

## India's Sectoral Valuation Study: Historical Absolute Levels vs Normalized Levels

This report analyses how India's current absolute valuations stack up against the last 17 years of history. Straight forward valuation multiples can be deceiving and may entice you in or keep you out of the markets at wrong times. To take care of this issue I have recalculated current as well as historical valuations by assuming normalized (or sustainable) profitability across all years. This is done at sectoral level so that we might observe the extent of relative over/under valuation and make some intelligent choices for portfolio positioning going forward. Risk with normalization is that the timing for the profitability to revert to sustainable level is uncertain. The longer it takes to revert, the higher would be the risk to valuation in situations when absolute valuations are high.

**Total Universe:** The starting universe for this analysis comprises all the companies (872) in the BSE 500, BSE Midcap and BSE Small Cap indices. After excluding companies who do not have 17 years of listed history, we are left with 553 companies. This universe covers about 80% of the total listed current market capitalization. The chosen period FY02 – 18 covers years between two troughs in India's economic cycle (not stock market cycles) and I believe covers a wide range of business environments representative of average conditions.

**Mid/Small Cap Universe:** The valuation as well as other parameters are weighted averages and hence are significantly influenced by large companies. To remove this effect, in addition to presenting the outcomes for all the 553 companies, I am also presenting similar analysis for non-large cap companies. This is done by excluding not only the top 10% of the largest companies but also removing outliers such as Suzlon, Jet Airways, Piramal Enterprises, Tata Teleservices and Tata Steel who have had abnormally large one-off profits/losses skewing overall valuations.

Same analysis is done for the Total and Mid/Small Cap Universes and hence you would find two sets of tables. First the summary tables are presented for both followed by detailed tables.

Investors need to connect the dots by looking at the absolute valuations, current state of the economic cycle (not the stock market cycle), leverage levels, sustainable profitability and other factors. Though I have provided summary tables, it would be helpful to look at the detailed tables to have better perspective about historical levels/trends. I do provide my views on valuations through the quarterly memos, but for me macro valuation is just good to know. Crucial is company level valuation. Portfolio cash levels are driven by the availability of investible (combination of quality as well as price) businesses at any point in time.

### Detailed Tables (for Total Universe as well as Mid/Small Cap Universe) include:

- Valuation Tables (PE, EV/EBIDTA and PB)
- Common size P&Ls for PSU Banks, Pvt Banks and NBFCs
- Growth tables (Sales, EBIDTA, PAT and Equity)
- Profitability Tables (ROE, ROCE, EBIDTA % and PAT %)
- Expenses Tables (COGS, Non-COGS, Interest Expense)
- Leverage and Asset Turns tables (D/E, Interest Coverage, Interest/Sales %)
- Tables on Market Cap, Sales and PAT weightages by sector

## SUMMARY FOR TOTAL UNIVERSE

Parameter (ttm or FY18)	Current	Average	FY02 – 18 Range	Comment (please refer to detailed tables for year/sector wise numbers)
PEx (ttm*)	20.2	16.6	7.9 – 28.9	Current multiple is 21% above average but 28% below the historical high levels reached this year in Jan'18. Excludes Financial Sector (FS).
<b>Normalized PEx (ttm)</b>	<b>19.8</b>	<b>19.5</b>	<b>10.3 – 43.3</b>	<b>Since profitability is cyclical, valuations have to be viewed from a sustainable profitability perspective rather than using just current profitability. For normalizing, we have assumed that the sustainable ROE going forward is 13.6% vs current level of 13.3%. Using ROE of 13.6% based on FY09-18 average which is lower than overall average of 16.7%. We are being conservative believing that FY05-08 was an extraordinary period which is unlikely to recur in the foreseeable future. Lowest normalized PEx level in FY03 and highest in Jan'08 when absolute PEx as well as ROE were at highest levels. Hence post FY08 we experienced double whammy of multiple as well as ROE contraction.</b> Excludes FS.
PBx (ttm)	2.3	2.2	1.2 – 4.9	Current multiple is near average but way below 4.9 reached in Jan'08. PB is a much stable valuation metric vs PE and adjusts for cyclical in profitability.
EV/EBITDA (ttm)	10.2	9.0	4.9 – 16.9	This is near average. Even the margins have jumped higher to average. Excludes FS.
ROE %	13.3	16.7	9.3 – 23.1	ROE has been climbing higher over the last 2 years when it reached the lowest levels.
ROCE %	10.3	13.1	8.7 – 18.3	ROCE has been climbing higher over the last 3 years when it reached the lowest levels. Excludes FS.
PAT %	6.7	7.2	4.6 – 9.9	Excludes FS. This has improved significantly from the lows of 4.6% reached in FY15.
EBITDA %	17.0	16.6	13.5 – 19.1	Excludes FS. Average of 16.6% and high of 19.1% reached in FY08
COGS %	52.3	56.3	51.9 – 60.3	Excludes FS. This is near lowest levels. Indication that pricing power is returning as companies are able to retain profits vs passing on to the customer.
Interest/Sales %	3.1	2.6	1.6 – 3.7	Excludes FS. Lowest level in FY06 and highest in FY02.
EBIDTA/Interest	5.41	7.09	4.44 – 11.15	Excludes FS. Significant improvement since FY15.
D/Ex	0.84	0.80	0.58 – 1.01	Excludes FS. Have seen reasonable decline since highs reached in FY15. Lowest in FY05.
Asset Turns (Sales/CE)	1.04	1.22	0.98 – 1.47	Excludes FS. Have turned around since lows reached last year. Highest in FY05.
Capacity Utilization %	70-75	78	65 – 100	Broad approximation assuming peak utilization of 100% in FY05 when asset turns were highest. This is just a rough derivation using asset turns.
Sales Growth %	11.6	14.8	(2.1) – 29.6	Highest in FY08; lowest in FY16. Note the divergence in FY08-18 CAGR of 10.8% vs 21.4% of FY02-08.
EBDTA Growth %	11.9	14.8	(0.1) – 36.2	Highest in FY07; lowest in FY09. Note the divergence in FY08-18 CAGR of 9.8% vs 24.1% of FY02-08.
PAT Growth %	12.8	15.4	(19.1) – 56.4	Highest in FY03; lowest in FY09. Note the divergence in FY08-18 CAGR of 5.3% vs 32.0% of FY02-08.
Equity Growth%	11.7	16.2	6.5 – 36.4	Highest in FY08; lowest in FY15. This is not adjusted for new fund raise or dividend payouts. Note the divergence in FY08-17 CAGR of 13.5 vs 21.4% during FY02-08.

\*Note: ttm is trailing twelve months as of October 11, 2018

## SUMMARY FOR MID/SMALL CAP UNIVERSE

Parameter (ttm or FY18)	Current	Average	FY02 – 18 Range	Comment (please refer to detailed tables for year/sector wise numbers)
PEx (ttm*)	22.0	16.5	6.3 – 41.5	Current earnings are 33% above average but have fallen by 47% below the highest levels reached in Jan'18. One has to careful in concluding when looking at averages or wtd averages, as few loss making companies can drive down earnings for the entire universe thereby exaggerating the multiples.
<b>Normalized PEx (ttm)</b>	<b>18.4</b>	<b>19.1</b>	<b>8.1 – 57.4</b>	<b>Since profitability is cyclical, valuations have to be viewed from a sustainable profitability perspective rather than using just current profitability. For normalizing, we have assumed that the sustainable ROE going forward is 13.3% vs current level of 11.1%. Lowest normalized PEx level in FY03 and highest in Jan'08 when absolute PEx as well as ROE were at highest levels. Hence post FY08 we experienced double whammy of multiple as well as ROE contraction. Current levels are below average.</b> Excludes FS.
PBx (ttm)	1.8	1.7	0.8 – 4.7	Current multiples are near average and 30% below levels in Jan'18.
EV/EBITDA (ttm)	10.9	9.1	4.5 – 18.2	Current multiples are just above average but 34% below levels in Jan'18. Excludes FS.
ROE %	11.1	13.3	4.3 – 21.2	ROE has picked up since making the low in FY16.
ROCE %	9.4	10.9	7.6 – 16.6	ROCE too has picked up since making the low in FY16. Excludes FS.
PAT %	6.1	5.1	2.8 – 8.2	Excludes FS. Net margins have picked up since making the low of 2.8% in FY15.
EBITDA %	15.6	13.9	11.8 – 15.8	Excludes FS. Lowest level in FY13 and highest in FY08.
COGS %	46.9	56.2	52.7 – 60.0	Excludes FS. Pricing power is returning as companies are able to retain profits vs passing on to the customer.
Interest/Sales %	3.9	3.3	2.0 – 4.9	Excludes FS. Levels significantly lower vs highs reached last year.
EBIDTA/Interest	3.99	4.60	2.79 – 7.40	Excludes FS. Levels significantly better than last year.
D/Ex	0.72	1.00	0.74 – 1.34	Excludes FS. Current level has dropped since peaking in FY15.
Asset Turns (Sales/CE)	1.02	1.19	0.97 – 1.58	Excludes FS.
Capacity Utilization %	70-75	86	73 – 100	Broad approximation assuming peak utilization of 100% in FY05 when asset turns were highest.
Sales Growth %	7.1	14.6	3.8 – 30.4	Highest in FY07; lowest in FY10.
EBDTA Growth %	8.4	13.8	(2.1) – 42.1	Highest in FY07; lowest in FY16. Excludes FS
PAT Growth %	19.7	15.7	(24.4) – 89.4	Highest in FY04; lowest in FY09. Excludes FS
Equity Growth%	9.3	15.4	4.0 – 38.8	Highest in FY08; lowest in FY16. This is not adjusted for new fund raise or dividend payouts.

## DETAILED VALUATION TABLES

We have added Jan '25, 2018 as an additional data point which happened to be near the peak of valuations in this cycle. Also have excluded financial sector where appropriate. Provisioning for NPAs in these companies have a significant impact on their profits and they skew the ratios. For finance sector, we have separately presented detailed analysis starting page 8. We have divided the sector into three groups: PSU (public) Banks, Private Banks and NBFCs (non-banking finance companies).

### PEx for Total Universe:

Weighted PEx by Sectors																					
Row Labels	TTM Oct 11, '18	FY18	Jan 25, '18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	14.8	15.9	21.5	17.9	17.4	21.6	17.9	9.1	12.9	11.5	12.6	4.6	9.9	19.8	9.4	11.9	9.2	10.2	12.3	8.6	12.5
Consumption	33.6	34.3	46.6	35.1	31.2	32.5	27.6	24.3	23.2	22.6	19.9	16.2	17.6	21.6	19.6	27.3	19.0	19.0	16.9	21.1	24.0
Energy	11.5	12.0	15.4	12.3	11.1	14.1	10.9	12.0	12.0	14.0	13.7	13.2	15.1	21.8	11.5	13.4	9.2	9.1	4.4	6.0	11.4
Finance																					
Industrial/Engg	22.5	27.3	42.4	35.5	33.4	84.1	33.4	22.0	16.7	18.6	22.6	12.1	22.9	51.5	20.3	26.5	14.0	12.4	8.0	10.2	24.7
Materials	15.8	19.9	29.3	32.4	-VE	49.4	10.3	14.9	10.5	12.2	19.1	7.5	11.3	17.0	7.9	11.0	7.0	8.0	9.6	(73.4)	9.9
Pharma/Chemicals/Life Sciences	29.1	26.0	36.5	30.9	25.9	28.7	23.7	19.9	21.1	9.7	21.8	18.4	15.9	20.9	18.6	27.3	20.7	17.0	11.0	14.5	20.7
Technology/Telecom/Media	29.7	30.6	45.6	22.8	20.4	23.5	20.1	24.1	23.9	23.5	19.7	13.5	21.9	28.4	34.4	44.0	30.2	42.9	34.6	28.0	26.9
Transportation/Logistics/Supplyc	26.4	26.0	28.7	26.0	19.9	24.3	17.0	14.2	15.2	17.7	27.9	27.5	22.0	34.2	13.6	13.9	9.6	12.7	7.1	10.3	17.9
<b>Grand Total</b>	<b>20.2</b>	<b>21.6</b>	<b>28.9</b>	<b>22.9</b>	<b>21.8</b>	<b>26.3</b>	<b>16.9</b>	<b>17.0</b>	<b>15.5</b>	<b>15.8</b>	<b>18.2</b>	<b>12.7</b>	<b>16.7</b>	<b>25.5</b>	<b>15.1</b>	<b>18.1</b>	<b>11.5</b>	<b>12.0</b>	<b>7.9</b>	<b>11.7</b>	<b>16.6</b>

Multiples are calculated as of year end and not an average for the year. Averages might be different if calculated across all days.

