

<b>BSE SENSEX</b>	<b>S&amp;P CNX</b>
38,277	11,498
Bloomberg	BSE IN
Equity Shares (m)	55
M.Cap.(INRb)/(USDb)	33 / 0.5
52-Week Range (INR)	881 / 535
1, 6, 12 Rel. Per (%)	6/-6/-31
12M Avg Val (INR M)	78
Free float (%)	100.0

**Financials & Valuations (INR b)**

Y/E Mar	FY19	FY20E	FY21E
Net Sales	4.4	5.0	5.5
EBITDA	0.2	0.5	0.8
PAT	2.0	1.9	2.2
EPS (INR)	39.0	38.1	47.1
EPS Gr (%)	-10.2	-2.3	23.4
BV / Sh (INR)	558	542	541
P/E (x)	16.3	16.7	13.5
P / BV (x)	1.1	1.2	1.2
RoE (%)	7.0	7.0	8.7
RoCE (%)	9.5	10.1	11.4

**Estimate change**

**TP change**

**Rating change**

**CMP: INR637 TP: INR750 (+18%)**
**Buy**
**Buyback and dividend make for 18% yield**
**Operating profit in 4QFY19 misses estimate on higher Other Expense**

- **Admin expenses drag profitability:** FY19 operating revenue declined 9% YoY with EBITDA margin crashing to 5.3% (from 23% in FY18), given the operating leverage in the business. PAT before share of profits from CDSL, declined 24% to INR1.65b. 4QFY19 operating revenues (excluding treasury income), was down 19% YoY to INR1.13b (but better than our est. of INR1.05b). However, operating EBITDA came in at -INR5m (lower v/s our est. of INR62m), mainly on account of higher other expenses at INR500m (v/s our est. of INR346m). PAT was 16.6% lower YoY at INR519m, but a 25% beat to our estimate, on account of higher income from other sources (MF platform, income from investment and deposits).
- **Buyback and dividend at 18% of market cap:** BSE announced a buyback amounting to INR4.6b — ~25% of the company's unencumbered cash and ~14% of market cap. The buyback is via the tender route, at INR680/share, a ~7% premium to CMP. Also, total dividend for the year is INR30/share, implying post tax payout of ~97% and another 4% of market cap, taking the total yield to 18% at CMP. BSE's unencumbered cash should come down to ~INR13b from INR18b.
- **Valuation view:** Our "Buy" thesis on BSE is centered on the value play – a combination of dividend and buyback at low valuations; and option value from new segments, such as the MF platform, commodities and INX – over and above the SOTP value of its segment. Our SOTP methodology for BSE ascribes value to (1) core operations ex-cash income (INR125/share), (2) implied value from CDSL's market price @20% holding company discount (INR100/share), (3) owned unencumbered cash (INR300/share), and (4) float income from encumbered/margin money (INR225/share). Our target price of INR750 implies 18% upside. Maintain **Buy**.

## Cons. Quarterly perf.

(INR m)

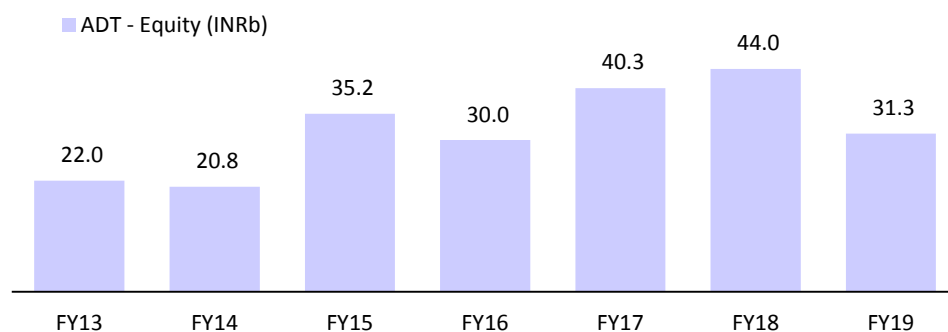
Y/E March	FY18				FY19				FY18	FY19E	Est. 4Q	Var. (%/bp)
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Rev. from operations	1,099	1,108	1,301	1,386	1,185	1,121	1,016	1,126	4,894	4,448	1,052	7.1
YoY Change (%)	22.7	20.0	49.7	25.0	7.8	1.2	-21.9	-18.8	28.9	-9.1	-24.13	537bp
Total Expenditure	896	820	947	1,107	992	1,028	1,110	1,132	3,770	4,262	989	14.4
EBITDA	203	288	354	279	193	93	-94	-6	1,124	186	62	-109.6
Margins (%)	18.5	26.0	27.2	20.1	16.3	8.3	-9.3	-0.5	23.0	4.2	5.9	-647bp
Depreciation	101	109	112	133	115	120	129	147	455	511	129	0.0
Interest	2	4	3	2	2	3	2	2	10	9	2	
Investment income	513	556	454	572	479	497	756	695	2,095	2,427	526	32.0
PBT before EO expense	614	731	694	716	555	468	530	540	2,754	2,093	457	18.2
Extra-Ord expense	0	5	7	14	28	-15	133	64	26	210	31	
PBT	614	726	686	702	527	483	397	476	2,728	1,883	427	11.6
Tax	118	126	162	149	70	101	18	44	555	233	85	-48.4
Rate (%)	19.2	17.4	23.6	21.2	13.3	20.9	4.6	9.2	20.3	12.4	20.0	-1076bp
MI & P/L of Asso. Cos.	2	68	60	69	58	77	70	87	199	292	74	18.2
Reported PAT	498	668	584	622	515	459	449	519	2,372	1,942	415	25.1
YoY Change (%)	43.8	30.0	34.6	26.6	3.5	-31.3	-23.2	-16.6	29.0	-13.1	-37.3	2074bp
Margins (%)	45.1	55.2	41.4	41.0	39.2	35.5	37.6	39.1	51.7	49.4	33.8	523bp

