its stake to leading banks such as SBI, HDFC Bank, Bank of India, Bank of Baroda, which became 'Sponsors' of CDSL. The company has a diverse range of service offerings for participants across the financial market.
- **Depository Participants and other capital market intermediaries:** CDSL offers dematerialization for a wide range of securities including equity shares, preference shares, mutual fund units, debt instruments, government securities. As a securities depository, the company facilitates holding of securities in electronic form and enable securities transactions (including off-market transfer and pledge) to be processed by book entry. The DPs act as agents of the company and offers depository services to the BO of the securities. The Registrar and Transfer Agents (RTAs) and Clearing Members (CMs) are the other intermediaries involved in the process of issue and transfer of securities on CDSL's electronic platform.
- **Corporates:** The Company offers facilities to issuers of credit securities and to a shareholder's or applicant's demat accounts to give effect to a range of non-cash corporate actions such as bonus issue, subdivision of holdings and conversion of securities in a merger, amalgamation or in an initial public offering.
- **Capital market intermediaries:** The Company offers KYC services in respect of investors in Indian capital markets to capital market intermediaries including to mutual funds. CDSL's wholly-owned subsidiary – CDSL Ventures Limited (CVL) – is the first and largest KYC registration agency in India, with a market share of c.67% as of Apr'17.
- **Insurance Companies:** CDSL offers facilities to allow holding of insurance policies in electronic form to the holders of these insurance policies of several insurance companies.
- **Others:** The company offers other online services such as e-voting, e-Locker, National Academy Depository, easi (Electronic Access to Security Information), easiest (Electronic Access to Security Information and Execution of Secured Transaction) drafting and preparation of wills for succession (myeasiwill) mobile application (myeasi, m-voting) and Transactions using Secured Texting (TRUST). The Company also regularly conducts investor meetings and other awareness programs. CVL is also a depository for the National Academic Depository and has applied to SEBI to act as a Registrar and Transfer Agent. CDSL Insurance Repository Limited holds insurance policies in electronic forms. The company recently incorporated CDSL Commodity Repository Limited to operate a commodity repository.
- **Dominant player:** CDSL has the highest market share in terms of incremental dematerialised (demat) accounts opened over the past 4 years. CDSL's market share (in terms of demat accounts) increased from c.40% in FY14 to c.44% in FY17. As of Apr'17, the company had **a)** 12.4 million investor accounts (demat accounts), **b)** over 253 billion securities of 9,934 issuers under custody, representing a total value of INR 18.3trn, **c)** 598 registered DPs and **d)** over 15 million KYC records.

Exhibit 13. Details of services offered

Entity	Year of commencement	Entity type	Services	Details
CDSL	1999	Parent	Depository Services	<ul style="list-style-type: none"> - Dematerialisation, Rematerialisation, pledging of demat securities, nomination, transfer of demat balance and centralised change of personal details - Central accounting and record keeping office of the securities - Facilitating e-voting, e-notices, GST suvidha provider, KYC search assistance and drafting wills
CDSL Ventures Limited	2006	Subsidiary	KYC	<ul style="list-style-type: none"> - Connectivity to create, hold or maintain any information or records in electronic forms - Document management and electronic depository of certificates for educational institutions of Central or state governments and other private entities
CDSL Insurance Repository Limited	2011	Subsidiary	Insurance Repository	<ul style="list-style-type: none"> - Electronic connectivity to act as an insurance repository of "e-insurance policies" issued by insurers - Undertake changes on request by insurers or policy holders - Facility to process, preserve, maintain and retrieve, in electronic form, records of documents pertaining to information such as ownership, titles, possession of moveable property, immovable property, term deposit receipts and securities
CDSL Commodity Repository Limited	2017	Subsidiary	Commodity Repository	<ul style="list-style-type: none"> - Setting up and maintaining, managing, handling of an electronic system database with suitable electronic connectivity of electronic negotiable warehouse repository receipts (eNWR)

Source: Company, JM Financial

Exhibit 14. Multiple streams of stable, recurring operating revenue

	FY13	FY14	FY15	FY16	FY17	1HFY18
Annual Issuer Charges	43%	43%	34%	39%	35%	31%
Transaction charges	24%	22%	27%	21%	21%	22%
IPO/Corporate Action Charges	5%	6%	6%	9%	11%	15%
Online data charges	13%	10%	14%	13%	13%	15%
Others	15%	18%	20%	19%	19%	18%

Source: Company, JM Financial

CDSL has a diversified revenue sources with more than 50% from stable and recurring sources

Exhibit 15. Key statistics

	31 Mar'15	31 Mar'16	31 Mar'17	30 Apr'17
Live companies	9,399	10,021	9,887	9,934
Depository Participants	574	583	588	589
Service centres	11,877	16,764	17,489	17,481
BO Accounts (Excl. closed accounts)	9,610,002	10,790,738	12,267,432	12,427,121

Source: Company, JM Financial

C) Stable revenue base led by repeat business in multiple offerings

- **Revenue laced with stability, consistency and diversification:** CDSL has well-diversified revenue mix with no single service contributing more than 40% to revenue. The company earns stable revenue of c.35% from the fixed annual charges collected from issuers. Its operating revenue witnessed a 12.6% CAGR over FY13-17 to INR 1.5bn. We estimate its net revenue to increase 20.5% CAGR over FY17-20E, driven by continued contribution from the stable annual issuer charges and growth across transactions fees and other diversified offerings to several client bases.
 - **Annual issuer charges:** CDSL charges an annual issuer fee to the active companies at the rate of INR 11 per folio in the depository, subject to minimum slab-based fees depending on the nominal value of admitted securities. These charges are set and periodically revised by SEBI. Annual issuer charges contributed c.35% to CSDL's FY17 revenue and are expected to remain stable, driven by certainty of earning custody charges from existing issuers and an increasing number of companies willing to enter the primary market. The number of companies available in demat increased 6.1% CAGR over FY13-17 to 10,200. We expect revenue from annual issuer charges to record a 10% CAGR over FY17-20E to INR 688mn.
 - **Transaction charges:** CDSL charges the DPs slab-wise fees (INR 4.25-5.5 per debit transactions) based on the monthly transaction bill. The transaction fee depends on the volumes in the secondary market and increasing number of BOs. CDSL has gained the highest market share in incremental demat accounts over the past four years and currently has 12.3 million demat accounts. We expect revenue from transaction charges to increase 20% CAGR over FY17-20E to INR 540mn.
 - **IPO/corporate action charges:** Revenue from IPO/corporate action charges witnessed the highest growth (35.4% CAGR over FY13-17) driven by increased activity in the primary issue market as well as a rise in corporate activity. During an IPO, CDSL charges INR 2 per folio for verification of the subscriptions and INR 10 per folio on allotment to the issuing company. In order to record any corporate action (bonus, split, etc), CDSL charges INR 10 per folio to the company. We expect net revenue from this segment to increase 50% CAGR over FY17-20E to INR 560mn, driven by increased issues/subscriptions in the primary market and a rise in corporate activity.
 - **CDSL Ventures:** CDSL Ventures is CDSL's wholly-owned subsidiary and has recorded an 11.9% CAGR over FY13-17 to INR 242mn. CDSL Ventures provides KYC services for investors in the capital markets, including the mutual fund industry. As on 30 Apr'17, the company held over 15 million capital market investor records, representing a c.67% market share. The revenue from such services is more one-time in nature and the company charges INR 20-35 per enquiry. However, with increasing investor interest in mutual funds and CSDL's dominant market share, we expect revenue from CDSL Ventures to increase 28.7% CAGR over FY17-20E, to INR 515mn.
 - **Other services:** CDSL has other established diversified sources of revenue such as e-voting, account maintenance, settlement charges, GST Suvidha, etc. CDSL has also established a subsidiary to provide warehouse repository services. The company's insurance repository arm has already opened 325,000 e-insurance accounts in which it held over 66,000 insurance policies in an electronic form. CDSL also started a National Academic Depository service in Jul'17 and has tied up with c.67 universities. The ramp-up of these services will provide additional revenue growth drivers over the long term.