### PEx for Mid/Small Cap Universe:

Weighted PEx by Sectors																					
Row Labels	TTM Oct 11, '18	FY18	Jan 25, '18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	14.8	15.9	22.1	17.0	18.2	21.6	17.9	9.1	12.9	11.5	12.6	4.6	9.9	19.8	9.4	11.9	9.2	10.2	12.3	8.6	12.5
Consumption	22.6	25.7	39.6	32.8	26.1	30.3	22.1	18.7	19.1	19.0	19.7	13.4	13.8	19.5	18.3	24.1	23.2	15.4	14.8	16.2	20.8
Energy	8.1	11.8	18.3	19.7	17.8	32.5	14.8	26.3	24.2	15.9	18.9	15.0	25.1	35.6	12.1	17.6	9.8	11.6	6.6	10.5	17.1
Finance																					
Industrial/Engg	22.7	27.6	43.7	42.5	34.5	51.6	33.1	22.5	18.0	15.6	20.6	8.9	18.6	51.3	18.3	22.8	14.0	11.1	6.8	10.6	22.2
Materials	21.3	36.3	-VE	-VE	-VE	25.0	16.0	11.3	11.8	14.1	14.8	7.5	12.3	18.9	8.3	10.7	6.3	7.9	14.6	(22.6)	11.6
Pharma/Chemicals/Life Sciences	35.8	29.9	42.6	33.1	26.2	28.3	19.8	15.7	16.1	17.9	18.6	10.5	13.0	20.7	16.8	20.9	16.6	11.9	7.4	10.5	18.4
Technology/Telecom/Media	24.5	28.8	53.7	30.9	22.4	31.7	17.3	43.6	35.1	24.9	27.3	27.6	27.8	35.4	47.0	(157.2)	42.2	(50.2)	31.0	9.1	14.1
Transportation/Logistics/Supplyc	49.1	59.1	41.5	28.4	23.5	35.1	23.5	24.2	31.8	34.7	60.1	21.0	33.7	63.2	12.0	8.6	5.7	7.8	5.6	5.8	24.7
<b>Grand Total</b>	<b>22.0</b>	<b>26.7</b>	<b>41.5</b>	<b>36.3</b>	<b>30.4</b>	<b>24.6</b>	<b>16.3</b>	<b>13.2</b>	<b>13.9</b>	<b>14.6</b>	<b>16.5</b>	<b>8.7</b>	<b>15.6</b>	<b>27.5</b>	<b>12.8</b>	<b>15.8</b>	<b>9.7</b>	<b>9.8</b>	<b>6.3</b>	<b>8.9</b>	<b>16.5</b>

Multiples are calculated as of year end and not an average for the year. Averages might be different if calculated across all days.

### Normalized PEx for Total Universe:

For normalizing, we have assumed that the sustainable ROE going forward is 13.6% vs current level of 13.3%. Using ROE of 13.6% based on FY09-18 average which is lower than overall average of 16.7%. We are being conservative given non-inflationary environment globally and believing that FY05-08 was an extraordinary period which is unlikely to recur in the foreseeable future. Lowest normalized PEx level in FY03 and highest in Jan'08 when absolute PEx as well as ROE were at highest levels. Hence post FY08 we experienced double whammy of multiple as well as ROE contraction.

Normalized PEx by Sectors																				
Row Labels	Oct 11, '18	FY18	Jan 25, '18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	17.7	19.1	23.0	19.1	12.5	14.4	8.8	8.5	14.0	14.1	13.8	7.0	12.6	25.3	11.1	14.9	11.1	9.6	4.4	12.2
Consumption	32.2	32.9	38.5	29.0	29.9	32.9	28.7	28.5	26.4	23.5	19.5	14.2	22.4	27.6	23.7	30.6	20.0	20.1	15.4	24.8
Energy	11.6	12.2	15.1	12.0	9.6	10.5	10.5	10.8	11.9	15.9	18.1	14.3	24.1	34.7	18.1	19.1	15.4	15.2	7.2	14.0
Finance																				
Industrial/Engg	25.8	31.2	36.0	30.2	25.0	30.2	18.8	16.9	19.3	27.1	32.8	18.2	58.6	132.0	53.3	57.1	26.8	19.1	9.3	29.6
Materials	13.8	17.4	14.1	15.6	-VE	10.6	10.8	10.3	14.2	23.5	32.6	13.3	35.6	53.4	25.3	31.3	27.0	21.8	9.4	19.9
Pharma/Chemicals/Life Sciences	23.0	20.6	29.0	24.6	25.8	30.6	20.3	18.4	17.4	20.1	22.1	12.1	20.9	27.4	25.8	32.0	23.7	20.1	12.4	21.7
Technology/Telecom/Media	20.4	21.0	36.5	18.2	22.8	23.7	20.6	18.7	20.4	23.8	25.5	19.2	36.6	47.4	56.7	49.3	35.3	25.0	15.4	27.0
Transportation/Logistics/Supplycl	22.8	22.4	24.1	21.8	18.0	22.7	16.0	14.0	19.7	27.0	31.8	15.8	28.8	44.6	20.4	24.9	18.6	19.8	6.0	20.5
<b>Grand Total</b>	<b>19.8</b>	<b>21.2</b>	<b>21.2</b>	<b>16.8</b>	<b>15.0</b>	<b>20.7</b>	<b>16.0</b>	<b>16.2</b>	<b>17.2</b>	<b>20.8</b>	<b>23.6</b>	<b>15.0</b>	<b>28.4</b>	<b>43.4</b>	<b>25.5</b>	<b>27.5</b>	<b>19.4</b>	<b>18.6</b>	<b>10.4</b>	<b>19.5</b>

Green are top undervalued and Red are top overvalued sectors compared to historical average normalized valuations.

### Normalized PEx for Mid/Small Cap Universe:

For normalizing, we have assumed that the sustainable ROE going forward is 13.3% vs current level of 11.1%. Lowest normalized PEx level in FY03 and highest in Jan'08 when absolute PEx as well as ROE were at highest levels. Hence post FY08 we experienced double whammy of multiple as well as ROE contraction.

Normalized PEx by Sectors																				
Row Labels	Oct 11, '18	FY18	Jan 25, '18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	17.7	19.1	22.2	17.1	11.6	15.1	9.3	8.9	14.7	14.7	14.5	7.4	13.2	26.5	11.7	15.7	11.7	10.0	4.6	12.4
Consumption	32.9	37.5	53.1	27.8	26.6	33.5	23.3	23.5	22.4	20.3	16.4	8.6	20.5	29.0	22.9	28.6	17.9	11.2	7.4	21.8
Energy	8.1	11.9	17.0	18.4	13.2	15.6	13.6	13.8	19.4	24.8	32.8	19.8	52.0	73.6	24.4	29.7	26.1	33.4	13.9	22.7
Finance																				
Industrial/Engg	18.8	22.8	41.1	33.7	26.5	28.8	17.2	15.8	17.9	24.3	30.4	14.5	58.7	162.1	55.0	53.3	28.5	19.0	9.8	28.5
Materials	7.0	11.8	-VE	-VE	-VE	12.3	11.5	11.0	15.4	23.9	34.7	13.6	35.4	54.4	27.4	29.8	27.2	23.5	11.0	20.6
Pharma/Chemicals/Life Sciences	26.9	22.5	42.8	33.2	27.6	28.1	17.7	18.3	17.4	18.3	18.0	8.6	21.0	33.3	24.7	31.4	26.7	17.2	9.4	21.3
Technology/Telecom/Media	48.9	57.6	NM	32.4	30.8	35.6	26.0	21.8	24.0	24.4	30.2	18.6	37.0	47.1	44.3	36.3	19.6	13.9	6.4	28.7
Transportation/Logistics/Supplycl	19.8	23.9	41.0	28.0	24.5	29.9	17.0	15.2	31.0	47.3	58.2	30.6	68.9	129.4	24.2	21.7	18.6	17.8	7.9	29.0
<b>Grand Total</b>	<b>18.4</b>	<b>22.3</b>	<b>28.6</b>	<b>19.6</b>	<b>13.0</b>	<b>18.0</b>	<b>13.5</b>	<b>12.8</b>	<b>15.9</b>	<b>21.2</b>	<b>24.8</b>	<b>12.2</b>	<b>32.6</b>	<b>57.4</b>	<b>26.0</b>	<b>27.7</b>	<b>20.4</b>	<b>17.1</b>	<b>8.1</b>	<b>19.1</b>

Green are top undervalued and Red are top overvalued sectors compared to historical average normalized valuations.

### PBx for Total Universe:

Weighted PBx by Sectors																					
Row Labels	Oct 11, '18	FY18	Jan 25, '18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	2.3	2.7	3.4	2.8	1.9	2.2	1.3	1.2	2.0	2.0	2.0	1.0	1.8	3.0	1.6	2.2	1.6	1.4	0.7	0.6	1.7
Consumption	6.9	6.8	7.2	6.4	6.6	7.2	6.3	6.2	5.6	5.6	4.2	3.0	4.6	5.9	5.0	6.3	4.3	4.6	3.4	4.3	5.3
Energy	1.5	1.5	1.8	1.5	1.2	1.3	1.3	1.3	1.5	1.9	2.2	1.7	2.8	3.9	2.2	2.3	1.8	1.8	0.9	0.9	1.7
Finance	1.8	1.8	2.1	1.7	1.4	1.7	1.4	1.4	1.5	2.0	1.9	1.0	1.9	3.3	1.9	1.9	1.5	1.4	0.7	0.6	1.5
Industrial/Engg	2.7	3.1	3.7	3.1	2.6	3.2	1.9	1.7	1.9	2.7	3.2	1.8	5.0	8.7	4.9	5.2	2.6	1.9	0.9	0.9	2.7
Materials	1.7	1.8	2.2	1.7	1.1	1.2	1.1	1.1	1.5	2.3	3.3	1.4	3.3	5.1	2.4	3.0	2.5	2.1	1.0	0.9	1.9
Pharma/Chemicals/Life Sciences	3.7	3.5	4.4	4.2	4.4	5.2	3.5	3.1	3.0	3.2	3.6	2.1	3.4	4.6	4.2	5.2	4.0	3.4	2.1	2.7	3.6
Technology/Telecom/Media	3.5	3.6	3.7	3.0	3.6	3.8	3.2	3.1	3.3	3.7	3.9	2.8	5.4	7.3	8.1	7.4	5.5	4.4	2.6	3.3	4.2
Transportation/Logistics/Supplyc	2.5	3.2	3.8	3.6	2.7	3.6	2.3	2.1	2.9	3.9	4.7	2.4	4.2	6.7	3.0	3.6	2.6	2.9	0.9	1.1	2.9
<b>Grand Total</b>	<b>2.3</b>	<b>2.4</b>	<b>2.8</b>	<b>2.4</b>	<b>2.0</b>	<b>2.4</b>	<b>1.9</b>	<b>1.8</b>	<b>2.0</b>	<b>2.5</b>	<b>2.8</b>	<b>1.7</b>	<b>3.2</b>	<b>4.9</b>	<b>3.0</b>	<b>3.2</b>	<b>2.3</b>	<b>2.1</b>	<b>1.2</b>	<b>1.2</b>	<b>2.2</b>

Multiples are calculated as of year end and not an average for the year. Averages might be different if calculated across all days.

### PBx for Mid/Small Cap Universe:

Weighted PBx by Sectors																					
Row Labels	Oct 11, '18	FY18	Jan 25, '18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	2.3	2.7	3.2	2.4	1.7	2.2	1.3	1.2	2.0	2.0	2.0	1.0	1.8	3.0	1.6	2.2	1.6	1.4	0.7	0.6	1.7
Consumption	4.7	5.0	5.1	3.8	3.6	4.5	3.2	3.2	3.0	3.2	2.1	1.1	2.5	3.8	2.9	3.5	2.4	1.5	1.0	1.1	2.8
Energy	1.2	1.1	1.3	1.2	0.8	1.0	0.9	0.9	1.2	1.5	2.0	1.2	2.7	3.6	1.5	1.8	1.6	2.0	0.9	0.9	1.4
Finance	0.8	1.0	1.3	1.0	0.7	0.9	0.9	0.8	1.0	1.4	1.3	0.7	1.5	2.7	1.4	1.7	1.4	1.2	0.5	0.4	1.1
Industrial/Engg	2.5	2.8	3.5	2.8	2.2	2.5	1.4	1.3	1.5	2.0	2.4	1.2	4.1	7.6	4.0	4.0	2.3	1.6	0.8	0.7	2.2
Materials	1.5	1.8	2.3	1.6	1.0	1.1	1.0	1.0	1.4	2.0	2.9	1.2	2.9	4.5	2.2	2.5	2.2	1.9	1.0	0.9	1.7
Pharma/Chemicals/Life Sciences	2.9	3.6	4.9	4.4	3.7	3.7	2.4	2.4	2.3	2.4	2.3	1.2	2.6	4.0	3.3	3.9	3.4	2.2	1.2	1.5	2.7
Technology/Telecom/Media	3.9	4.6	4.6	3.2	3.1	3.5	2.6	2.2	2.5	2.4	2.9	1.9	3.6	5.7	4.1	3.4	1.9	1.5	0.7	1.1	2.6
Transportation/Logistics/Supplyc	3.2	3.2	3.2	2.7	2.5	2.7	1.6	1.4	2.8	4.2	5.2	2.5	5.9	10.7	2.1	1.9	1.5	1.6	0.7	0.7	2.5
<b>Grand Total</b>	<b>1.8</b>	<b>2.1</b>	<b>2.6</b>	<b>2.1</b>	<b>1.6</b>	<b>1.8</b>	<b>1.3</b>	<b>1.2</b>	<b>1.5</b>	<b>2.0</b>	<b>2.3</b>	<b>1.1</b>	<b>2.8</b>	<b>4.7</b>	<b>2.3</b>	<b>2.5</b>	<b>1.8</b>	<b>1.6</b>	<b>0.8</b>	<b>0.8</b>	<b>1.7</b>

Multiples are calculated as of year end and not an average for the year. Averages might be different if calculated across all days.