## Exhibit 1: Segment performance (INR m); Gaining traction in star MF platform

	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19
Transaction charges income - Equity	407	226	218	170	195
Transaction charges income - currency derivatives	15	19	20	18	18
Transaction charges income - interest rate futures	1	1	1	0	-
Listing fees	510	512	472	454	443
Book building and other services	110	48	72	40	91
SME Listing fees	15	9	7	11	NM
Star MF platform		52	71	77	83

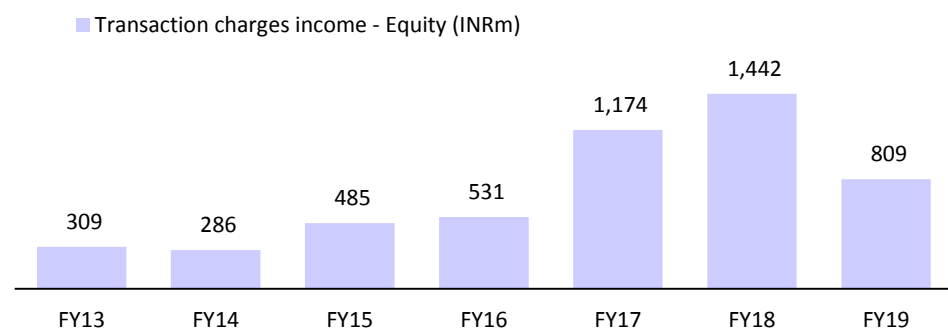
Source: MOFSL, Company

## Exhibit 2: Equity ADT negatively impacted by market conditions and loss of market share

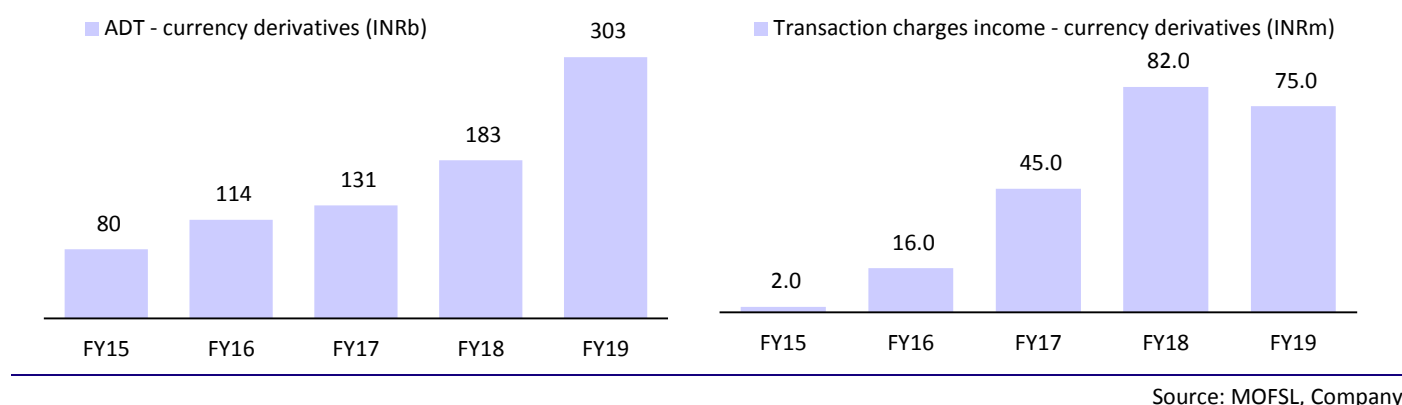


Source: MOFSL, Company

## Exhibit 3: Equity transaction charges on a decline; INR809m in FY19



Source: MOFSL, Company

**Exhibit 4: ADT increase and currency derivatives transaction income was down by 9% in FY19 due to change in pricing**

### Takeaways from Management Commentary

- MF segment:** The platform was set up in 2009. Intermediaries can process, purchase and submit redemption requests of units on the platform. Over the last five years, CAGR of transactions on the platform has been 117%. The MF started charging for this segment towards the end of last fiscal. It garnered INR291m in FY19; 36m orders were processed v/s 17m in the previous year. Value was up 36% to 161t from 118t. Orders in March were up 57% YoY. BSE's market share in the segment is 79%. Currently, the run-rate is 4.3m transactions per month, which BSE is targeting to increase to between 10-20m per month.
- INX:** ADT grew 615% YoY to USD766m in FY19. Equity derivatives constitute 73% of the volumes, while commodities derivatives constitute 27%. BSE's market share is 71% in the segment. The liquidity enhancement scheme will continue in the segment (INR125m cost in FY19), till its competitor also continues with it. Volumes are still not high enough for BSE to start monetization.
- Interoperability of clearing corporation:** SEBI had issued guidelines to take all necessary steps, not later than 1<sup>st</sup> Jun'19. Interoperability goes live from that date, although there has been resistance from the competitor. The introduction of interoperability will reduce the need for funds to trade on another exchange. Utilization of margins will be more efficient.
- Capital allocation:** Unencumbered cash is INR18b; buyback is 25% of that amount. BSE will continue to return capital and also the dividend payout will remain high. Investment requirements for the business are not high.
- Operating expenses:** FY19 saw operations of commodities' transactions (that run for longer hours) requiring investments in additional people. Average cost per employee increased by 10% YoY; in the future, 8-10% should be the inflation.