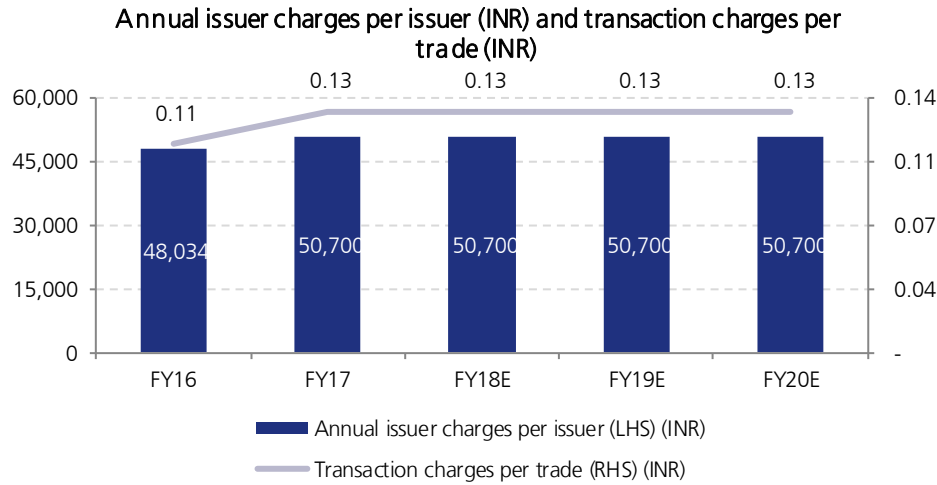
Exhibit 16. Segmental net revenue contribution (%)

	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Annual Issuer Charges	43%	43%	34%	39%	35%	33%	30%	27%
Transaction charges	24%	22%	27%	21%	21%	21%	21%	21%
IPO/Corporate Action Charges	5%	6%	6%	9%	11%	15%	19%	22%
CDSL Ventures Ltd	17%	15%	18%	17%	17%	18%	19%	20%
Others	11%	13%	15%	14%	15%	13%	11%	10%

Source: Company, JM Financial

Diversified revenue with 35% contribution from stable recurring annual issuer charges

Exhibit 17. Trends in annual issuer charges and transaction charges

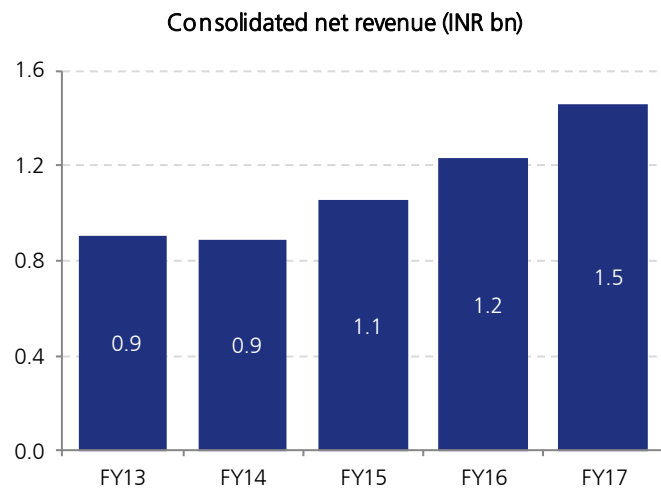


Source: Company, JM Financial

SEBI has increased annual issuer charges per folio in 2009 (to INR 8 per folio) and 2015 (to INR 11 per folio)

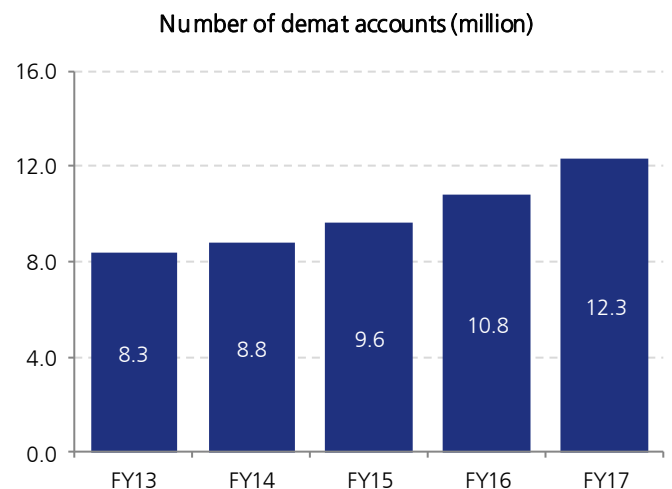
- CDSL gaining market share in demat accounts:** CDSL recorded revenue CAGR of c.12.6% over FY13-17, implying CDSL’s market share of 37% in revenue terms in FY17. The number of demat accounts witnessed a CAGR of 10.2% over FY13-FY17 for CDSL. Consequently, CDSL’s market share (in terms of demat accounts) increased from 40% in FY13 to 44% in FY17. CDSL has gained market share (in terms of incremental demat accounts), going from 46% in FY12 to 60% in FY17.

Exhibit 18. CDSL’s market share (by revenue) at 37% in FY17



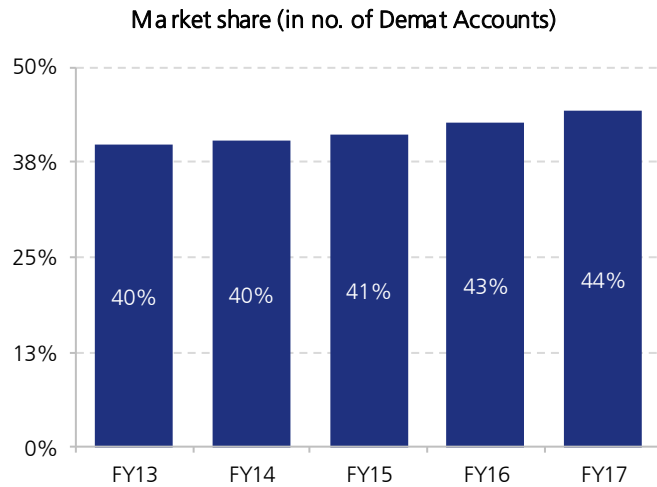
Source: Company, JM Financial; Note: Excludes other income

Exhibit 19. CDSL’s demat accounts CAGR at 10% over FY13-17



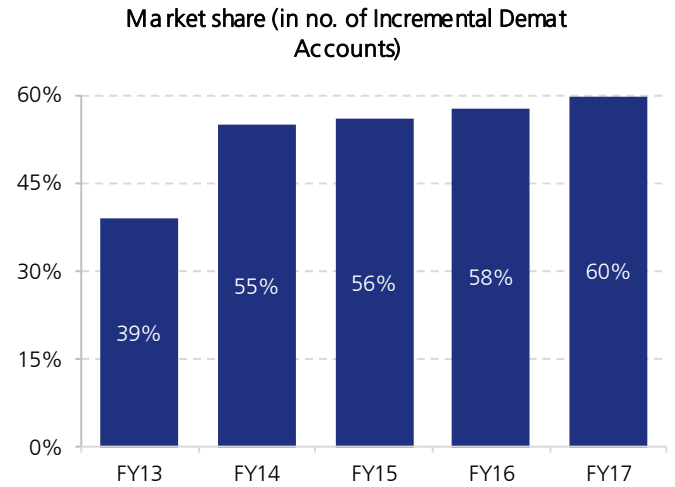
Source: Company, JM Financial

Exhibit 20. CDSL's market share in terms of demat accounts rising



Source: Company, JM Financial

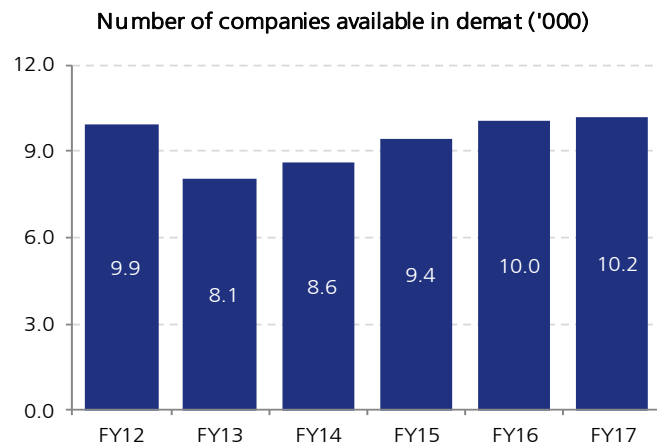
Exhibit 21. CDSL adding higher demats over the past 4 yrs