### EV/EBIDTax for Total Universe:

Weighted EV/EBIDTA x by Sectors																					
Row Labels	Oct 11, '18	FY18	Jan 25, '18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	9.4	10.8	13.3	10.8	9.6	10.1	7.5	7.2	7.7	6.8	7.2	3.8	6.6	12.3	6.0	7.1	5.5	5.6	4.4	4.5	7.1
Consumption	21.5	22.2	25.0	19.3	17.1	18.3	16.0	14.8	13.6	13.7	11.8	9.6	12.1	15.8	12.4	16.1	11.1	11.0	8.9	11.3	14.1
Energy	7.4	7.6	9.2	8.3	7.3	8.7	7.4	7.5	7.1	8.3	8.2	7.6	9.0	14.5	7.0	7.9	5.5	5.5	3.6	4.2	7.1
Finance																					
Industrial/Engg	12.1	13.6	17.5	13.9	12.9	14.9	10.9	9.4	9.2	10.4	12.0	7.4	14.1	31.4	12.3	14.6	7.9	6.4	4.6	5.1	10.5
Materials	7.3	8.2	10.4	9.3	9.2	7.2	7.1	6.8	6.8	8.0	9.8	4.9	7.9	12.8	5.1	6.6	4.7	5.6	5.4	7.4	7.1
Pharma/Chemicals/Life Sciences	15.7	14.9	18.3	17.0	15.4	18.9	12.9	11.7	11.7	12.8	11.7	8.2	10.7	15.3	11.7	16.4	12.0	9.8	6.5	8.1	12.4
Technology/Telecom/Media	10.6	10.8	12.2	9.1	8.9	9.8	8.8	9.1	9.8	11.6	11.2	7.7	13.3	18.6	19.8	21.6	16.1	17.1	12.1	13.7	12.4
Transportation/Logistics/Supplyc	8.9	10.6	12.5	10.6	8.5	9.7	7.7	7.5	9.5	10.8	13.4	11.1	12.3	22.2	8.6	8.7	5.3	6.6	3.9	5.1	8.8
<b>Grand Total</b>	<b>10.2</b>	<b>10.8</b>	<b>13.1</b>	<b>10.9</b>	<b>12.8</b>	<b>10.8</b>	<b>8.9</b>	<b>8.7</b>	<b>8.6</b>	<b>9.7</b>	<b>10.1</b>	<b>7.3</b>	<b>10.3</b>	<b>16.9</b>	<b>9.1</b>	<b>10.4</b>	<b>6.8</b>	<b>6.8</b>	<b>4.9</b>	<b>6.2</b>	<b>9.0</b>

Multiples are calculated as of year end and not an average for the year. Averages might be different if calculated across all days.

### EV/EBIDTax for Mid/Small Cap Universe:

Weighted EV/EBIDTA x by Sectors																					
Row Labels	Oct 11, '18	FY18	Jan 25, '18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	9.4	10.8	13.7	10.5	9.9	10.1	7.5	7.2	7.7	6.8	7.2	3.8	6.6	12.3	6.0	7.1	5.5	5.6	4.4	4.5	7.1
Consumption	17.8	20.3	24.5	15.3	13.1	14.6	11.2	10.3	9.9	11.0	10.4	7.5	10.9	17.4	11.6	13.0	10.7	7.6	6.0	6.5	11.2
Energy	6.1	7.4	8.6	8.8	7.9	10.5	9.1	10.6	10.7	10.6	11.9	9.0	14.9	21.4	8.2	9.6	5.5	6.7	4.5	5.6	8.9
Finance																					
Industrial/Engg	11.8	13.2	18.2	13.6	11.7	13.2	9.7	9.1	9.1	9.4	11.2	6.4	12.1	30.6	11.2	12.4	7.8	5.9	4.4	5.2	9.8
Materials	8.4	11.3	16.7	13.8	11.6	8.7	8.5	7.4	7.5	8.6	8.6	5.0	7.6	12.8	5.2	6.5	4.4	5.8	6.0	8.0	7.9
Pharma/Chemicals/Life Sciences	16.3	14.0	20.3	17.1	14.9	15.8	10.2	9.5	9.3	10.0	9.0	6.3	9.0	15.6	10.3	12.5	9.6	7.1	4.8	5.7	10.3
Technology/Telecom/Media	11.6	13.8	16.8	10.0	8.7	10.5	8.7	8.1	9.0	9.0	10.7	8.2	11.7	18.4	14.7	20.2	11.1	13.6	4.8	4.6	10.4
Transportation/Logistics/Supplyc	12.8	13.7	16.1	12.4	11.0	12.0	10.0	10.9	15.9	19.2	26.5	11.7	19.2	41.2	7.9	5.6	3.0	4.2	4.1	4.0	11.3
<b>Grand Total</b>	<b>10.9</b>	<b>12.6</b>	<b>16.6</b>	<b>12.7</b>	<b>13.8</b>	<b>11.3</b>	<b>9.6</b>	<b>9.0</b>	<b>9.2</b>	<b>9.6</b>	<b>10.1</b>	<b>6.3</b>	<b>10.0</b>	<b>18.2</b>	<b>8.4</b>	<b>9.7</b>	<b>6.7</b>	<b>5.8</b>	<b>4.5</b>	<b>4.9</b>	<b>9.1</b>

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## DETAILED RATIOS FOR FINANCE COMPANIES

### PSU Banks – Common Size (as a % of average assets) P&L and Other Key Ratios

Gross NPAs are at the highest levels and half of that haven't been provided for until March 2018. High growth was achieved during FY07 - FY09 and FY11 – FY12 (look at the growth tables on the following pages) and we see the results back ended with negative ROA now. In lending business, growth is the easiest aspect and every time investors pay up for growth not worrying about the consequences years later. Valuations have to be done by looking at ROEs across a business cycle rather than just looking at ROEs during the growth years. Look at the PBx and ROEs for high growth years.

Profit & Loss (Common Size by Assets)	Mar-18	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13	Mar-12	Mar-11	Mar-10	Mar-09	Mar-08	Mar-07	Mar-06	Mar-05	Mar-04	Mar-03	
Interest Income	6.7%	7.2%	7.8%	8.1%	8.3%	8.5%	8.5%	7.5%	7.5%	8.1%	7.9%	7.4%	7.3%	7.5%	8.0%	8.8%	
Interest Expense	4.5%	5.0%	5.5%	5.7%	5.8%	5.9%	5.7%	4.7%	5.1%	5.7%	5.5%	4.6%	4.2%	4.3%	4.8%	5.7%	
Net Int Inc	2.1%	2.2%	2.3%	2.4%	2.5%	2.6%	2.8%	2.8%	2.4%	2.4%	2.4%	2.8%	3.1%	3.2%	3.2%	3.1%	
Other Inc	1.5%	1.5%	1.1%	1.2%	1.1%	1.1%	1.1%	1.3%	1.6%	1.4%	1.5%	1.2%	1.3%	1.5%	2.1%	1.8%	
Total Income	3.6%	3.6%	3.5%	3.6%	3.6%	3.7%	3.9%	4.1%	3.9%	3.8%	3.9%	4.1%	4.4%	4.8%	5.3%	4.9%	
OPEX (Incl Provisions)	4.8%	3.8%	3.6%	2.9%	2.9%	2.7%	2.7%	2.8%	2.6%	2.4%	2.5%	2.7%	3.2%	3.5%	3.6%	3.4%	
PBT	-1.2%	-0.2%	-0.2%	0.7%	0.7%	1.0%	1.2%	1.3%	1.3%	1.5%	1.4%	1.3%	1.2%	1.3%	1.7%	1.5%	
Taxes	-0.4%	0.0%	0.0%	0.2%	0.2%	0.2%	0.3%	0.4%	0.4%	0.5%	0.4%	0.4%	0.3%	0.3%	0.5%	0.4%	
<b>ROA</b>	<b>-0.8%</b>	<b>-0.1%</b>	<b>-0.1%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.2%</b>	<b>1.0%</b>	
Assets/Equity (Leverage)	16.8	17.0	17.1	17.2	17.1	17.1	17.6	18.3	18.2	17.7	17.7	17.8	17.8	18.8	20.1	21.9	
<b>ROE</b>	<b>TTM</b>	<b>-13.7%</b>	<b>-1.8%</b>	<b>-2.5%</b>	<b>8.3%</b>	<b>9.3%</b>	<b>13.6%</b>	<b>15.8%</b>	<b>16.7%</b>	<b>17.3%</b>	<b>17.8%</b>	<b>17.7%</b>	<b>16.3%</b>	<b>15.7%</b>	<b>18.6%</b>	<b>25.1%</b>	<b>22.5%</b>
Price / Book Value(x)	<b>0.69</b>	0.74	0.78	0.54	0.76	0.66	0.79	0.99	1.50	1.27	0.68	1.22	1.04	1.26	1.18	1.15	0.56
Median GNPA %	17.09	12.53	9.40	4.96	4.18	3.21	2.53	1.98	1.74	1.71	1.92	2.38	3.72	5.01	7.40	8.20	
Median NNPA %	8.48	7.81	6.35	2.93	2.48	2.16	1.47	0.98	1.02	0.72	0.72	0.76	0.87	1.59	2.58	4.29	



## Private Banks – Common Size (as a % of average assets) P&L and Other Key Ratios

When looked at the return ratios over the entire period, it makes sense that private banks get a significant premium in PBx vs their PSU peers, though the premium is currently at the highest level. Net Interest Income % (NIM) has been increasing as cost of funds is coming down. GNPA's seem to be rising.

Profit & Loss (Common Size by Assets)		Mar-18	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13	Mar-12	Mar-11	Mar-10	Mar-09	Mar-08	Mar-07	Mar-06	Mar-05	Mar-04	Mar-03
Interest Income		7.5%	7.9%	8.5%	8.5%	8.6%	8.6%	8.3%	7.2%	7.3%	8.5%	8.2%	7.5%	6.9%	6.7%	7.8%	8.8%
Interest Expense		4.2%	4.6%	5.0%	5.1%	5.3%	5.5%	5.2%	4.2%	4.4%	5.7%	5.6%	5.0%	4.2%	4.1%	5.3%	6.7%
Net Int Inc		3.3%	3.4%	3.5%	3.4%	3.3%	3.2%	3.0%	3.0%	2.8%	2.8%	2.6%	2.5%	2.7%	2.6%	2.6%	2.1%
Other Inc		2.7%	2.9%	2.7%	2.8%	2.6%	2.8%	3.0%	3.7%	4.1%	3.9%	4.3%	3.7%	3.1%	3.0%	2.9%	2.9%
Total Income		6.1%	6.2%	6.2%	6.1%	5.9%	6.0%	6.1%	6.7%	6.9%	6.8%	6.9%	6.2%	5.8%	5.6%	5.5%	5.0%
OPEX (Incl Provisions)		4.4%	4.4%	4.1%	3.8%	3.6%	3.8%	3.9%	4.7%	5.0%	5.3%	5.5%	4.9%	4.3%	4.1%	3.6%	3.6%
PBT		1.6%	1.9%	2.1%	2.4%	2.4%	2.3%	2.1%	2.0%	1.8%	1.5%	1.4%	1.4%	1.5%	1.4%	1.9%	1.4%
Taxes		0.5%	0.6%	0.7%	0.8%	0.7%	0.7%	0.6%	0.6%	0.6%	0.5%	0.4%	0.4%	0.4%	0.4%	0.5%	0.2%
<b>ROA</b>		<b>1.1%</b>	<b>1.3%</b>	<b>1.5%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>1.4%</b>	<b>1.3%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>1.4%</b>	<b>1.2%</b>
Assets/Equity (Leverage)		9.7	9.6	10.0	10.3	10.6	10.9	11.0	10.5	10.7	11.2	12.7	14.5	13.5	14.8	15.5	15.3
<b>ROE</b>	<b>TTM</b>	<b>10.9%</b>	<b>12.1%</b>	<b>14.6%</b>	<b>16.7%</b>	<b>17.2%</b>	<b>17.5%</b>	<b>16.3%</b>	<b>14.9%</b>	<b>13.5%</b>	<b>11.4%</b>	<b>12.8%</b>	<b>14.2%</b>	<b>15.1%</b>	<b>15.3%</b>	<b>22.4%</b>	<b>18.7%</b>
P/B x	<b>2.70</b>	2.76	2.62	2.36	2.93	2.64	2.30	2.30	2.72	2.55	1.18	2.39	3.23	2.60	2.31	2.16	1.17
Median GNPA %		3.31	2.64	1.97	1.85	1.68	1.33	1.18	1.20	1.72	2.09	1.92	2.89	4.14	6.30	7.99	9.47
Median NNPA %		1.69	1.37	1.12	0.94	0.76	0.64	0.39	0.33	0.54	1.03	0.93	1.11	1.08	2.21	2.81	5.08

**NBFC – Common Size (as a % of average assets) P&L and Other Key Ratios**

Leverage (7 x) also has been increasing since FY09. Given that  $ROE = ROA \times \text{Leverage}$ , ROE should be increasing with leverage, but that's not the case over the last few years.