## Valuation and view

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- **Oldest exchange gunning for the newest offerings:** BSE is Asia's oldest exchange, and boasts of the largest number of listed securities in the world. However, in the Indian context, NSE is the clear leader in equities with a monopolistic market share in derivatives and 85%+ in cash. As a result, BSE, which set off to transform itself under new management tried its hand through pricing in old segments and actively staying ahead in the game in new areas. Little change has been affected in equities, but the exchange has encouraging early progress in new areas such as currency, IR derivatives, MF platform, SME platform, new bond raising market as well as GIFT city. These remain marginal contributors today but lend an optionality of scale in earnings in the future.
- **Operating leverage higher from new segments:** Given BSE's scale of revenues, the impact from success in any one segment would appear much more handsome than that for its rival NSE, which has a higher base to grow on. Additionally, BSE is invested in the same and any triggers in any segment will flow to the bottom line, driving accentuated boost to earnings.
- **Technology prowess is an encouraging backbone:** Deutsche's strategic stake in BSE has not only lent an edge in terms of the best-in-class technology (Eurex platform), but also at a significantly lower cost, having linked the charges to success in business. That keeps BSE's backbone ready to address any potential opportunity ahead of peers, if not alongside them.

**Valuation view:** : Our "buy" thesis on BSE centered around the value play (combination of dividend and buyback) at low valuations and option value from new segments such as MF platform, commodities and INX – over and above the SOTP value of its segment. Our SOTP methodology for BSE ascribes value to [1] core operations ex-cash income (INR125/share), [2] implied value from CDSL's market price @20% holding company discount (INR100/share), [3] owned unencumbered cash (INR300/share) and [4] float income from encumbered/margin money (INR225/share). Our target price of INR750 implies a 18% upside. Maintain **Buy**.

### Key triggers

- Pick-up in volume led by the introduction of new products like Options / Indices.
- Introduction of new participants like Banks / FIs.
- High volatility in key commodities like Bullion / Crude.

### Key risks

- Continued deterioration of cash volumes market share.
- Pace of regulatory reforms and investor acceptance of INX.
- Continued slow velocity in new segments.