Source: Company, JM Financial

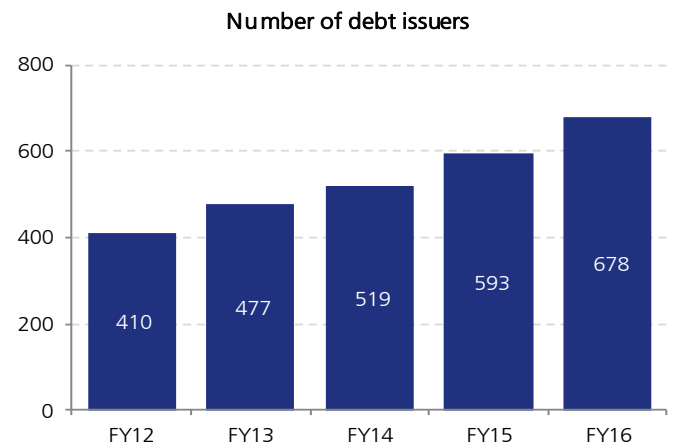
- CDSL benefits from a diversified revenue mix:** CDSL has a diversified revenue mix as only 56% of its total operating income comes from annual issuer and transaction fees. CDSL earns the other 43% of revenue from diversified services such as IPO/corporate action, online document storage, KYC and other such value-added services. This revenue mix is expected to become more favourable as insurance/commodity repository, academic depository and KYC services ramp up.
- CDSL offers higher benefits to DPs:** As of Mar'17, CDSL had 588 DPs spread across 4,628 locations. CDSL provides various benefits to DPs: **a)** comparatively relaxed eligibility norms - minimum net worth requirement of INR 20mn; **b)** lower deposit requirement of INR 0.5mn; **c)** lower set-up costs –CDSL has a centralised server enabling DPs to start only by linking their workstation to the server, thus saving costs for the DP; and **d)** a slab-based transaction fee structure, no custodian fees to DPs and lower settlement fees. However, the number of companies available in demat and number of debt issuers is still lower for CDSL.

Exhibit 22. 10,000+ companies available in demat for CDSL

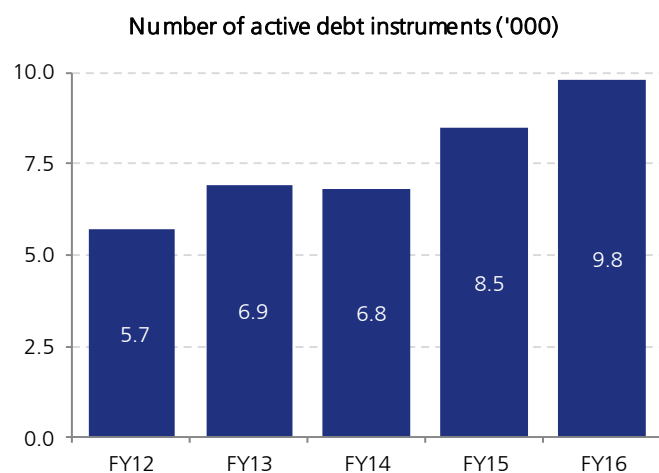


Source: Company, JM Financial

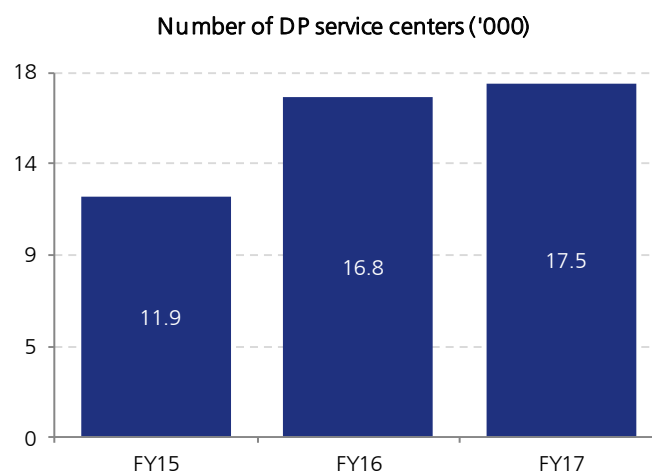
Exhibit 23. Number of debt issuers increasing for CDSL



Source: Company, JM Financial

Exhibit 24. No of debt instruments witnessed a 15% CAGR for CDSL

Source: Company, JM Financial

Exhibit 25. CDSL operates across 4,628 locations

Source: Company, JM Financial

- **Lower CDSL fee structure beneficial to end users:** Securities and Exchange Board of India (SEBI) periodically sets and revises the annual issuer. Transaction charges are set by the depositories, but the SEBI has a right to govern and regulate them. CDSL has a slab-based transaction fees structure based on monthly transaction bills. The fees range from INR 4.25 to 5.5 per debit transaction. Such pricing by CDSL encourages more transactions as charges per transaction decrease with an increase in value of transaction numbers. Moreover, no transaction fees are charged by CDSL if there are no transactions in a BO account.

Exhibit 26. Annual issuer fee charged to the issuer set by SEBI

Annual issuer fees (Per Folio) subject to minimum annual charges as mentioned below	INR 11 per folio
Slab structure based on nominal value of security :	
Up to INR 50mn	INR 9,000 annually
INR 50- 100mn	INR 22,500 annually
INR 100-200mn	INR 45,000 annually
More than 200mn	INR 75,000 annually

Source: Company, JM Financial

Exhibit 27. Transaction fees charged by CDSL (INR)

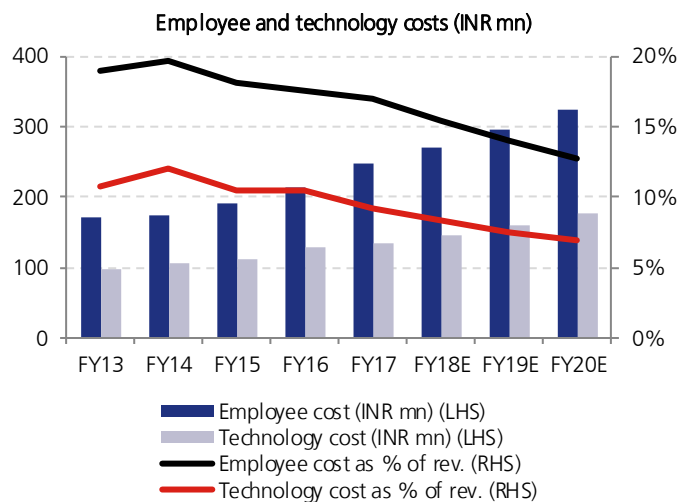
	CDSL
Transaction fees (INR per debit instruction)	4.25 - 5.5
Slab structure based on monthly transaction bill amount	
Up to INR 0.1mn	5.5
INR 0.1 - 0.4mn	5
INR 0.4- 1.5mn	4.5
More than INR 1.5mn	4.25