<b>Profit &amp; Loss (Common Size as a % of Avg Assets)</b>	<b>Mar-18</b>	<b>Mar-17</b>	<b>Mar-16</b>	<b>Mar-15</b>	<b>Mar-14</b>	<b>Mar-13</b>	<b>Mar-12</b>	<b>Mar-11</b>	<b>Mar-10</b>	<b>Mar-09</b>	<b>Mar-08</b>	<b>Mar-07</b>	<b>Mar-06</b>	<b>Mar-05</b>	<b>Mar-04</b>	<b>Mar-03</b>	
Interest Income	19.9%	13.5%	13.6%	13.9%	13.9%	14.2%	14.1%	14.1%	15.2%	13.4%	25.4%	18.8%	15.6%	11.2%	13.8%	14.8%	
Interest Expense	5.8%	6.4%	6.8%	7.0%	7.2%	7.3%	7.0%	6.1%	6.2%	7.0%	6.3%	5.7%	5.3%	5.5%	6.2%	7.6%	
Net Int Inc	14.1%	7.1%	6.8%	6.9%	6.7%	6.9%	7.1%	8.0%	8.9%	6.4%	19.1%	13.1%	10.3%	5.8%	7.6%	7.2%	
Other Inc	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.3%	0.4%	0.4%	0.7%	0.4%	0.4%	0.3%	0.8%	0.7%	
Total Income	14.5%	7.4%	7.1%	7.1%	7.0%	7.1%	7.3%	8.3%	9.4%	6.8%	19.8%	13.5%	10.6%	6.1%	8.4%	7.8%	
OPEX (Incl Provisions)	11.6%	4.5%	4.1%	3.8%	3.5%	3.6%	3.9%	4.4%	5.5%	3.1%	15.3%	9.5%	7.1%	2.9%	6.9%	4.3%	
PBT	2.9%	2.9%	3.0%	3.3%	3.4%	3.6%	3.4%	3.9%	3.9%	3.7%	4.5%	4.0%	3.5%	3.2%	1.5%	3.5%	
Taxes	0.8%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	1.1%	1.0%	1.0%	1.4%	1.1%	0.7%	0.8%	0.9%	0.8%	
<b>ROA</b>	<b>2.1%</b>	<b>2.0%</b>	<b>2.1%</b>	<b>2.3%</b>	<b>2.5%</b>	<b>2.6%</b>	<b>2.4%</b>	<b>2.8%</b>	<b>2.8%</b>	<b>2.8%</b>	<b>3.1%</b>	<b>2.9%</b>	<b>2.8%</b>	<b>2.4%</b>	<b>0.7%</b>	<b>2.7%</b>	
Assets/Equity (Leverage)	7.0	7.0	7.0	6.8	6.7	6.6	6.4	6.2	6.0	6.0	6.3	7.0	7.7	7.7	6.9	6.4	
<b>ROE</b>	<b>TTM</b>	<b>14.4%</b>	<b>13.8%</b>	<b>14.5%</b>	<b>15.6%</b>	<b>16.4%</b>	<b>16.9%</b>	<b>15.1%</b>	<b>17.0%</b>	<b>16.9%</b>	<b>16.6%</b>	<b>19.5%</b>	<b>20.6%</b>	<b>21.3%</b>	<b>18.7%</b>	<b>4.7%</b>	<b>17.3%</b>
Price / Book Value(x)	<b>2.06</b>	2.41	2.42	1.83	2.31	1.72	1.74	1.79	2.31	2.35	1.33	3.01	2.24	2.35	1.33	1.17	0.57
Median GNPA %		2.01	1.54	1.30	1.13	1.10	0.91	0.75	0.81	1.20	1.07	1.18	NM	NM	NM	NM	NM
Median NNPA %		1.44	1.69	1.59	0.68	0.45	0.35	0.26	0.38	0.71	0.75	0.64	NM	NM	NM	NM	NM

## DETAILED GROWTH TABLES

### Net Sales Growth for Total Universe:

Net Sales Growth by Sectors																		
Row Labels	FY02-18 CAGR	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	12.5%	8.3%	-4.2%	5.7%	8.2%	10.9%	3.5%	26.6%	18.2%	-19.5%	67.4%	27.3%	16.4%	13.0%	18.8%	15.2%	4.8%	13.8%
Consumption	17.6%	14.3%	14.9%	31.2%	14.2%	6.6%	14.9%	22.8%	18.6%	15.7%	19.4%	24.9%	26.4%	22.8%	13.4%	17.2%	7.1%	17.8%
Energy	11.9%	18.2%	6.1%	-18.3%	-8.4%	8.5%	13.1%	31.2%	23.9%	-1.5%	19.3%	16.7%	24.5%	21.1%	21.9%	9.3%	17.1%	12.7%
Finance	15.0%	2.9%	3.7%	6.3%	11.2%	12.7%	17.4%	32.2%	18.4%	11.8%	26.5%	30.3%	26.5%	19.6%	8.4%	5.1%	12.8%	15.4%
Industrial/Engg	15.3%	8.8%	4.1%	-0.1%	4.4%	6.7%	6.9%	17.9%	18.4%	5.8%	22.1%	34.6%	37.5%	26.0%	25.9%	18.6%	15.1%	15.8%
Materials	17.3%	19.8%	6.0%	-9.1%	4.7%	20.3%	3.0%	15.8%	18.5%	-9.3%	14.2%	100.6%	33.0%	11.3%	34.8%	22.6%	23.0%	19.3%
Pharma/Chemicals/Life Sciences	15.4%	6.8%	7.8%	10.8%	13.3%	13.2%	22.2%	21.4%	8.8%	12.3%	18.6%	15.3%	36.2%	19.7%	12.5%	14.3%	16.9%	15.6%
Technology/Telecom/Media	18.5%	-0.4%	5.2%	9.6%	9.2%	18.1%	12.2%	19.2%	20.2%	10.1%	28.3%	27.5%	46.2%	36.6%	38.9%	17.0%	9.1%	19.2%
Transportation/Logistics/Supply	17.6%	11.5%	2.6%	2.1%	8.5%	11.5%	2.0%	26.8%	27.2%	17.5%	34.2%	17.2%	36.5%	8.0%	35.2%	43.5%	9.7%	18.4%
<b>Grand Total</b>	<b>14.8%</b>	<b>11.6%</b>	<b>5.6%</b>	<b>-2.1%</b>	<b>2.7%</b>	<b>11.1%</b>	<b>10.9%</b>	<b>25.9%</b>	<b>21.0%</b>	<b>3.5%</b>	<b>22.5%</b>	<b>29.6%</b>	<b>29.3%</b>	<b>19.7%</b>	<b>22.2%</b>	<b>14.1%</b>	<b>14.7%</b>	<b>15.2%</b>

There isn't significant variance in growth across segments, but there is big difference in growth before and after FY09.

### Net Sales Growth for Mid/Small Cap Universe:

Net Sales Growth by Sectors																		
Row Labels	FY02-18 CAGR	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	12.3%	8.3%	-7.0%	5.1%	8.2%	10.9%	3.5%	26.6%	18.2%	-19.5%	67.4%	27.3%	16.4%	13.0%	18.8%	15.2%	4.8%	13.6%
Consumption	20.3%	11.1%	18.6%	50.1%	16.5%	4.5%	14.4%	24.3%	19.2%	21.2%	17.4%	29.7%	29.5%	28.8%	10.2%	24.9%	11.3%	20.7%
Energy	12.7%	10.4%	4.3%	-10.7%	-7.9%	8.7%	16.2%	31.4%	21.0%	-9.2%	22.3%	19.3%	21.9%	23.7%	24.5%	11.8%	27.4%	13.5%
Finance	13.9%	0.4%	0.4%	2.2%	9.7%	12.1%	16.3%	33.4%	22.4%	12.9%	26.2%	24.4%	27.6%	19.1%	9.6%	6.6%	6.7%	14.4%
Industrial/Engg	14.4%	6.4%	0.9%	0.4%	5.5%	8.9%	4.0%	15.4%	19.9%	5.2%	13.9%	33.9%	37.7%	23.7%	24.3%	20.4%	17.6%	14.9%
Materials	15.6%	20.6%	1.5%	-1.9%	7.9%	6.6%	5.7%	19.2%	16.6%	2.7%	16.4%	48.4%	32.4%	5.6%	32.9%	22.3%	23.6%	16.3%
Pharma/Chemicals/Life Sciences	14.2%	4.8%	7.5%	9.6%	9.2%	9.1%	20.5%	22.2%	7.5%	12.7%	15.1%	17.9%	26.4%	17.8%	16.6%	14.6%	18.4%	14.4%
Technology/Telecom/Media	14.3%	9.4%	5.5%	8.4%	8.3%	11.3%	16.1%	17.7%	9.1%	12.0%	20.8%	18.0%	43.0%	39.1%	29.8%	-0.4%	-7.6%	15.0%
Transportation/Logistics/Supply	12.9%	10.4%	0.3%	-8.8%	4.7%	4.6%	-16.7%	21.3%	27.9%	6.7%	24.5%	14.7%	43.8%	-2.7%	37.9%	56.6%	6.1%	14.5%
<b>Grand Total</b>	<b>14.6%</b>	<b>7.1%</b>	<b>4.3%</b>	<b>4.9%</b>	<b>5.5%</b>	<b>8.5%</b>	<b>8.8%</b>	<b>24.2%</b>	<b>19.6%</b>	<b>3.8%</b>	<b>21.7%</b>	<b>27.6%</b>	<b>30.4%</b>	<b>17.2%</b>	<b>22.9%</b>	<b>17.8%</b>	<b>14.5%</b>	<b>14.9%</b>

There isn't significant variance in growth across segments, but there is big difference in growth before and after FY09.

### EBIDTA Growth for Total Universe:

EBIDTA Growth by Sectors																		
Row Labels	FY02-18 CAGR	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	11.9%	12.2%	18.3%	2.4%	6.7%	6.3%	-4.2%	12.7%	21.0%	-12.7%	44.7%	22.4%	13.1%	15.0%	18.4%	19.7%	5.9%	12.6%
Consumption	15.5%	17.5%	9.2%	9.3%	12.5%	7.2%	17.0%	18.6%	11.7%	29.7%	3.1%	24.0%	31.5%	24.8%	10.1%	13.4%	12.9%	15.8%
Energy	12.1%	13.3%	15.5%	21.1%	-7.2%	14.2%	-0.4%	11.5%	0.5%	28.0%	-4.3%	21.7%	26.8%	1.1%	9.6%	20.8%	31.7%	12.7%
Finance																		
Industrial/Engg	15.0%	8.3%	8.7%	3.6%	5.9%	1.2%	-1.0%	3.9%	16.3%	13.7%	-1.6%	42.9%	57.7%	36.5%	23.5%	20.6%	16.7%	16.1%
Materials	19.1%	22.8%	37.5%	-23.7%	4.8%	31.0%	-4.6%	-0.5%	17.1%	8.6%	-5.4%	39.2%	48.2%	4.5%	69.4%	52.6%	45.9%	21.7%
Pharma/Chemicals/Life Sciences	16.7%	15.2%	5.7%	23.1%	11.2%	10.8%	20.5%	19.9%	3.3%	28.9%	2.3%	18.8%	48.9%	22.5%	12.3%	15.4%	15.7%	17.1%
Technology/Telecom/Media	18.3%	-5.7%	4.9%	8.6%	14.8%	24.9%	7.6%	17.1%	15.9%	12.8%	23.2%	36.9%	66.7%	25.2%	54.8%	10.7%	-4.4%	19.6%
Transportation/Logistics/Supply	17.4%	12.1%	-5.7%	-8.3%	15.2%	22.7%	13.2%	16.7%	32.4%	60.2%	-7.8%	19.8%	12.5%	15.2%	36.2%	49.0%	17.3%	18.8%
<b>Grand Total</b>	<b>14.8%</b>	<b>11.9%</b>	<b>11.9%</b>	<b>4.8%</b>	<b>4.5%</b>	<b>16.4%</b>	<b>3.3%</b>	<b>10.3%</b>	<b>11.0%</b>	<b>21.5%</b>	<b>-0.1%</b>	<b>29.0%</b>	<b>36.5%</b>	<b>10.2%</b>	<b>23.4%</b>	<b>24.6%</b>	<b>24.8%</b>	<b>15.3%</b>

Growth during FY02-08 period is double of that for the FY08-18 period. The difference is even wider for cyclical sectors such as Materials and Industrial/Engg.