## Financials and valuations

Income Statement								(INR M)
Y/E March	2014	2015	2016	2017	2018	2019	2020E	2021E
Revenue	3,115.5	4,021.8	4,686.2	5,255.0	4,894.0	4,448.0	4,963.9	5,519.0
Revenue ex-CDSL	2,244.5	2,975.8	3,459.2	3,797.0	4,894.0	4,448.0	4,963.9	5,519.0
Change (%)	-1.0	32.6	16.2	9.8	28.9	-9.1	11.6	11.2
Employee expenses	853.7	998.7	1,115.5	1,415.0	1,201.0	1,392.0	1,503.4	1,593.6
Technology expenses	642.1	704.2	806.4	1,056.0	1,111.0	1,134.0	1,224.7	1,273.7
Admin & Others	927.9	1,491.5	1,655.7	1,732.0	1,458.0	1,736.0	1,804.5	1,909.8
EBITDA	691.8	827.4	1,108.6	1,052.0	1,124.0	186.0	431.3	741.9
EBITDA %	22.2	20.6	23.7	20.0	23.0	4.2	8.7	13.4
Depreciation / Amortization	323.5	587.7	616.8	540.0	455.0	511.0	521.2	531.6
EBIT	368.3	239.7	491.8	512.0	669.0	-325.0	-89.9	210.3
EBIT %	11.8	6.0	10.5	9.7	13.7	-7.3	-1.8	3.8
Finance costs	3.8	6.6	6.7	10.0	10.0	9.0	9.0	9.0
Investment income	2,182.7	2,225.7	1,896.5	2,785.0	2,095.0	2,427.0	1,931.7	1,954.3
PBT	2,547.2	2,458.8	2,381.6	3,287.0	2,754.0	2,093.0	1,832.7	2,155.6
Tax	339.9	437.8	324.1	406.0	555.0	233.0	342.5	431.1
ETR %	13.3	17.8	13.6	12.4	20.2	11.1	18.7	20.0
PAT before MI and associate profits	2,207.3	2,021.0	2,057.5	2,881.0	2,199.0	1,860.0	1,490.2	1,724.5
Minority Interest	244.1	213.3	363.5	446.0	0.0	0.0	0.0	0.0
Share of Associates profit	4.1	2.8	2.7	11.0	173.0	82.0	335.8	386.2
PAT after MI and Associate profits	1,967.3	1,810.5	1,696.7	2,446.0	2,372.0	1,942.0	1,826.0	2,110.7
Change (%)	-9.7	-8.0	-6.3	44.2	-3.0	-18.1	-6.0	15.6
PAT margin %	63.1	45.0	36.2	46.5	48.5	43.7	36.8	38.2
Exceptional items	607.2	507.5	466.0	208.0	26.0	150.0	120.0	0.0
PAT after exceptional items	1,600.1	1,513.5	1,591.5	2,238.0	2,346.0	1,792.0	1,706.0	2,110.7

Balance Sheet								(INR M)
Y/E March	2014	2015	2016	2017	2018	2019	2020E	2021E
Total fixed assets	2,242	2,542	2,496	2,519	2,142	2,181	2,417	2,697
Non current investments	11,252	14,102	15,251	17,478	17,600	13,096	13,096	13,096
Other non current assets	867	940	1,327	1,128	1,537	1,830	1,954	1,884
Total non current assets	14,362	17,585	19,074	21,125	21,278	17,108	17,467	17,677
Cash & Current investments	25,306	23,184	21,474	29,278	27,715	27,137	27,300	27,612
Trade receivables	344	360	480	687	549	490	437	483
Other current assets	698	844	1,043	740	302	304	491	543
Total current assets	26,347	24,389	22,996	30,705	28,566	27,931	28,228	28,638
TOTAL ASSETS	40,709	41,974	42,070	51,830	49,844	45,039	45,695	46,315
Share Capital	104	107	107	108	107	104	104	104
R&S	23,604	24,502	24,385	26,516	31,237	29,253	24,696	24,589
Shareholders equity	23,708	24,609	24,493	26,624	31,344	29,357	24,800	24,693
Core SGF	56	1,113	1,761	2,045	2,910	3,945	3,945	3,945
Minority Interest	1,875	1,986	2,223	2,909	0	0	0	0
Deferred tax liabilities	96	27	2	0	142	0	42	46
LT borrowings	13	36	19	0	0	0	0	0
Other LT liabilities	601	648	719	88	95	114	114	114
Total non-current liabilities	710	710	739	88	236	114	156	160
Outstanding dues to creditors	470	581	697	563	629	419	419	419
Other current liabilities	13,891	12,975	12,158	19,601	14,725	11,205	16,376	17,098
Total current liabilities	14,360	13,556	12,854	20,164	15,354	11,623	16,795	17,517
TOTAL LIABILITIES	40,709	41,973	42,070	51,830	49,844	45,039	45,695	46,315