Source: Company, JM Financial

D) Robust margins driven by fixed operating costs and high economies of scale

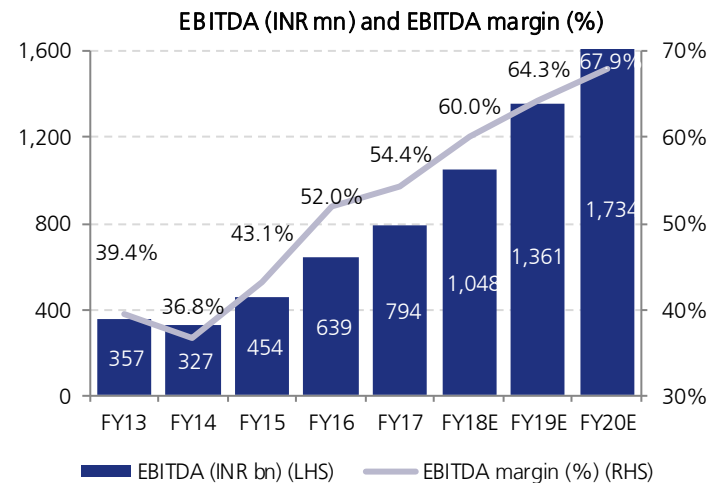
- CDSL operates in a fixed-cost model:** CDSL operates in a largely fixed operating cost environment, wherein employee expenses and software development/maintenance costs constitute c.57% of its total costs. These are expected to record linear mid-single-digit growth. Other costs – including contribution to the Investor Protection Fund (IPF) – reduced from c.50% in FY15 to 43% in F17 as, in FY16, SEBI revised the percentage of contribution to IPF from 25% of profit before tax (excluding other income) to 5% with retrospective effect.
- Robust technology infrastructure and IT systems:** CDSL’s depository system is based on centralised architecture providing real-time updated information to users; this can be accessed over the Internet. The Information Security Management System protects information throughout its life span with multiple back-up levels. The company’s online application offers various enhanced investor experience features, including online statement generation, real-time information on executed transactions and e-locker facilities. Technology costs constitutes c.20-22% of the total costs.
- Margins to expand with high economies of scale:** CDSL’s costs recorded a 3.9% CAGR over FY13-17, while its revenue increased 12.6% CAGR over the same period, resulting in its EBITDA margin increasing from 39.4% in FY13 to 54.4% in FY17. We expect the margin to further increase by 13.5ppt to 67.9% by FY20 as its EBITDA will benefit from higher revenue growth leading to increased economies of scale. We expect CDSL’s EBITDA to increase from INR 794mn in FY17 to INR 1.7bn in FY20.

Exhibit 28. Employee and technology constitutes c.25% of revenue



Source: Company, JM Financial

Exhibit 29. EBITDA margin to expand to 67.9% by FY20E

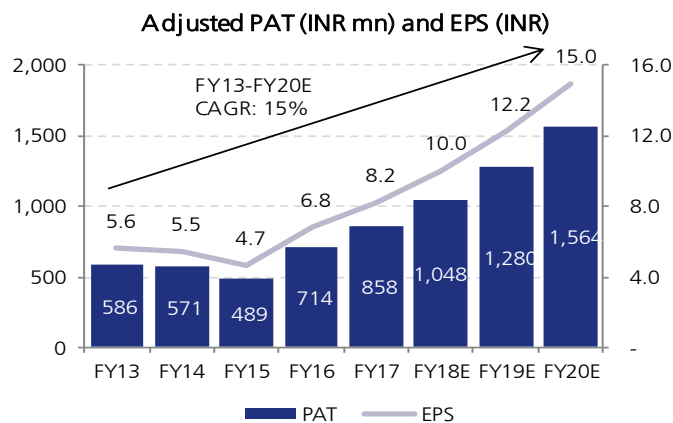


Source: Company, JM Financial

E) Steady cash flow generation; robust balance sheet

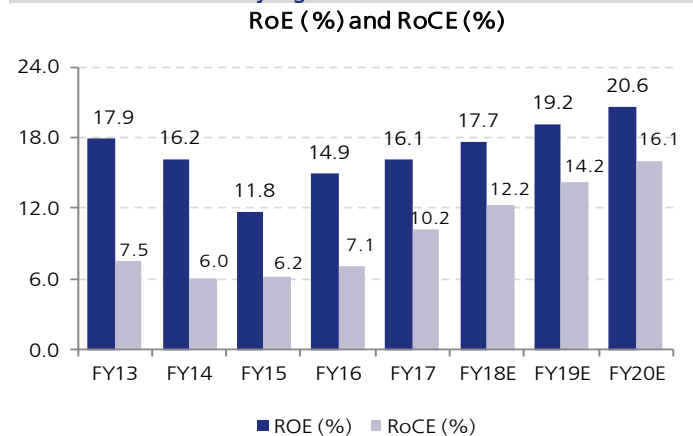
- Profitability supported by high margin and investment income:** CDSL's adjusted PAT increased from INR 586mn in FY13 to INR 858mn in FY17, driven by increase in EBITDA margin from 39.4% in FY13 to 54.4% in FY17. The company's depreciation is low as it has low fixed assets, mainly comprising equipment for IT infrastructure. The company purchased office premises amounting to INR630mn in 1HFY18, the depreciation of which is expected to remain minimal. The company has zero interest costs as the company does not hold any debt. CDSL generates c.50% of adjusted PAT from other income, mainly consisting of interest income on investment and gains from the sale of investments. We expect PAT to increase at 22.2% CAGR over FY17-FY20 to INR 1.6bn, driven by improvement in margins and sustained investment income.
- RoCE low due to high accumulated profits:** The company has high accumulated profits driven by historical dividend payout of c.30-45% and low capex. As per regulatory requirement, the company also maintains a networth of c.INR 2.2bn. This has led to lower RoCE. However, RoE benefits from high other income. We expect RoE and RoCE to improve to 20.6% and 16.1% in FY20E, respectively. Cash adjusted RoCE is estimated at 138%/168% for FY19E/FY20E, respectively.
- Strong CFO and minimal capex to support FCF; stable dividend policy:** High cash flow from operations and limited capex is expected to keep CDSL's free cash flow positive around c.INR 1.5bn going forward, resulting in an FCF yield of 3.3%/4.1% for FY19E/FY20E, respectively. The company has a stable dividend policy and endeavours to achieve the higher of the following two: **a)** a 60% pay-out or **b)** a 30% rate of dividend. Its dividend yield is low at c.0.8%.

Exhibit 30. PAT expected to increase 22.2% CAGR over FY17-20E



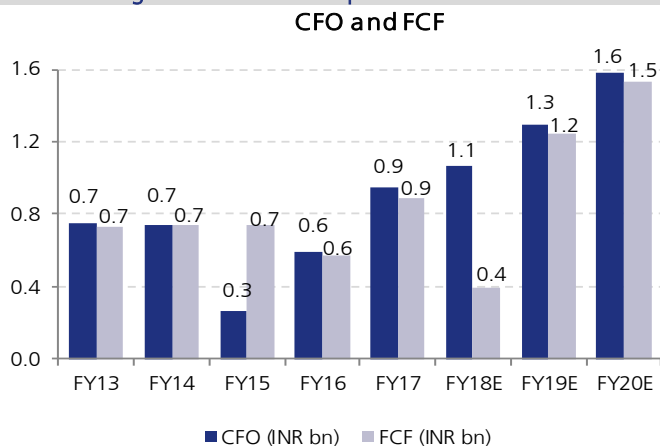
Source: Company, JM Financial

Exhibit 31. RoE driven by higher other income



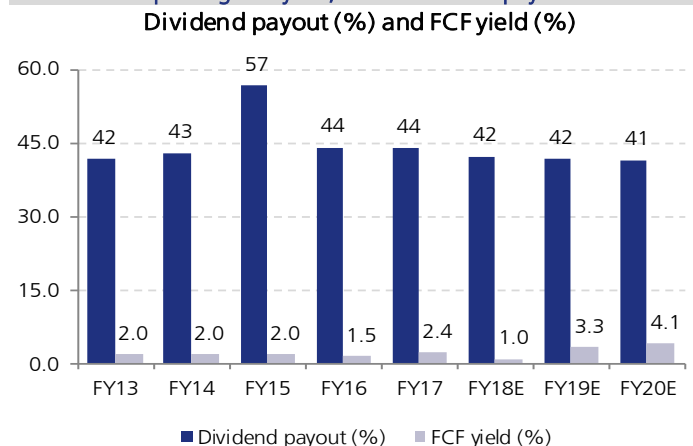
Source: Company, JM Financial

Exhibit 32. High CFO and lower capex to drive FCF



Source: Company, JM Financial, JM Financial; Note: Low FCF in FY18E driven by purchase of property worth INR 630mn

Exhibit 33. Improving FCF yield; stable dividend payout



Source: Company, JM Financial, JM Financial

F) Initiate with BUY; Valuation

- **Diversification into high growth services in a fixed-cost model to drive earnings; Initiate with BUY:** CDSL's annuity based revenue stream, new growth avenues of Insurance & Academics, fixed operating costs, robust cash flow generation coupled with a strong balance sheet and stable dividend policy is likely to drive earnings growth leading to a re-rating of the scrip. We estimate a potential EBITDA increase from INR 794mn in FY17 to INR 1.7bn in FY20E and estimate an EPS CAGR of c.22.2% over FY17-20E valuing the stock at 30x FY20 to arrive at a fair value of INR 450/share, implying an upside of 25%+. Initiate with BUY.