### EBIDTA Growth for Mid/Small Cap Universe:

EBIDTA Growth by Sectors																		
Row Labels	FY02-18 CAGR	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	11.5%	12.2%	15.7%	-1.5%	6.7%	6.3%	-4.2%	12.7%	21.0%	-12.7%	44.7%	22.4%	13.1%	15.0%	18.4%	19.7%	5.9%	12.2%
Consumption	17.5%	13.4%	8.6%	7.7%	15.7%	5.6%	17.2%	14.9%	19.5%	41.8%	-2.8%	27.4%	29.9%	59.8%	13.8%	13.9%	6.4%	18.3%
Energy	13.9%	7.3%	11.2%	38.7%	-4.5%	23.5%	2.6%	7.9%	13.4%	20.3%	9.0%	34.5%	32.9%	-22.9%	7.3%	27.9%	32.0%	15.1%
Finance																		
Industrial/Engg	14.3%	5.6%	2.3%	6.5%	7.0%	5.4%	1.5%	-4.0%	16.6%	10.1%	-10.5%	49.2%	63.0%	35.4%	18.2%	19.6%	25.0%	15.7%
Materials	15.2%	26.6%	17.4%	-21.8%	7.1%	2.1%	1.2%	5.3%	-4.0%	35.9%	-8.8%	23.9%	46.8%	-6.8%	67.9%	47.4%	42.6%	17.7%
Pharma/Chemicals/Life Sciences	15.0%	9.7%	5.5%	27.6%	5.8%	0.1%	15.8%	24.4%	-0.2%	29.6%	-2.8%	27.9%	27.8%	14.3%	28.6%	18.4%	16.4%	15.5%
Technology/Telecom/Media	10.5%	-4.8%	4.8%	11.0%	13.5%	14.0%	12.1%	10.6%	15.1%	18.9%	-5.2%	33.1%	100.2%	12.1%	57.8%	-33.4%	-31.6%	14.3%
Transportation/Logistics/Supply	10.3%	-7.6%	-4.8%	-33.9%	22.3%	26.0%	4.9%	13.6%	37.4%	-7.0%	14.0%	28.5%	4.4%	6.8%	47.3%	45.6%	0.0%	12.4%
<b>Grand Total</b>	<b>13.8%</b>	<b>8.4%</b>	<b>6.8%</b>	<b>1.8%</b>	<b>7.7%</b>	<b>9.0%</b>	<b>4.5%</b>	<b>6.6%</b>	<b>10.1%</b>	<b>19.6%</b>	<b>-2.1%</b>	<b>32.7%</b>	<b>42.1%</b>	<b>5.1%</b>	<b>33.8%</b>	<b>26.2%</b>	<b>18.3%</b>	<b>14.4%</b>

Growth during FY02-08 period is double of that for the FY08-18 period. The difference is even wider for cyclical sectors such as Materials and Industrial/Engg.

### PAT Growth for Total Universe:

PAT Growth by Sectors																		
Row Labels	FY02-18 CAGR	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	19.8%	31.4%	67.3%	12.8%	42.6%	-40.4%	-1.2%	1.7%	27.7%	-16.8%	45.0%	29.3%	9.4%	17.9%	47.8%	185.3%	-21.4%	27.4%
Consumption	17.2%	27.5%	17.1%	7.0%	10.8%	1.5%	20.7%	18.0%	14.3%	34.0%	-13.2%	36.6%	36.6%	31.5%	10.5%	25.9%	9.7%	18.0%
Energy	11.8%	3.3%	30.0%	24.1%	-17.0%	16.7%	-1.5%	-2.5%	-3.3%	40.9%	-17.9%	23.4%	29.0%	-0.6%	17.2%	18.4%	56.1%	13.5%
Finance																		
Industrial/Engg	15.7%	19.7%	13.0%	104.3%	-34.2%	-22.3%	-27.9%	-11.5%	18.0%	14.0%	-22.0%	47.2%	66.9%	44.3%	41.3%	43.9%	50.6%	21.6%
Materials	27.2%	79.2%	262.8%	-126.5%	-77.6%	77.2%	-43.5%	-14.2%	40.8%	11.2%	-29.0%	43.2%	54.7%	0.4%	97.2%	225.9%	-996.0%	-24.6%
Pharma/Chemicals/Life Sciences	17.3%	15.1%	-2.4%	6.8%	42.0%	4.8%	27.6%	-52.0%	165.6%	79.9%	-40.9%	23.1%	53.0%	26.6%	15.5%	25.0%	20.1%	25.6%
Technology/Telecom/Media	14.3%	-22.0%	-11.0%	7.3%	12.5%	48.7%	-1.6%	-5.2%	-6.9%	15.7%	13.3%	39.4%	101.5%	18.7%	113.1%	29.5%	-34.8%	19.9%
Transportation/Logistics/Supply	17.7%	8.7%	-9.1%	-1.8%	11.7%	12.4%	-12.3%	5.5%	65.3%	131.3%	-47.6%	7.6%	4.3%	21.0%	58.9%	108.9%	33.2%	24.9%
<b>Grand Total</b>	<b>15.4%</b>	<b>12.8%</b>	<b>27.0%</b>	<b>11.7%</b>	<b>-13.6%</b>	<b>18.3%</b>	<b>-9.4%</b>	<b>-8.0%</b>	<b>19.5%</b>	<b>30.3%</b>	<b>-19.1%</b>	<b>31.9%</b>	<b>41.4%</b>	<b>10.0%</b>	<b>36.9%</b>	<b>40.1%</b>	<b>46.8%</b>	<b>17.3%</b>

Net profit has grown at a CAGR ~ 5% during FY08-18 period vs 32% for the FY02-08 period. Cyclical sectors have degrown over the past 7 years.

### PAT Growth for Mid/Small Cap Universe:

PAT Growth by Sectors																		
Row Labels	FY02-18 CAGR	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	19.7%	31.4%	66.9%	11.9%	42.6%	-40.4%	-1.2%	1.7%	27.7%	-16.8%	45.0%	29.3%	9.4%	17.9%	47.8%	185.3%	-21.4%	27.3%
Consumption	26.7%	74.2%	24.4%	14.3%	17.0%	-5.2%	23.8%	8.0%	32.1%	61.5%	-43.2%	66.0%	42.9%	105.4%	20.1%	60.2%	6.3%	31.7%
Energy	15.2%	-3.9%	103.8%	128.3%	-45.8%	81.3%	-31.9%	-43.8%	3.6%	48.8%	-18.2%	43.4%	38.6%	-24.9%	9.6%	59.3%	74.7%	26.4%
Finance																		
Industrial/Engg	16.1%	35.6%	14.3%	26.9%	10.8%	-22.8%	-24.9%	-29.5%	22.1%	7.1%	-31.8%	63.0%	77.3%	44.7%	36.9%	30.7%	84.3%	21.5%
Materials	20.0%	157.5%	39.5%	-144.3%	-28.4%	-20.5%	-18.0%	-9.2%	-9.7%	56.0%	-22.9%	16.7%	56.1%	-14.7%	97.7%	364.9%	-275.7%	15.3%
Pharma/Chemicals/Life Sciences	14.3%	-7.3%	1.4%	1.9%	25.0%	-13.5%	26.4%	21.2%	23.7%	36.2%	-38.3%	38.3%	22.2%	20.4%	36.9%	36.6%	35.3%	16.7%
Technology/Telecom/Media	5.2%	-1.5%	-16.7%	3.2%	-18.5%	225.9%	-24.7%	-27.0%	0.7%	84.4%	-44.4%	69.1%	-612.2%	-158.1%	-264.9%	-224.9%	-83.0%	-68.3%
Transportation/Logistics/Supply	5.4%	-52.8%	2.8%	4.9%	28.3%	22.2%	-31.0%	-20.4%	61.5%	-18.3%	-7.0%	23.9%	-2.7%	-0.7%	77.8%	77.9%	14.0%	11.3%
<b>Grand Total</b>	<b>15.7%</b>	<b>19.7%</b>	<b>19.4%</b>	<b>-2.5%</b>	<b>-3.6%</b>	<b>-2.5%</b>	<b>-12.0%</b>	<b>-16.5%</b>	<b>10.3%</b>	<b>29.9%</b>	<b>-24.4%</b>	<b>39.3%</b>	<b>51.9%</b>	<b>0.2%</b>	<b>58.6%</b>	<b>89.4%</b>	<b>54.7%</b>	<b>19.5%</b>

### Equity Growth for Total Universe:

Equity Growth by Sectors																		
Row Labels	FY02-18 CAGR	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	13.1%	16.9%	16.2%	5.9%	2.6%	8.7%	16.2%	13.4%	17.4%	11.2%	20.5%	22.4%	16.1%	16.2%	12.4%	16.7%	-0.3%	13.3%
Consumption	16.7%	29.0%	10.8%	11.1%	13.6%	13.9%	15.3%	19.5%	-2.8%	19.6%	21.0%	33.0%	24.4%	29.7%	16.4%	4.8%	13.3%	17.0%
Energy	13.1%	8.2%	11.4%	8.4%	4.9%	9.9%	7.9%	10.1%	12.0%	13.7%	17.1%	25.6%	17.8%	16.1%	16.4%	17.0%	14.7%	13.2%
Finance	19.0%	11.4%	10.5%	10.4%	12.6%	14.4%	17.8%	20.8%	19.5%	17.8%	17.0%	41.5%	21.4%	27.8%	27.9%	18.8%	18.5%	19.3%
Industrial/Engg	16.0%	12.9%	6.8%	5.7%	1.2%	5.8%	5.8%	10.6%	14.1%	21.0%	15.2%	60.9%	37.4%	35.6%	19.2%	9.4%	7.7%	16.8%
Materials	17.9%	8.7%	-0.4%	-7.2%	-4.2%	26.7%	5.7%	15.5%	31.1%	19.7%	9.8%	50.5%	41.1%	32.0%	42.8%	31.4%	3.2%	19.2%
Pharma/Chemicals/Life Sciences	19.3%	17.9%	14.4%	15.9%	17.3%	10.9%	14.8%	12.6%	32.8%	25.1%	8.7%	29.7%	30.5%	27.7%	18.8%	20.4%	15.4%	19.5%
Technology/Telecom/Media	15.3%	-2.0%	8.6%	12.1%	10.0%	18.5%	7.1%	9.5%	15.4%	23.4%	32.8%	33.2%	43.6%	27.9%	19.1%	-5.8%	3.0%	16.0%
Transportation/Logistics/Supply	17.8%	28.6%	-3.8%	12.5%	1.9%	24.6%	11.5%	20.2%	28.2%	18.6%	14.4%	25.1%	20.9%	28.9%	34.5%	20.0%	6.4%	18.3%
<b>Grand Total</b>	<b>16.2%</b>	<b>11.7%</b>	<b>8.4%</b>	<b>7.8%</b>	<b>6.5%</b>	<b>14.5%</b>	<b>10.9%</b>	<b>14.6%</b>	<b>17.3%</b>	<b>17.8%</b>	<b>16.9%</b>	<b>36.4%</b>	<b>25.0%</b>	<b>24.3%</b>	<b>22.4%</b>	<b>15.7%</b>	<b>12.3%</b>	<b>16.4%</b>

### Equity Growth for Mid/Small Cap Universe:

Equity Growth by Sectors																		
Row Labels	FY02-18 CAGR	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	12.9%	16.9%	14.7%	4.3%	2.6%	8.7%	16.2%	13.4%	17.4%	11.2%	20.5%	22.4%	16.1%	16.2%	12.4%	16.7%	-0.3%	13.1%
Consumption	17.2%	22.9%	9.0%	11.7%	12.8%	11.3%	14.5%	16.8%	-16.7%	27.9%	20.3%	48.4%	27.7%	47.9%	16.0%	9.6%	10.1%	18.1%
Energy	12.9%	5.3%	6.3%	5.9%	3.2%	4.5%	2.9%	5.1%	13.3%	18.0%	7.1%	64.2%	12.3%	21.0%	15.2%	22.0%	11.7%	13.6%
Finance	17.7%	6.8%	4.8%	5.0%	9.1%	12.2%	15.2%	20.1%	28.4%	16.2%	19.3%	25.3%	27.3%	27.2%	31.5%	17.5%	21.6%	18.0%
Industrial/Engg	15.6%	13.1%	4.5%	5.6%	2.0%	4.6%	4.0%	8.6%	12.1%	20.8%	13.5%	65.0%	41.2%	33.5%	17.7%	11.4%	8.2%	16.6%
Materials	15.6%	6.6%	-5.0%	-2.8%	1.7%	7.4%	7.9%	11.9%	24.4%	26.1%	14.7%	32.5%	35.2%	27.1%	41.0%	30.4%	3.4%	16.4%
Pharma/Chemicals/Life Sciences	17.8%	10.9%	15.1%	12.8%	15.0%	9.9%	16.9%	16.8%	13.5%	20.2%	10.9%	34.5%	17.8%	33.4%	22.8%	23.1%	14.0%	18.0%
Technology/Telecom/Media	9.0%	13.6%	10.4%	8.1%	7.6%	10.4%	5.8%	0.3%	9.1%	19.3%	5.0%	14.9%	26.1%	24.5%	7.9%	-9.7%	-3.3%	9.4%
Transportation/Logistics/Supply	12.6%	5.0%	-0.5%	-11.8%	12.4%	4.9%	6.6%	8.1%	14.9%	14.7%	34.7%	24.8%	18.9%	23.9%	35.0%	12.7%	6.6%	13.2%
<b>Grand Total</b>	<b>15.4%</b>	<b>9.3%</b>	<b>4.9%</b>	<b>4.0%</b>	<b>6.3%</b>	<b>8.5%</b>	<b>9.7%</b>	<b>12.7%</b>	<b>17.0%</b>	<b>19.7%</b>	<b>15.6%</b>	<b>38.8%</b>	<b>27.1%</b>	<b>27.6%</b>	<b>24.8%</b>	<b>16.3%</b>	<b>10.1%</b>	<b>15.8%</b>