## Financials and valuations

### Ratios

Y/E March	2014	2015	2016	2017	2018	2019	2020E	2021E
<b>Basic (INR)</b>								
EPS	24.8	23.8	24.4	41.0	130.3	39.0	38.1	47.1
EPS (excl EOI)	24.7	23.8	24.4	41.0	43.5	39.0	38.1	47.1
Cash EPS	30.7	34.5	34.2	51.0	138.6	48.7	49.5	58.7
Book Value	434.3	450.8	448.7	494.9	574.2	558.3	542.2	540.8
DPS	7.7	10.0	8.0	28.0	30.0	40.0	50.0	40.0
Payout %	31.3	42.1	32.9	68.3	23.0	102.5	131.1	85.0

### Valuation (x)

P/E	25.7	26.8	26.1	15.5	4.9	16.3	16.7	13.5
Cash P/E	20.7	18.4	18.6	12.5	4.6	13.0	12.8	10.8
EV/EBITDA	30.0	9.5	6.3	-4.1	-4.4	-0.1	8.5	12.9
EV/Sales	2.7	1.1	1.0	-0.8	-0.7	0.0	-1.1	-0.9
Price/Book Value	1.5	1.4	1.4	1.3	1.1	1.1	1.2	1.2
Dividend Yield (%)	1.2	1.6	1.3	4.4	4.7	6.3	7.9	6.3

### Profitability Ratios (%)

RoE	5.7	5.3	5.4	8.3	7.6	7.0	7.0	8.7
RoCE	12.1	12.8	12.5	13.7	10.7	9.5	10.1	11.4

### Turnover Ratios

Debtors (Days)	47.1	36.4	41.2	48.5	44.9	50.0	40.0	40.0
Fixed Asset Turnover (x)	1.9	2.1	2.6	3.1	2.5	2.0	2.0	1.9

E: MOSL Estimates

### Cash Flow Statement

(INR M)

Y/E March	2014	2015	2016	2017	2018	2019	2020E	2021E
PBT	1,934	1,951	1,916	3,255	2,754	2,143	1,885	2,212
Depreciation	324	588	617	540	455	511	521	532
Contribution to SGF	0	258	174	208	26	150	120	0
Interest & Dividend income	-1,977	-2,107	-1,901	-2,380	-1,687	-2,120	-1,609	-1,618
Other adjustments	-107	18	261	10	10	9	9	9
Working capital changes	2,103	-1,756	-825	7,670	-4,064	-3,635	1,733	1,883
Taxes paid	-548	-480	-733	-406	-555	-233	-353	-442
<b>CF - Operations</b>	<b>1,728</b>	<b>-1,528</b>	<b>-491</b>	<b>8,896</b>	<b>-3,061</b>	<b>-3,175</b>	<b>2,306</b>	<b>2,576</b>
Capital expenditure	-446	-726	-623	-650	-700	-701	-800	-800
<b>FCF</b>	<b>1,283</b>	<b>-2,254</b>	<b>-1,115</b>	<b>8,246</b>	<b>-3,761</b>	<b>-3,876</b>	<b>1,506</b>	<b>1,776</b>
Other investment changes	-302	4,413	2,270	506	-1,303	2,856	1,609	1,618
<b>CF - Investments</b>	<b>-748</b>	<b>3,687</b>	<b>1,646</b>	<b>-144</b>	<b>-2,003</b>	<b>2,155</b>	<b>809</b>	<b>818</b>
Finance costs	-2	-7	-7	-10	-10	-9	-9	-9
Dividends including taxes	-607	-607	-1,244	-670	-2,839	-4,258	-5,677	-7,096
Others	-2,102	159	34	-19	-26	0	0	0
<b>CF - Financing activities</b>	<b>-2,711</b>	<b>-455</b>	<b>-1,217</b>	<b>-698</b>	<b>-2,875</b>	<b>-4,267</b>	<b>-5,686</b>	<b>-7,105</b>
<b>Net change in cash</b>	<b>-1,730</b>	<b>1,704</b>	<b>-62</b>	<b>8,053</b>	<b>-7,939</b>	<b>-5,287</b>	<b>-2,571</b>	<b>-3,712</b>
Cash at beginning	14,695	14,525	16,101	24,258	19,826	15,481	15,686	16,043
<b>Cash at end</b>	<b>12,964</b>	<b>16,229</b>	<b>16,039</b>	<b>32,311</b>	<b>11,887</b>	<b>10,194</b>	<b>13,115</b>	<b>12,331</b>

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

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