Exhibit 34. Target price; Initiate with BUY

	FY20E
EPS (INR)	15.0
P/E multiple	30
Fair value (INR/share)	450

Source: JM Financial

Exhibit 35. DCF based fair value for CDSL to support valuations (INR mn)

	FY19E	FY20E	FY21E	FY22E	FY23E	...FY28E
Revenues	2,117	2,554	2,974	3,441	3,991	7,055
Growth (%)	21%	21%	16%	16%	16%	12%
EBITDA	1,361	1,735	2,061	2,449	2,912	5,439
Less: Dep. / amor.	53	56	59	62	65	81
EBIT	1,308	1,678	1,999	2,382	2,841	5,347
Less: Tax	332	429	511	609	726	1,366
NOPAT	976	1,250	1,488	1,774	2,115	3,981
Add: Dep. / amor.	53	56	59	62	65	81
Less: Capex	50	50	50	50	50	50
Change in working capital	(37)	(43)	(43)	(43)	(43)	(43)
Free cash flow	942	1,213	1,454	1,743	2,088	3,969
Discount Factor	1.00	0.90	0.81	0.73	0.66	0.39
Discounted cash flow	942	1,093	1,183	1,278	1,380	1,564

Valuation	(INR mn)
PV of FCFE	13,367
PV of Terminal value	27,841
Consolidated Enterprise Value	41,208
Less: Net debt	-6,155
Equity Value	47,363
Number of shares (mn)	105
Fair value per share (INR/share)	453

WACC (%)	10.9%
Terminal growth rate (%)	5.0%

Source: JM Financial

Exhibit 36. Revenue drivers	(INR mn)					
	FY19E	FY20E	FY21E	FY22E	FY23E	...FY28E
Annual Issuer Charges	626	688	757	833	916	1,285
Growth(%)	10%	10%	10%	10%	10%	7%
Transaction Charges	450	540	648	778	933	1,877
Growth(%)	20%	20%	20%	20%	20%	15%
IPO/Corporate Action Charges	392	560	700	840	1,008	2,028
Growth(%)	54%	43%	25%	20%	20%	15%
On Line Data Charges	354	460	552	663	795	1,463
Growth(%)	35%	30%	20%	20%	20%	10%
Others	296	306	316	328	339	402
Growth(%)	3%	3%	3%	3%	3%	3%
Total Revenue	2,117	2,554	2,974	3,441	3,991	7,055

Source: JM Financial

Exhibit 37. Cost drivers	(INR mn)					
	FY19E	FY20E	FY21E	FY22E	FY23E	...FY28E
Employee Cost	301	331	364	401	441	710
Growth (%)	10%	10%	10%	10%	10%	10%
IT Cost	141	148	156	164	172	219
Growth (%)	5%	5%	5%	5%	5%	5%
Other costs	263	274	288	303	318	405
Growth (%)	4%	4%	5%	5%	5%	5%
Contribution to IPF	51	65	105	126	150	282
Total Operating Costs	756	819	913	992	1,080	1,616

Source: JM Financial

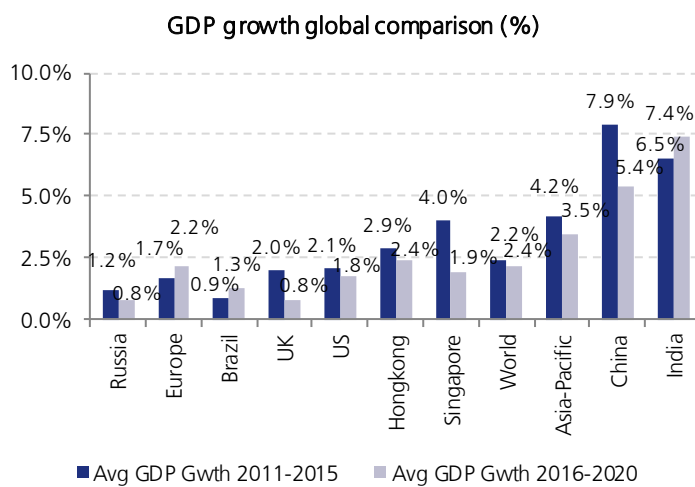
Exhibit 38. Comparative valuation	Companies	Mcap. USD bn	PE (x)		P/B		ROE		ROCE	
			FY18E	FY19E	FY18E	FY19E	FY18E	FY19E	FY18E	FY19E
			Indian exchanges							
BSE Ltd	0.8	16	20	1.7	1.7	8.1	8.3	6.4	7.1	
MCX	0.8	36	23	3.2	3.3	8.9	14.0	3.0	10.4	
Average		26	22	2.5	2.5					
Foreign exchanges										
CME Group Inc	50.9	31	26	2.4	2.4	7.7	9.2	7.1	11.2	
Intercontinental Exchange	42.6	25	21	2.6	2.5	10.7	11.6	7.1	11.2	
Hong Kong Exchange	41.3	44	38	9.5	9.2	21.3	23.7	16.8	25.2	
Deutsche Boerse AG	22.8	22	19	4.0	3.6	18.1	18.3	20.3	18.7	
London Stock Exchange Group	17.6	26	22	4.1	3.7	15.9	16.9	5.0	20.7	
Japan Exchange Group Inc	9.8	24	24	4.1	3.9	16.5	16.3	15.9	18.9	
ASX LTD	8.5	24	23	2.8	2.7	11.6	12.0	5.5	4.9	
Singapore Exchange Ltd	6.1	22	20	7.8	7.4	35.7	36.3	35.5	42.7	
TMX Group Ltd	3.2	15	14	1.3	1.2	8.5	9.1	5.7	9.4	
Bolsas Y Mercados Espanoles	2.7	15	14	5.4	5.3	36.9	36.5	0.6	0.9	
Average		25	22	4.4	4.2					

Source: Bloomberg, JM Financial; Note: Last updated on 08/01/2018

G) Depository business riding the growth in capital market

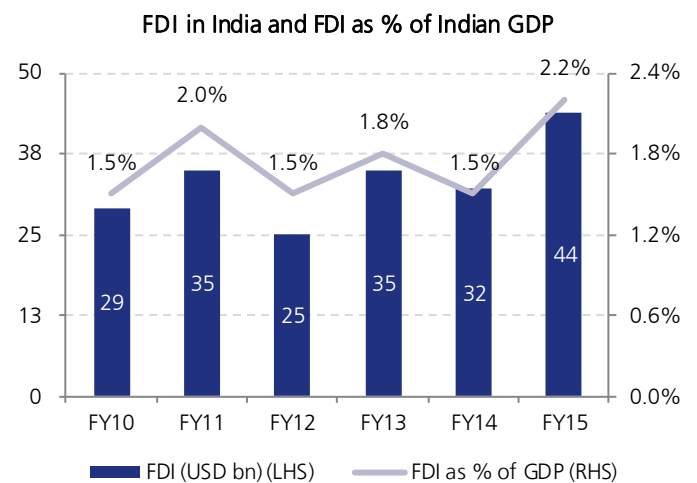
- Overview of the Indian macro economy:** The Indian economy is projected to grow fastest among global peers with an estimated average GDP growth of around 7.4% over 2016-2020. India is on a trajectory to becoming a USD 7trn+ economy, which will make it the world's 3rd largest economy by 2030. FDI into India has been steadily increasing but still comprised only around 2.2% of the GDP in FY15. Driven by strong growth in the economy, along with a strong culture of saving, both household income and household savings have seen a substantial increase in the past decade. To continue this strong pace of growth, there have been numerous policies and initiatives undertaken by the current government such as the introduction of the Goods & Services Tax, the Start-up India movement, Make in India and Digital India. These efforts are likely to serve as catalysts for growth in the Indian economy.