## DETAILED PROFITABILITY TABLES

### ROE for Total Universe:

Weighted ROE% by Sectors																	
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	18.6%	16.6%	11.1%	10.4%	7.7%	14.4%	16.8%	19.0%	17.1%	23.7%	19.8%	18.3%	19.4%	18.9%	14.6%	5.5%	15.6%
Consumption	22.3%	19.2%	22.3%	23.5%	24.1%	27.2%	26.5%	24.3%	22.8%	20.4%	29.7%	28.1%	26.0%	24.5%	24.5%	21.2%	24.3%
Energy	13.0%	12.6%	11.2%	9.6%	12.5%	11.6%	12.9%	14.6%	17.1%	14.0%	20.6%	20.4%	18.5%	21.6%	21.5%	21.1%	16.0%
Finance			5.3%	11.8%	12.6%	15.0%	15.7%	16.3%	16.1%	15.5%	17.0%	16.7%	16.5%	17.9%	21.0%	20.5%	15.6%
Industrial/Engg	12.1%	9.0%	7.9%	3.8%	5.9%	8.1%	12.1%	15.4%	15.3%	15.9%	27.0%	27.7%	22.7%	20.1%	16.3%	12.3%	14.6%
Materials	9.7%	5.3%	-0.6%	2.4%	11.6%	7.6%	14.8%	21.1%	18.9%	19.5%	34.7%	35.5%	31.5%	42.8%	29.9%	10.8%	19.1%
Pharma/Chemicals/Life Sciences	14.5%	14.5%	18.1%	19.5%	15.7%	16.9%	15.0%	38.0%	18.5%	12.1%	24.0%	25.4%	21.4%	20.9%	21.6%	20.5%	20.1%
Technology/Telecom/Media	11.6%	13.5%	18.8%	17.1%	17.3%	13.1%	14.4%	17.1%	21.9%	24.1%	28.2%	27.9%	18.9%	19.7%	9.8%	7.5%	18.0%
Transportation/Logistics/Supplyc	14.0%	13.6%	14.6%	15.1%	15.1%	16.0%	21.0%	24.6%	18.4%	9.3%	21.1%	24.2%	28.8%	31.3%	25.2%	13.7%	19.5%
<b>Grand Total</b>	<b>13.3%</b>	<b>10.0%</b>	<b>9.3%</b>	<b>10.7%</b>	<b>12.9%</b>	<b>13.0%</b>	<b>15.1%</b>	<b>17.9%</b>	<b>17.6%</b>	<b>16.1%</b>	<b>23.1%</b>	<b>22.9%</b>	<b>20.6%</b>	<b>22.9%</b>	<b>21.0%</b>	<b>17.7%</b>	<b>16.7%</b>

Given the volatility in numbers for some sectors, it tricky to estimate profitability for the future

### ROE for Mid/Small Cap Universe:

Weighted ROE% by Sectors																	
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	18.6%	14.9%	9.4%	10.4%	7.7%	14.4%	16.8%	19.0%	17.1%	23.7%	19.8%	18.3%	19.4%	18.9%	14.6%	5.5%	15.5%
Consumption	21.5%	12.2%	14.7%	15.9%	15.2%	18.1%	16.9%	15.4%	12.0%	9.2%	21.4%	18.0%	17.1%	11.1%	10.4%	7.1%	14.8%
Energy	9.8%	6.1%	4.8%	3.1%	6.0%	3.4%	5.2%	10.1%	11.3%	8.6%	13.5%	13.1%	11.0%	17.3%	18.7%	13.7%	9.7%
Finance																	
Industrial/Engg	10.6%	6.8%	6.6%	4.8%	4.5%	6.1%	8.6%	13.4%	12.7%	13.9%	27.2%	25.9%	20.1%	17.5%	14.7%	12.4%	12.9%
Materials	5.0%	-1.3%	-1.7%	4.6%	6.7%	9.1%	12.1%	15.7%	21.8%	16.9%	26.7%	30.6%	25.8%	40.2%	27.8%	7.0%	15.4%
Pharma/Chemicals/Life Sciences	12.6%	14.3%	15.0%	14.1%	12.7%	16.6%	15.3%	14.6%	13.7%	11.7%	22.9%	21.0%	21.4%	22.9%	20.5%	17.9%	16.7%
Technology/Telecom/Media	16.8%	10.8%	14.2%	11.6%	15.5%	5.1%	7.0%	10.1%	11.4%	6.9%	13.7%	9.7%	-2.4%	4.8%	-2.9%	2.1%	8.4%
Transportation/Logistics/Supplyc	5.5%	9.4%	9.9%	8.1%	6.9%	5.9%	9.2%	12.9%	9.2%	13.8%	19.4%	19.1%	23.8%	30.9%	21.6%	13.3%	13.7%
<b>Grand Total</b>	<b>11.1%</b>	<b>5.4%</b>	<b>4.3%</b>	<b>7.4%</b>	<b>8.3%</b>	<b>9.8%</b>	<b>11.5%</b>	<b>14.6%</b>	<b>15.1%</b>	<b>14.1%</b>	<b>21.0%</b>	<b>20.5%</b>	<b>17.7%</b>	<b>21.2%</b>	<b>17.5%</b>	<b>12.9%</b>	<b>13.3%</b>

Given the volatility in numbers for some sectors, it tricky to estimate profitability for the future

### ROCE for Total Universe:

Weighted ROCE% by Sectors																	
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	13.8%	12.5%	9.4%	9.1%	7.7%	10.3%	12.3%	13.8%	12.1%	16.6%	13.9%	13.5%	14.7%	14.3%	12.5%	8.5%	12.2%
Consumption	16.5%	16.2%	17.4%	18.4%	18.5%	20.4%	19.5%	17.5%	17.0%	15.8%	20.7%	20.0%	19.2%	18.6%	19.4%	18.2%	18.3%
Energy	9.6%	9.2%	8.3%	7.4%	8.9%	8.9%	9.9%	10.6%	11.9%	11.1%	14.8%	15.1%	14.2%	16.5%	17.2%	16.1%	11.9%
Finance																	
Industrial/Engg	10.3%	8.8%	8.2%	6.7%	7.8%	8.6%	10.5%	11.9%	11.8%	12.4%	18.2%	19.0%	17.1%	15.9%	13.7%	11.8%	12.0%
Materials	9.0%	7.1%	4.0%	5.0%	9.5%	7.3%	11.4%	14.6%	12.8%	13.2%	22.9%	23.5%	21.9%	26.7%	17.9%	10.6%	13.6%
Pharma/Chemicals/Life Sciences	11.2%	11.5%	13.9%	15.0%	12.9%	13.8%	12.8%	26.5%	13.4%	10.6%	16.7%	17.1%	15.3%	16.1%	16.9%	16.8%	15.0%
Technology/Telecom/Media	9.3%	11.7%	14.2%	13.5%	13.3%	10.7%	11.5%	13.5%	17.3%	20.6%	22.7%	22.8%	15.7%	16.2%	10.1%	8.9%	14.5%
Transportation/Logistics/Supplyc	10.8%	10.6%	10.4%	11.2%	11.4%	10.6%	12.9%	14.5%	11.6%	8.7%	14.9%	16.9%	21.0%	23.1%	18.4%	12.0%	13.7%
<b>Grand Total</b>	<b>10.3%</b>	<b>10.5%</b>	<b>9.0%</b>	<b>8.7%</b>	<b>10.1%</b>	<b>9.7%</b>	<b>11.4%</b>	<b>13.2%</b>	<b>12.8%</b>	<b>12.6%</b>	<b>17.7%</b>	<b>17.9%</b>	<b>16.6%</b>	<b>18.3%</b>	<b>16.5%</b>	<b>13.9%</b>	<b>13.1%</b>

Given the volatility in numbers for some sectors, it tricky to estimate profitability for the future

### ROCE for Mid/Small Cap Universe:

Weighted ROCE% by Sectors																	
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	15.0%	10.4%	8.1%	9.1%	7.7%	10.3%	12.3%	13.8%	12.1%	16.6%	13.9%	13.5%	14.7%	14.3%	12.5%	8.5%	12.0%
Consumption	12.7%	10.7%	11.9%	12.9%	12.4%	13.9%	12.8%	11.0%	9.6%	8.8%	14.5%	12.9%	12.6%	9.8%	10.2%	9.7%	11.7%
Energy	9.1%	8.0%	7.3%	5.5%	6.1%	5.0%	5.8%	7.5%	8.2%	8.0%	10.3%	10.2%	9.2%	13.4%	14.6%	12.3%	8.8%
Finance																	
Industrial/Engg	10.3%	7.9%	7.8%	7.3%	7.2%	7.7%	8.8%	10.8%	10.3%	11.3%	17.9%	17.1%	14.9%	13.9%	12.8%	12.0%	11.1%
Materials	6.4%	3.3%	4.1%	6.4%	6.9%	8.0%	9.6%	11.4%	14.4%	12.0%	18.2%	20.8%	17.9%	24.6%	16.8%	9.5%	11.9%
Pharma/Chemicals/Life Sciences	10.3%	12.3%	11.9%	11.8%	11.0%	13.5%	12.5%	11.2%	10.4%	10.5%	15.5%	14.5%	15.5%	16.8%	15.9%	15.0%	13.0%
Technology/Telecom/Media	8.5%	12.2%	10.6%	10.3%	12.0%	7.7%	8.9%	9.8%	10.6%	8.8%	12.5%	10.3%	2.4%	7.0%	2.1%	5.6%	8.7%
Transportation/Logistics/Supplyc	6.8%	9.5%	7.5%	8.3%	7.7%	6.0%	7.2%	8.7%	7.4%	11.2%	13.9%	14.3%	18.4%	23.3%	15.9%	11.2%	11.1%
<b>Grand Total</b>	<b>9.4%</b>	<b>8.2%</b>	<b>7.6%</b>	<b>7.6%</b>	<b>7.7%</b>	<b>7.8%</b>	<b>8.9%</b>	<b>10.2%</b>	<b>10.6%</b>	<b>10.7%</b>	<b>15.3%</b>	<b>15.3%</b>	<b>13.8%</b>	<b>16.6%</b>	<b>13.5%</b>	<b>10.5%</b>	<b>10.9%</b>

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### Net Margins for Total Universe:

PAT as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	8.1%	6.7%	4.0%	3.9%	2.9%	5.4%	5.7%	7.1%	6.6%	6.3%	7.3%	7.2%	7.7%	7.4%	5.9%	2.4%	3.2%	5.8%
Consumption	12.3%	6.0%	6.4%	7.7%	7.9%	8.3%	7.9%	8.2%	8.5%	7.4%	10.1%	9.2%	8.6%	8.0%	8.2%	7.6%	7.5%	8.2%
Energy	6.1%	7.4%	6.2%	4.1%	4.5%	4.2%	4.8%	6.4%	8.2%	5.8%	8.4%	7.9%	7.6%	9.3%	9.7%	8.9%	6.7%	6.8%
Finance																		
Industrial/Engg	6.3%	4.5%	3.9%	1.9%	2.9%	4.0%	6.0%	8.0%	8.0%	7.4%	11.6%	10.6%	8.8%	7.7%	6.8%	5.6%	4.3%	6.4%
Materials	5.4%	3.4%	-0.4%	1.5%	6.8%	4.6%	8.5%	11.4%	9.6%	7.8%	12.6%	17.6%	15.2%	16.8%	11.5%	4.3%	-0.6%	8.0%
Pharma/Chemicals/Life Sciences	11.3%	10.4%	11.6%	12.0%	9.6%	10.3%	9.9%	25.0%	10.3%	6.4%	12.8%	12.0%	10.7%	10.1%	9.9%	9.0%	8.8%	11.2%
Technology/Telecom/Media	8.5%	9.3%	10.9%	10.0%	9.7%	7.7%	8.8%	11.0%	14.2%	13.6%	15.3%	14.0%	10.2%	11.7%	7.6%	6.9%	11.6%	10.7%
Transportation/Logistics/Supply	4.3%	4.2%	4.4%	4.4%	4.2%	4.2%	4.9%	5.9%	4.5%	2.3%	5.9%	6.4%	8.3%	7.4%	6.3%	4.3%	3.6%	5.0%
<b>Grand Total</b>	<b>6.7%</b>	<b>6.2%</b>	<b>5.4%</b>	<b>4.6%</b>	<b>5.4%</b>	<b>5.0%</b>	<b>6.1%</b>	<b>8.3%</b>	<b>8.4%</b>	<b>6.6%</b>	<b>9.9%</b>	<b>9.8%</b>	<b>9.0%</b>	<b>9.7%</b>	<b>8.9%</b>	<b>7.3%</b>	<b>5.8%</b>	<b>7.2%</b>

### Net Margins for Mid/Small Cap Universe:

PAT as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	8.1%	6.0%	3.3%	3.9%	2.9%	5.4%	5.7%	7.1%	6.6%	6.3%	7.3%	7.2%	7.7%	7.4%	5.9%	2.4%	3.2%	5.7%
Consumption	9.7%	2.4%	2.9%	4.0%	4.0%	4.4%	4.1%	4.7%	4.3%	3.2%	6.6%	5.2%	4.7%	2.9%	2.7%	2.1%	2.2%	4.1%
Energy	5.3%	3.8%	3.3%	1.0%	1.7%	1.0%	1.7%	4.0%	4.6%	2.8%	4.2%	3.5%	3.1%	5.1%	5.8%	4.1%	3.0%	3.4%
Finance																		
Industrial/Engg	6.2%	3.7%	3.6%	2.5%	2.4%	3.4%	4.7%	7.7%	7.6%	7.5%	12.5%	10.3%	8.0%	6.8%	6.2%	5.7%	3.6%	6.0%
Materials	3.8%	-1.0%	-1.0%	2.5%	3.8%	5.1%	6.6%	8.7%	11.2%	7.4%	11.2%	14.2%	12.1%	14.9%	10.0%	2.6%	-1.9%	6.5%
Pharma/Chemicals/Life Sciences	9.1%	9.2%	9.5%	7.9%	6.9%	8.7%	8.3%	8.3%	7.3%	6.0%	11.2%	9.5%	9.9%	9.7%	8.2%	6.9%	6.0%	8.4%
Technology/Telecom/Media	9.1%	5.8%	6.9%	3.6%	4.7%	1.6%	2.5%	4.0%	4.4%	2.6%	5.8%	4.0%	-1.1%	2.7%	-2.1%	1.7%	9.1%	3.8%
Transportation/Logistics/Supply	1.4%	3.2%	3.3%	2.8%	2.3%	2.0%	2.4%	3.6%	2.9%	3.7%	5.0%	4.6%	6.8%	6.7%	5.2%	4.6%	4.2%	3.8%
<b>Grand Total</b>	<b>6.1%</b>	<b>3.5%</b>	<b>3.2%</b>	<b>2.8%</b>	<b>3.1%</b>	<b>3.4%</b>	<b>4.1%</b>	<b>6.0%</b>	<b>6.5%</b>	<b>5.1%</b>	<b>8.2%</b>	<b>7.6%</b>	<b>6.5%</b>	<b>7.6%</b>	<b>6.0%</b>	<b>3.8%</b>	<b>2.9%</b>	<b>5.1%</b>

### Operating Margins for Total Universe:

EBIDTA as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	14.1%	13.7%	10.8%	11.5%	11.6%	12.1%	13.1%	14.7%	14.4%	13.3%	15.3%	16.0%	16.4%	16.1%	16.2%	15.6%	15.4%	14.1%
Consumption	20.0%	11.4%	12.3%	14.2%	14.4%	14.3%	14.1%	14.6%	15.5%	13.8%	16.0%	16.1%	15.5%	15.2%	15.7%	16.2%	15.4%	15.0%
Energy	15.4%	17.3%	16.3%	11.1%	10.9%	10.4%	11.8%	13.9%	17.1%	13.2%	16.4%	15.7%	15.4%	18.5%	20.6%	18.6%	16.5%	15.2%
Finance																		
Industrial/Engg	15.3%	15.1%	14.5%	14.0%	13.8%	14.5%	15.6%	17.8%	18.1%	16.8%	20.9%	19.7%	17.1%	15.8%	16.1%	15.9%	15.7%	16.3%
Materials	20.0%	19.6%	15.8%	18.8%	18.8%	17.3%	18.7%	21.7%	22.0%	18.4%	22.2%	31.9%	28.7%	30.5%	24.3%	19.5%	16.4%	21.4%
Pharma/Chemicals/Life Sciences	22.9%	21.4%	21.7%	19.6%	19.9%	20.4%	20.7%	20.9%	22.1%	19.2%	22.3%	21.6%	19.8%	19.3%	19.4%	19.2%	19.4%	20.6%
Technology/Telecom/Media	27.5%	28.5%	29.0%	26.5%	25.2%	23.8%	24.8%	25.3%	26.2%	25.6%	26.6%	24.8%	21.7%	23.7%	21.3%	22.5%	25.7%	25.2%
Transportation/Logistics/Supply	12.5%	12.3%	12.6%	14.0%	13.2%	12.0%	10.8%	11.7%	11.3%	8.3%	12.0%	11.8%	14.3%	13.4%	13.3%	12.8%	12.0%	12.3%
<b>Grand Total</b>	<b>17.0%</b>	<b>16.8%</b>	<b>16.2%</b>	<b>14.7%</b>	<b>14.2%</b>	<b>13.5%</b>	<b>14.4%</b>	<b>16.3%</b>	<b>17.8%</b>	<b>15.0%</b>	<b>18.3%</b>	<b>18.4%</b>	<b>17.4%</b>	<b>18.9%</b>	<b>19.1%</b>	<b>17.8%</b>	<b>16.4%</b>	<b>16.6%</b>

### Operating Margins for Mid/Small Cap Universe:

EBIDTA as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	14.1%	12.4%	9.5%	11.5%	11.6%	12.1%	13.1%	14.7%	14.4%	13.3%	15.3%	16.0%	16.4%	16.1%	16.2%	15.6%	15.4%	14.0%
Consumption	12.7%	5.9%	6.8%	9.4%	9.5%	9.4%	9.1%	9.9%	9.9%	8.4%	10.2%	10.4%	10.4%	8.3%	8.1%	8.9%	9.3%	9.2%
Energy	19.2%	21.1%	20.8%	8.3%	8.0%	7.1%	8.0%	9.7%	10.4%	7.8%	8.8%	7.8%	7.2%	11.5%	13.3%	11.7%	11.3%	11.3%
Finance																		
Industrial/Engg	15.3%	15.5%	15.0%	14.1%	13.9%	14.4%	14.7%	17.7%	18.2%	17.4%	22.1%	19.9%	16.8%	15.3%	16.1%	16.2%	15.3%	16.4%
Materials	16.6%	14.9%	11.7%	15.5%	15.6%	16.2%	17.0%	19.2%	23.3%	17.6%	22.5%	27.0%	24.3%	27.6%	21.8%	18.1%	15.7%	19.1%
Pharma/Chemicals/Life Sciences	21.3%	19.5%	19.4%	16.1%	16.7%	18.2%	18.9%	18.6%	20.0%	17.4%	20.6%	19.0%	18.8%	19.4%	17.6%	17.0%	17.3%	18.6%
Technology/Telecom/Media	19.7%	23.5%	24.3%	13.9%	13.2%	12.9%	13.4%	14.2%	13.5%	12.7%	16.2%	14.4%	10.3%	12.7%	10.5%	15.7%	21.2%	15.4%
Transportation/Logistics/Supply	7.8%	9.6%	9.1%	13.3%	11.4%	9.5%	7.5%	8.0%	7.5%	8.6%	9.3%	8.3%	11.5%	10.5%	9.8%	10.5%	11.2%	9.6%
<b>Grand Total</b>	<b>15.6%</b>	<b>13.7%</b>	<b>13.4%</b>	<b>12.3%</b>	<b>11.9%</b>	<b>11.8%</b>	<b>12.1%</b>	<b>13.9%</b>	<b>15.0%</b>	<b>12.8%</b>	<b>15.8%</b>	<b>15.3%</b>	<b>14.1%</b>	<b>15.6%</b>	<b>14.7%</b>	<b>14.0%</b>	<b>13.8%</b>	<b>13.9%</b>

## DETAILED EXPENSE TABLES

### COGS for Total Universe:

COGS as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	53.3%	54.3%	58.7%	58.2%	57.6%	58.7%	59.9%	57.5%	57.7%	62.4%	54.6%	51.8%	53.5%	50.6%	48.7%	45.3%	47.1%	54.7%
Consumption	44.1%	67.5%	64.0%	54.5%	53.1%	55.3%	54.7%	52.2%	50.6%	49.9%	49.8%	50.3%	51.6%	50.3%	51.6%	48.3%	49.6%	52.8%
Energy	63.2%	60.7%	63.7%	72.8%	75.0%	75.3%	74.0%	70.3%	68.8%	71.9%	70.7%	70.3%	70.1%	66.6%	65.0%	63.6%	64.7%	68.6%
Finance																		
Industrial/Engg	48.1%	46.8%	47.6%	48.5%	48.5%	48.7%	49.4%	47.2%	45.9%	47.4%	47.7%	48.1%	48.3%	48.5%	45.8%	44.2%	43.8%	47.3%
Materials	44.0%	40.8%	44.1%	44.1%	45.1%	46.9%	48.8%	45.3%	44.9%	48.9%	45.1%	39.6%	39.1%	36.3%	36.0%	37.0%	37.6%	42.6%
Pharma/Chemicals/Life Sciences	39.0%	38.1%	39.0%	41.4%	41.7%	41.4%	42.3%	42.8%	42.5%	43.2%	44.8%	45.9%	48.0%	47.7%	47.9%	47.4%	47.4%	43.6%
Technology/Telecom/Media	5.5%	4.8%	4.7%	13.8%	13.5%	14.4%	15.4%	15.4%	17.3%	16.5%	17.6%	18.4%	20.4%	19.4%	17.9%	20.1%	22.9%	15.2%
Transportation/Logistics/Supplyc	63.2%	62.5%	63.2%	60.7%	62.1%	64.3%	68.6%	67.9%	67.1%	66.0%	65.0%	67.6%	65.9%	68.4%	65.6%	60.1%	60.8%	64.6%
<b>Grand Total</b>	<b>52.3%</b>	<b>51.9%</b>	<b>53.0%</b>	<b>56.5%</b>	<b>58.6%</b>	<b>60.0%</b>	<b>60.3%</b>	<b>57.1%</b>	<b>55.8%</b>	<b>58.0%</b>	<b>56.7%</b>	<b>57.7%</b>	<b>58.3%</b>	<b>56.7%</b>	<b>55.5%</b>	<b>54.2%</b>	<b>55.0%</b>	<b>56.3%</b>

### COGS for Mid/Small Cap Universe:

COGS as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	53.3%	55.4%	60.0%	58.2%	57.6%	58.7%	59.9%	57.5%	57.7%	62.4%	54.6%	51.8%	53.5%	50.6%	48.7%	45.3%	47.1%	54.9%
Consumption	51.3%	78.4%	76.2%	62.1%	60.2%	63.3%	62.4%	59.5%	58.3%	57.1%	56.6%	58.3%	60.8%	60.0%	61.0%	56.0%	55.7%	61.0%
Energy	40.0%	32.5%	33.4%	70.5%	72.4%	72.5%	71.6%	70.1%	67.2%	73.3%	76.5%	78.5%	79.2%	74.4%	70.7%	72.6%	70.2%	66.2%
Finance																		
Industrial/Engg	50.5%	48.4%	48.9%	49.8%	49.3%	49.4%	49.7%	46.8%	44.2%	43.8%	45.3%	47.4%	47.5%	48.8%	46.8%	45.7%	45.6%	47.5%
Materials	41.6%	42.7%	49.7%	50.5%	51.1%	51.0%	52.9%	50.5%	49.2%	51.5%	49.2%	44.7%	43.7%	40.4%	40.1%	40.9%	41.8%	46.6%
Pharma/Chemicals/Life Sciences	41.1%	42.9%	43.0%	47.9%	47.9%	45.7%	46.9%	47.7%	46.8%	46.9%	48.3%	48.5%	50.5%	50.2%	50.3%	49.2%	48.4%	47.2%
Technology/Telecom/Media	19.6%	11.8%	10.9%	38.8%	37.5%	36.8%	37.4%	37.0%	38.4%	36.8%	36.9%	37.1%	41.1%	38.8%	32.8%	32.0%	31.2%	32.6%
Transportation/Logistics/Supplyc	62.4%	69.8%	68.6%	65.4%	68.0%	71.0%	77.7%	77.7%	77.7%	74.8%	73.9%	76.8%	73.3%	75.1%	71.8%	63.0%	62.9%	71.2%
<b>Grand Total</b>	<b>46.9%</b>	<b>53.0%</b>	<b>52.7%</b>	<b>57.3%</b>	<b>58.1%</b>	<b>58.8%</b>	<b>60.0%</b>	<b>57.9%</b>	<b>56.0%</b>	<b>58.0%</b>	<b>57.6%</b>	<b>58.8%</b>	<b>59.5%</b>	<b>57.7%</b>	<b>55.7%</b>	<b>54.2%</b>	<b>53.1%</b>	<b>56.2%</b>