Exhibit 39. India is the fastest growing economy in the world



Source: Economist Intelligence Unit, JM Financial

Exhibit 40. FDI as a % of GDP is still low in India

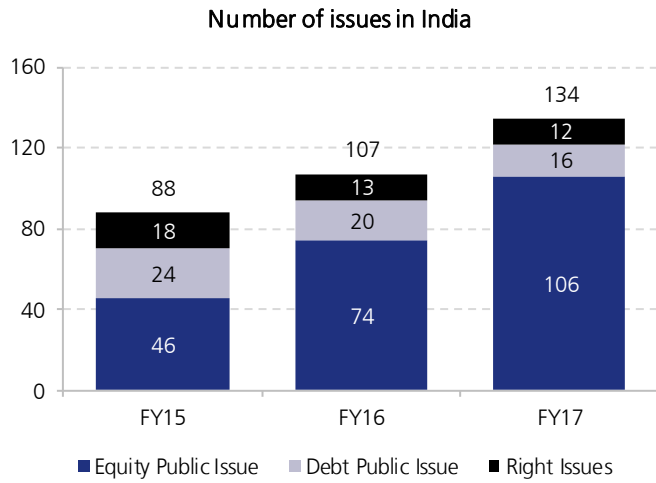


Source: The World Bank Group, JM Financial

- Indian capital market poised for high growth:** There is significant room available for growth in capital market transactions in India as India covers the gap with world averages in **a)** market capitalisation as a % of GDP (72% for India vs. the global average of 97%), **b)** turnover velocity (47% for India vs. 100%+ for developed countries), **c)** free float as a % of market capitalisation (47% for India vs. 80%+ for LSE/NYSE). AUM growth for the mutual fund industry is likely to be supported by the healthy outlook for the capital market and increasing preference towards mutual funds as an asset class among investors.
- Depository business – a key beneficiary of capital market growth:** The depository business is a direct beneficiary of the increase in transactions in the primary as well as secondary capital markets and money market. Resource mobilisation through primary market sources has seen considerable growth in the past 3 years – increasing to INR 621bn in FY17 from INR 192bn in FY15 – primarily due to an increase in the number and ticket size of equity IPOs. The share of equity public issues in total resources mobilised increased from 15.8% in FY15 to 46.9% in FY17. Transactions in the secondary capital market have also increased significantly, with trading volumes at stock exchanges increasing c.3x over the past 10 years. The AUMs of the mutual funds industry increased INR 11.6tn over the past five years to INR 17.5tn in FY17. Consequently, the total number of BO accounts increased from 21mn in FY12 to 28mn in FY17.

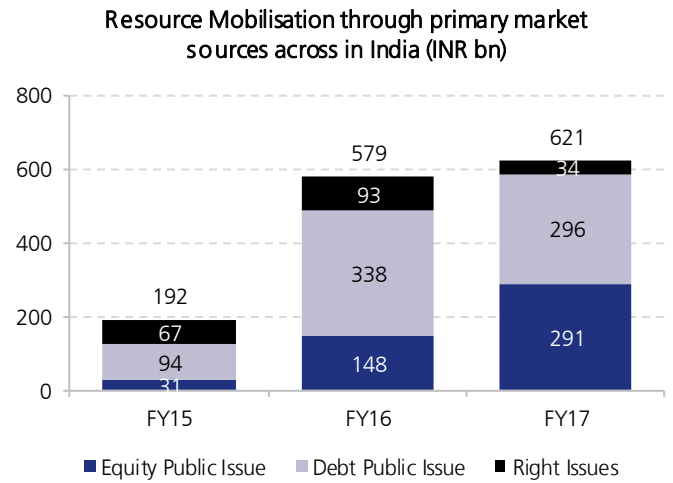
- **Strong entry barriers for new entrants:** India's depository market was worth INR 2.4bn as at end-FY16 and has increased at 12% CAGR over the past three years. The presence of a multi-depository system in India has resulted in a competitive scenario and helped reduce transaction charges for investors. With strong parental lineages, i.e. CDSL with BSE, the depository has a clear advantage over any new entrants, creating strong industry entry barriers.

Exhibit 41. High growth witnessed in the issue of equity instruments



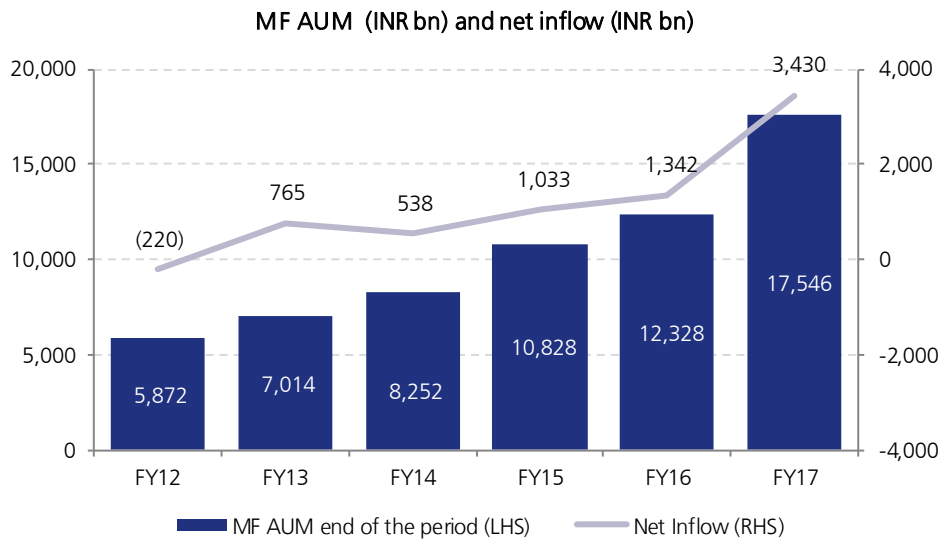
Source: Company, JM Financial

Exhibit 42. Primary market resource mobilisation driven by equities



Source: Company, JM Financial

Exhibit 43. Trend in resource mobilisation by mutual funds



Source: Company, JM Financial

H) Key risks

- **Low pricing power:** The company operates in a competitive market and has minimal pricing power. Moreover, there is fierce competition to gain market share of incremental demat accounts and issuers. Any loss in market share or reduction in fees could adversely impact revenue and profitability.
- **High dependence of transaction-based business on trading volumes:** Transaction charges represented c.21% of CDSL's FY17 net revenues, which are dependent on trading volumes in the capital market. Any decline in trading volumes and market liquidity would adversely impact the company's business and profitability.
- **Regulatory oversight:** The depository business is highly regulated by SEBI and thus the depository has to comply with all directives to avoid penalties. Regulations such as contributing 5% of profit before tax to the IPF adversely impacted CDSL's profitability. SEBI regulates the pricing of annual issuer charges and oversees the pricing of other services. All product and segment offerings are ultimately determined by SEBI and the company is has limited flexibility to innovate or differentiate vis-à-vis other depositories.
- **Appointment of CERSAI as the central KYC registration agency might adversely impact CVL's KYC business:** The Government of India has authorised the Central Registry of Securitization Asset Reconstruction and Security Interest of India (CERSAI) to perform the functions of a central KYC records registry. As a result, CDSL may lose a substantial part of its KYC business that operates through its subsidiary CVL, which holds over 15 million capital market investor records (67% market share) and contributed to c.16.6% of net revenues in FY17.
- **Decline in interest rate may adversely impact other income:** CDSL is a debt free company and has high investment and cash generated from accumulated profits. Approximately 50% of profits are generated from these investment incomes. Any change in the interest rate may adversely impact other income.
- **Emergence of technologies such as Blockchain:** Many fin-tech companies and global exchanges are investing in the Blockchain technology, which can potentially disrupt a few key businesses of depositories such as e-voting and KYC.
- **IT infrastructure vulnerable to security risks and cyber-attacks:** CDSL's electronic platforms involve the storage and transmission of a client's proprietary information. A failure of the platform, including a security breach or cyber-attack, could result in the loss or misappropriation of client data, leading to loss of reputation and lawsuits.

I) Annexures

- **Strong 1H driven by high growth in transaction and IPO/corporate action charges:** In 1HFY18, CDSL reported 25.2% YoY increase in consolidated revenue to INR 878mn driven by **a) 28.2%** increase in transaction charges, **b) 65.8%** increase in IPO/corporate action charges, **c) 49.5%** increase in online data charges, while revenue from stable annual issuer charges increased 6% YoY. EBITDA margin increased 2.8ppt to 60.3% in 1HFY18 and the company reported an 31.4% increase in EBITDA to INR 529mn. PAT increased 23.4% YoY to INR520mn in 1HFY18. We estimate the PAT in 2HFY18 to increase 21.4% YoY.

Exhibit 44. Financial summary – 1HFY18 results

(INR mn)

	2QFY18	2QFY17	YoY %	1QFY18	QoQ %	1HFY18	1HFY17	YoY %
Net Sales	472	386	22.4	405	16.5	878	701	25.2
Annual issuer charges	136	129	6.0	134	2.1	270	255	6.0
Transaction charges	104	83	26.0	86	21.4	190	148	28.2
IPO/corporate action charges	84	50	68.0	46	84.5	130	78	65.8
Online data charges	68	48	41.0	62	10.0	130	87	49.5
Others	79	76	4.3	78	1.3	158	133	18.7
Total expenditure	173	149	15.4	176	-1.9	348	298	16.8
Employee Expenses	66	54	23.1	70	-6.1	137	108	26.5
Technology cost	24	23	7.5	23	5.1	48	43	10.2
Admin & other expenses	82	73	12.2	82	-0.4	164	147	11.7
EBITDA	300	237	26.8	230	30.7	529	403	31.4
EBITDA (%)	63.5	61.3		56.6		60.3	57.5	
Depreciation	14	9	49.7	10	33.6	24	17	41.8
EBIT	286	227	25.9	219	30.5	505	386	30.9
Other income	91	110		98		189	216	
PBT	377	337	11.7	317	18.8	694	602	15.3
Tax	108	92		62		170	175	
Eff. Tax rate (%)	28.7	27.3		19.6		24.6	29.0	
XO income / (expenses)	-	-		-		-	-	
PAT before MI/Assoc.	268	245		255		523	427	
Minority Interest	1	4		2		3	5	
PAT- Reported	267	242	10.6	253	5.5	520	422	23.4
PAT- Adjusted	267	242	10.6	253	5.5	520	422	23.4
Diluted EPS (Rs)	2.6	2.3	10.6	2.4	5.5	5.0	4.0	23.4

Source: Company, JM Financial

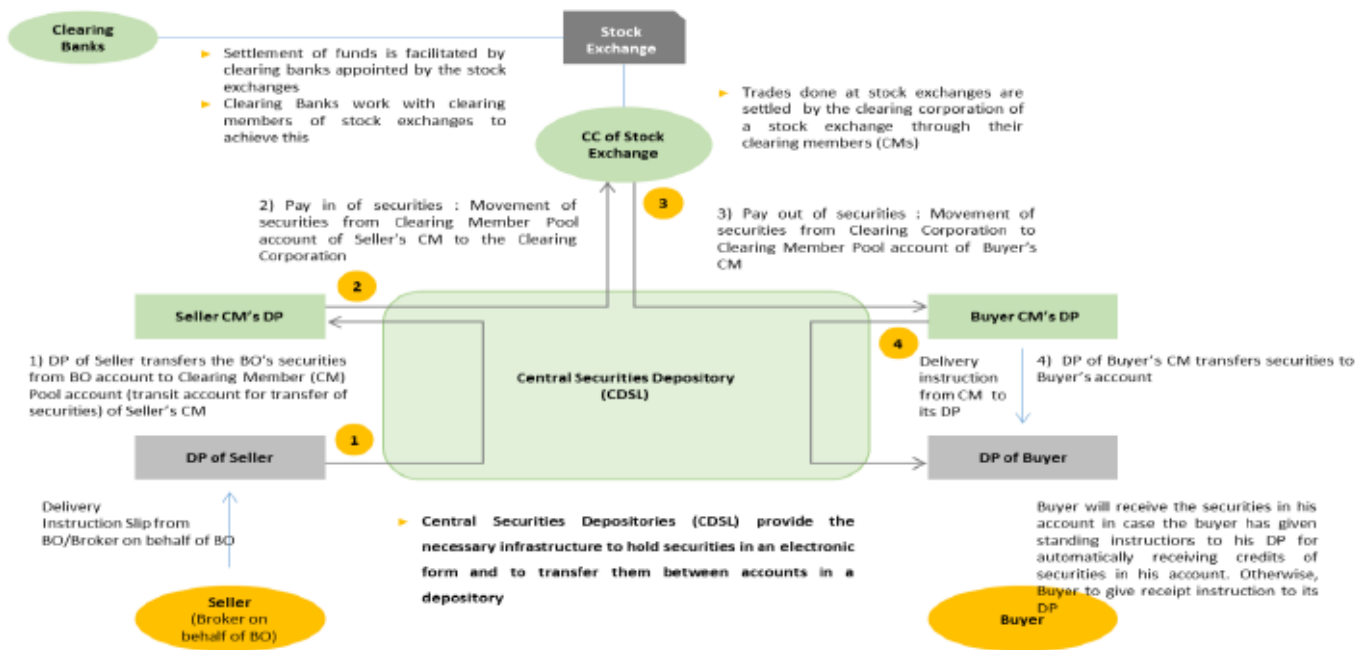
Exhibit 45. Group financial summary

(INR mn)

	Consolidated		Standalone		CVL	
	FY16	FY17	FY16	FY17	FY16	FY17
Revenue	1,229	1,460	1,017	1,216	210	242
EBITDA	639	794	500	617	148	177
Adjusted PAT	714	858	539	678	110	134

Source: Company, JM Financial

Exhibit 46. Overview of securities trade and settlement process



Source: Company, JM Financial

Exhibit 47. Key milestones

Year	Remarks
1999	Commencement of depository services
2002	Launch of internet facility 'EASI' (electronic access to securities information)
2004	Launch of internet facility 'EASIEST' (electronic access to securities information and execution of secured transaction)
2006	Incorporated CDSL Ventures with 'Customer profiling and Record Keeping' of the KYC of investors for mutual funds.
2007	Launched its SMS Alert facility, called "SMART" (SMS Alerts Related to Transactions)
2009	Launched e-voting platform
2010	Signed an agreement with Nepal Stock Exchange Limited ("NEPSE") to set-up a depository and clearing and settlement system in Nepal and to provide technical assistance and consultancy services to NEPSE
2012	Launched CDSL Ventures KRA, India's first and largest KYC Registration agency.
2015	Launched 'TRUST' (transaction using SMS texting)
2017	CDSL Commodity Repository Limited, a wholly-owned subsidiary, was incorporated
2017	CDSL listed on an Indian exchange

Source: Company, JM Financial

Exhibit 48. Management overview

Name	Designation	Comments
<u>Directors</u>		
Padala Subbi Reddy	Managing Director and Chief Executive Officer	Master's degree in Arts (Economics); member of various SEBI committees including the Secondary Market Advisory Committee and Corporate Bond and Securitization Advisory Committee.
Taruvai Subbayya Krishna Murthy	Non-Executive Chairman and a Public Interest Director	Master's degree in Fiscal Studies; former Chief Election Commissioner of India and Secretary of the MCA; advisor to the IMF; several years of experience in the securities market.
Aravamudan Krishna Kumar	Public Interest Director	Bachelor's degree in Arts (Economics); certified Associate of the Indian Institute of Bankers.
Bontha Prasada Rao	Public Interest Director	Post Graduate Diploma in Industrial Engineering.
Rajender Mohan Malla	Public Interest Director	Post Graduate Diploma in Management; certified Associate of the Indian Institute of Bankers.
Usha Narayanan	Public Interest Director	Master's degree in Arts (Economics) and Business Laws; certified Associate of the Indian Institute of Bankers; member of the Bar Council of India.
Nayan Chandrakant Mehta	Shareholder Director	Chartered Accountant; Cost and Works Accountant; over 24 years of experience in financial and securities markets; currently CFO (BSE)
Nehal Naleen Vora	Shareholder Director	Master's degree in Management Studies; more than 15 years of experience in areas of legal compliance; currently Chief Regulatory Officer (BSE)
Venkat Nageswar Chalasani	Shareholder Director	Post Graduate Diploma in Journalism; over 30 years of experience in banking; currently Deputy MD (SBI)
<u>Key Management Personnel</u>		
Cyrus Khambata	Executive Director	Master's degree in Commerce; certified Associate of the Indian Institute of Bankers; over 38 years of experience spread across banking and capital markets
Joydeep Dutta	Group Chief Technology Officer	Master's degree in Electrical Engineering and Computer Science; over 34 years of diverse work experience
Bharat Sheth	Chief Financial Officer	Chartered Accountant
Ramkumar K.,	Chief Risk Officer	Master's degree in Financial Management
Farokh Patel	Vice President -Audit and Inspection	Master's degree in Commerce
Nayana Ovalekar	Executive Vice President – Operations	Company Secretary
Sunil Alvares	Executive Vice President – Business Development and Admission Cell	Masters in Marketing Management; Post Graduate Diploma in Computer Science

Source: Company, JM Financial

Financial Tables (Consolidated)

Income Statement		(INR mn)				
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E	
Net Sales	1,229	1,460	1,747	2,117	2,554	
Sales Growth	16.5%	18.8%	19.7%	21.2%	20.6%	
Other Operating Income	0	0	0	0	0	
Total Revenue	1,229	1,460	1,747	2,117	2,554	
Cost of Goods Sold/Op. Exp	0	0	0	0	0	
Personnel Cost	0	0	0	0	0	
Other Expenses	589	666	700	756	819	
EBITDA	639	794	1,048	1,361	1,734	
EBITDA Margin	52.0%	54.4%	60.0%	64.3%	67.9%	
EBITDA Growth	40.7%	24.3%	31.9%	29.8%	27.5%	
Depn. & Amort.	42	37	49	53	56	
EBIT	597	757	999	1,308	1,678	
Other Income	385	408	412	418	433	
Finance Cost	0	0	0	0	0	
PBT before Excep. & Forex	982	1,166	1,411	1,725	2,112	
Excep. & Forex Inc./Loss(-)	0	0	0	0	0	
PBT	982	1,166	1,411	1,725	2,112	
Taxes	402	300	354	438	540	
Extraordinary Inc./Loss(-)	331	0	0	0	0	
Assoc. Profit/Min. Int.(-)	1	8	8	8	8	
Reported Net Profit	910	858	1,048	1,280	1,564	
Adjusted Net Profit	714	858	1,048	1,280	1,564	
Net Margin	58.2%	58.8%	60.0%	60.4%	61.3%	
Diluted Share Cap. (mn)	104.5	104.5	104.5	104.5	104.5	
Diluted EPS (INR)	6.8	8.2	10.0	12.2	15.0	
Diluted EPS Growth	46.0%	20.1%	22.2%	22.1%	22.2%	
Total Dividend + Tax	314	377	443	534	648	
Dividend Per Share (INR)	2.5	3.0	3.5	4.2	5.1	

Source: Company, JM Financial

Balance Sheet		(INR mn)				
	FY16A	FY17A	FY18E	FY19E	FY20E	
Shareholders' Fund	4,793	5,333	5,938	6,684	7,600	
Share Capital	1,045	1,045	1,045	1,045	1,045	
Reserves & Surplus	3,748	4,288	4,893	5,639	6,555	
Preference Share Capital	0	0	0	0	0	
Minority Interest	147	155	163	171	179	
Total Loans	0	0	0	0	0	
Def. Tax Liab. / Assets (-)	29	-15	-15	-15	-15	
Total - Equity & Liab.	4,969	5,473	6,086	6,839	7,764	
Net Fixed Assets	37	55	686	683	677	
Gross Fixed Assets	79	129	809	859	909	
Intangible Assets	0	0	0	0	0	
Less: Depn. & Amort.	42	77	126	179	235	
Capital WIP	0	3	3	3	3	
Investments	4,575	5,029	4,779	4,779	4,779	
Current Assets	918	966	1,198	1,955	2,885	
Inventories	0	0	0	0	0	
Sundry Debtors	130	133	160	194	235	
Cash & Bank Balances	403	483	686	1,406	2,294	
Loans & Advances	2	2	2	2	2	
Other Current Assets	384	348	350	352	354	
Current Liab. & Prov.	561	577	577	577	577	
Current Liabilities	73	90	90	90	90	
Provisions & Others	488	487	487	487	487	
Net Current Assets	358	389	621	1,378	2,308	
Total - Assets	4,969	5,473	6,086	6,839	7,764	

Source: Company, JM Financial

Cash Flow Statement		(INR mn)				
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E	
Profit before Tax	1,116	1,158	1,403	1,717	2,104	
Depn. & Amort.	42	37	49	53	56	
Net Interest Exp. / Inc. (-)	0	0	0	0	0	
Inc (-) / Dec in WCap.	-297	49	-29	-37	-43	
Others	0	0	0	0	0	
Taxes Paid	-402	-300	-354	-438	-540	
Operating Cash Flow	459	943	1,069	1,296	1,577	
Capex	-12	-53	-680	-50	-50	
Free Cash Flow	448	890	389	1,246	1,527	
Inc (-) / Dec in Investments	-434	-454	250	0	0	
Others	272	21	8	8	8	
Investing Cash Flow	-174	-486	-422	-42	-42	
Inc / Dec (-) in Capital	0	0	0	0	0	
Dividend + Tax thereon	-314	-377	-443	-534	-648	
Inc / Dec (-) in Loans	0	0	0	0	0	
Others	0	0	0	0	0	
Financing Cash Flow	-314	-377	-443	-534	-648	
Inc / Dec (-) in Cash	-29	80	203	720	888	
Opening Cash Balance	432	403	483	686	1,406	
Closing Cash Balance	403	483	686	1,406	2,294	

Source: Company, JM Financial

Dupont Analysis						
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E	
Net Margin	58.2%	58.8%	60.0%	60.4%	61.3%	
Asset Turnover (x)	0.3	0.3	0.3	0.3	0.3	
Leverage Factor (x)	1.0	1.0	1.0	1.0	1.0	
RoE	16.0%	16.9%	18.6%	20.3%	21.9%	

Key Ratios						
	FY16A	FY17A	FY18E	FY19E	FY20E	
BV/Share (INR)	45.9	51.0	56.8	64.0	72.7	
ROIC	NA	NA	244.4%	149.6%	181.7%	
ROE	14.9	16.1	17.7	19.2	20.6	
Net Debt/Equity (x)	-1.0	-1.0	-0.9	-0.9	-0.9	
P/E (x)	51.8	43.1	35.3	28.9	23.7	
P/B (x)	7.7	6.9	6.2	5.5	4.9	
EV/EBITDA (x)	50.6	40.1	30.4	22.9	17.5	
EV/Sales (x)	26.3	21.8	18.3	14.7	11.9	
Debtor days	39	33	33	33	34	
Inventory days	NA	NA	NA	NA	NA	
Creditor days	45	49	47	43	40	

Source: Company, JM Financial

APPENDIX I

JM Financial Institutional Securities Limited

Corporate Identity Number: U65192MH1995PLC092522

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

SEBI Registration Nos.: BSE - INZ010012532, NSE - INZ230012536 and MSEI - INZ260012539, Research Analyst – INH000000610

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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%

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