### Non-COGS (operating expenses) for Total Universe:

Total non-COGS Expenses as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	34.1%	33.5%	31.7%	31.7%	32.3%	30.6%	28.2%	29.4%	30.0%	27.2%	33.7%	34.9%	32.8%	35.8%	38.4%	41.8%	40.1%	33.3%
Consumption	37.8%	22.2%	24.6%	32.6%	33.8%	31.8%	32.7%	34.6%	36.8%	38.6%	36.9%	35.9%	35.5%	36.8%	35.4%	37.9%	37.4%	34.2%
Energy	24.0%	25.5%	22.3%	18.1%	15.7%	15.9%	15.9%	19.4%	20.1%	18.7%	17.4%	17.5%	17.8%	18.4%	19.8%	21.1%	21.7%	19.4%
Finance																		
Industrial/Engg	39.4%	41.0%	40.1%	40.0%	40.2%	39.2%	37.1%	37.4%	40.2%	38.9%	34.7%	36.2%	37.7%	38.8%	41.3%	43.4%	44.2%	39.4%
Materials	37.7%	42.0%	43.6%	39.5%	38.3%	37.9%	34.9%	35.0%	36.1%	34.9%	35.0%	31.6%	35.4%	36.1%	43.4%	47.2%	51.1%	38.8%
Pharma/Chemicals/Life Sciences	41.9%	42.2%	40.9%	40.8%	40.1%	39.8%	39.4%	41.0%	38.4%	40.7%	38.0%	36.2%	35.8%	35.9%	35.8%	35.8%	35.9%	38.7%
Technology/Telecom/Media	70.6%	69.8%	69.1%	63.7%	64.5%	64.1%	62.1%	61.8%	59.1%	60.7%	59.4%	58.7%	59.8%	59.7%	64.4%	60.8%	57.0%	62.7%
Transportation/Logistics/Supplyc	25.7%	26.6%	25.1%	26.4%	26.1%	25.0%	22.0%	21.6%	24.3%	28.4%	25.9%	23.0%	23.0%	20.6%	23.6%	30.0%	30.1%	25.1%
<b>Grand Total</b>	<b>33.1%</b>	<b>33.8%</b>	<b>32.9%</b>	<b>30.8%</b>	<b>29.0%</b>	<b>28.2%</b>	<b>27.2%</b>	<b>29.3%</b>	<b>30.6%</b>	<b>30.1%</b>	<b>28.6%</b>	<b>27.1%</b>	<b>27.3%</b>	<b>27.5%</b>	<b>29.5%</b>	<b>31.2%</b>	<b>31.8%</b>	<b>29.9%</b>
These are all expenses pre-operating profits but post COGS. Includes SG&A, Power & Fuel, Employee and other expenses.																		

### Non-COGS (operating expenses) for Mid/Small Universe:

Total non-COGS Expenses as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	34.1%	33.5%	31.7%	31.7%	32.3%	30.6%	28.2%	29.4%	30.0%	27.2%	33.7%	34.9%	32.8%	35.8%	38.4%	41.8%	40.1%	33.3%
Consumption	37.7%	16.2%	17.5%	29.4%	31.4%	28.5%	29.7%	31.8%	35.1%	36.8%	35.8%	33.4%	31.6%	33.7%	33.0%	37.1%	37.1%	31.5%
Energy	43.4%	49.8%	48.5%	22.9%	20.7%	21.6%	21.8%	22.1%	25.4%	21.0%	17.1%	15.6%	15.4%	16.2%	18.6%	17.4%	20.4%	24.6%
Finance																		
Industrial/Engg	37.1%	38.8%	37.9%	38.4%	39.1%	38.6%	37.8%	37.6%	40.6%	41.7%	35.6%	36.7%	38.6%	38.6%	40.3%	41.1%	42.5%	38.9%
Materials	43.3%	44.3%	40.5%	35.7%	35.1%	34.4%	32.0%	32.3%	30.5%	33.3%	31.0%	31.3%	35.4%	35.0%	41.8%	44.9%	48.1%	37.0%
Pharma/Chemicals/Life Sciences	41.8%	39.5%	39.5%	37.8%	37.2%	37.7%	36.6%	38.3%	36.1%	38.7%	36.7%	35.8%	33.7%	33.1%	34.8%	35.9%	36.7%	37.1%
Technology/Telecom/Media	63.5%	66.9%	67.1%	51.3%	52.8%	51.8%	51.1%	51.9%	51.1%	53.2%	52.1%	50.6%	50.9%	52.9%	61.3%	56.1%	54.0%	55.2%
Transportation/Logistics/Supplyc	31.4%	22.3%	23.8%	23.0%	22.2%	21.4%	16.4%	15.8%	17.4%	19.7%	19.4%	17.2%	18.7%	16.9%	20.4%	28.7%	28.3%	21.4%
<b>Grand Total</b>	<b>40.0%</b>	<b>35.2%</b>	<b>35.6%</b>	<b>32.2%</b>	<b>31.7%</b>	<b>31.0%</b>	<b>29.6%</b>	<b>30.3%</b>	<b>31.9%</b>	<b>31.8%</b>	<b>29.6%</b>	<b>28.6%</b>	<b>29.1%</b>	<b>29.2%</b>	<b>32.5%</b>	<b>34.4%</b>	<b>36.3%</b>	<b>32.3%</b>
These are all expenses pre-operating profits but post COGS. Includes SG&A, Power & Fuel, Employee and other expenses.																		

### Interest Expense for Total Universe:

Interest Expense as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	2.3%	3.0%	2.8%	2.9%	3.0%	2.5%	2.1%	2.0%	2.0%	1.9%	1.9%	1.9%	1.8%	2.0%	3.4%	4.7%	6.1%	2.7%
Consumption	1.7%	1.2%	1.4%	1.5%	1.6%	1.5%	1.5%	1.3%	1.4%	1.7%	1.7%	1.7%	1.3%	1.7%	1.7%	2.2%	2.6%	1.6%
Energy	2.5%	2.9%	3.0%	2.2%	1.9%	1.8%	1.7%	1.4%	1.5%	1.8%	1.3%	1.3%	1.3%	1.5%	2.3%	2.0%	2.8%	2.0%
Finance																		
Industrial/Engg	4.4%	5.2%	5.2%	5.3%	5.2%	4.7%	4.0%	3.4%	3.4%	3.2%	2.5%	2.3%	2.1%	2.1%	2.5%	3.5%	4.6%	3.8%
Materials	5.5%	6.5%	6.1%	5.2%	4.5%	3.7%	3.3%	2.9%	2.8%	2.6%	2.9%	2.2%	2.4%	2.6%	4.3%	6.4%	8.2%	4.2%
Pharma/Chemicals/Life Sciences	3.2%	2.9%	2.3%	2.4%	3.2%	3.3%	3.2%	2.5%	2.8%	3.6%	2.6%	2.3%	2.2%	2.1%	2.4%	3.3%	4.3%	2.9%
Technology/Telecom/Media	3.9%	4.7%	4.0%	3.4%	3.1%	3.2%	3.3%	2.5%	1.7%	3.5%	2.1%	1.8%	2.1%	2.8%	3.9%	4.6%	4.3%	3.2%
Transportation/Logistics/Supplyc	2.1%	2.1%	2.1%	3.0%	3.1%	2.6%	2.2%	1.9%	2.3%	2.5%	1.9%	1.3%	1.5%	1.5%	1.6%	2.5%	3.0%	2.2%
<b>Grand Total</b>	<b>3.1%</b>	<b>3.5%</b>	<b>3.4%</b>	<b>3.1%</b>	<b>2.9%</b>	<b>2.6%</b>	<b>2.4%</b>	<b>2.1%</b>	<b>2.1%</b>	<b>2.4%</b>	<b>1.9%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.8%</b>	<b>2.5%</b>	<b>2.9%</b>	<b>3.7%</b>	<b>2.6%</b>

### Interest Expense for Mid/Small Universe:

Interest Expense as a % of Net Sales by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	2.3%	2.7%	2.5%	2.9%	3.0%	2.5%	2.1%	2.0%	2.0%	1.9%	1.9%	1.9%	1.8%	2.0%	3.4%	4.7%	6.1%	2.7%
Consumption	1.3%	1.5%	1.7%	2.1%	2.2%	2.1%	2.0%	1.7%	1.9%	2.5%	2.3%	2.4%	1.7%	1.9%	2.1%	3.0%	3.6%	2.1%
Energy	8.4%	11.4%	10.4%	4.0%	3.2%	2.8%	2.6%	2.0%	2.0%	2.0%	1.6%	1.3%	1.1%	1.3%	1.9%	2.6%	3.5%	3.7%
Finance																		
Industrial/Engg	4.4%	5.8%	5.3%	5.7%	5.6%	5.3%	4.7%	3.9%	3.9%	3.9%	2.9%	2.7%	2.6%	2.5%	3.0%	4.0%	5.2%	4.2%
Materials	5.1%	8.1%	6.7%	5.6%	4.9%	4.2%	3.5%	3.0%	2.8%	2.9%	2.8%	2.4%	2.8%	3.0%	4.9%	7.2%	9.0%	4.6%
Pharma/Chemicals/Life Sciences	2.2%	2.7%	3.2%	3.3%	3.5%	4.1%	3.8%	3.4%	3.6%	4.3%	3.1%	2.7%	2.4%	2.4%	2.8%	3.6%	5.0%	3.3%
Technology/Telecom/Media	1.7%	5.2%	4.4%	3.3%	3.1%	3.4%	3.5%	2.8%	3.0%	3.4%	2.8%	2.6%	2.9%	3.6%	4.5%	4.6%	3.8%	3.4%
Transportation/Logistics/Supplyc	2.6%	2.8%	2.8%	5.4%	5.1%	3.8%	2.6%	1.8%	2.0%	2.3%	1.6%	1.3%	1.7%	1.6%	1.3%	2.0%	2.5%	2.5%
<b>Grand Total</b>	<b>3.9%</b>	<b>4.9%</b>	<b>4.7%</b>	<b>4.3%</b>	<b>4.0%</b>	<b>3.6%</b>	<b>3.2%</b>	<b>2.6%</b>	<b>2.6%</b>	<b>2.8%</b>	<b>2.3%</b>	<b>2.1%</b>	<b>2.0%</b>	<b>2.1%</b>	<b>2.9%</b>	<b>4.0%</b>	<b>4.9%</b>	<b>3.3%</b>

## DETAILED LEVERAGE AND ASSET TURNS TABLES

### Leverage for Total Universe:

Weighted D/E Ratio by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	0.68	0.80	0.99	1.00	1.00	1.10	0.99	0.72	0.81	0.88	0.83	0.77	0.66	0.63	0.79	0.98	0.98	<b>0.86</b>
Consumption	0.42	0.47	0.56	0.53	0.55	0.60	0.56	0.70	0.54	0.59	0.61	0.76	0.56	0.63	0.61	0.52	0.58	<b>0.58</b>
Energy	0.92	0.89	0.99	1.01	1.02	0.94	0.85	0.71	0.69	0.74	0.63	0.63	0.58	0.52	0.56	0.60	0.67	<b>0.76</b>
Finance																		
Industrial/Engg	0.82	1.13	1.25	1.23	1.17	1.10	1.00	0.88	0.83	0.92	0.79	0.87	0.69	0.67	0.66	0.72	0.81	<b>0.91</b>
Materials	1.08	1.24	1.30	1.20	1.10	0.96	0.83	0.81	0.87	1.00	0.95	0.76	0.66	0.75	1.12	1.67	1.67	<b>1.06</b>
Pharma/Chemicals/Life Sciences	0.64	0.66	0.61	0.55	0.60	0.64	0.62	0.51	0.70	0.87	0.70	0.78	0.78	0.59	0.57	0.66	0.72	<b>0.66</b>
Technology/Telecom/Media	0.66	0.80	0.88	0.68	0.72	0.75	0.77	0.73	0.38	0.50	0.49	0.40	0.47	0.52	0.53	0.46	0.37	<b>0.60</b>
Transportation/Logistics/Supplyc	0.86	1.00	0.83	1.36	1.24	1.41	1.50	1.24	1.37	1.53	0.98	0.82	0.65	0.63	0.69	0.80	0.90	<b>1.05</b>
<b>Grand Total</b>	<b>0.84</b>	<b>0.92</b>	<b>0.99</b>	<b>1.01</b>	<b>0.99</b>	<b>0.95</b>	<b>0.88</b>	<b>0.78</b>	<b>0.74</b>	<b>0.83</b>	<b>0.72</b>	<b>0.69</b>	<b>0.61</b>	<b>0.58</b>	<b>0.65</b>	<b>0.71</b>	<b>0.77</b>	<b>0.80</b>

### Leverage for Mid/Small Cap Universe:

Weighted D/E Ratio by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	0.68	0.79	1.06	1.00	1.00	1.10	0.99	0.72	0.81	0.88	0.83	0.77	0.66	0.63	0.79	0.98	0.98	<b>0.86</b>
Consumption	0.31	0.88	0.99	0.86	0.89	0.93	0.87	1.10	0.75	0.86	0.87	1.21	0.87	0.92	0.93	0.85	0.90	<b>0.88</b>
Energy	1.45	1.83	1.73	1.93	1.93	1.81	1.49	1.11	0.97	0.98	0.75	0.95	0.69	0.66	0.69	0.83	0.93	<b>1.22</b>
Finance																		
Industrial/Engg	0.63	1.13	1.14	1.17	1.12	1.09	1.01	0.90	0.86	0.94	0.84	1.01	0.87	0.79	0.77	0.80	0.89	<b>0.94</b>
Materials	0.76	1.26	1.36	1.38	1.28	1.15	0.99	0.88	0.86	0.98	0.95	0.70	0.79	0.85	1.26	1.88	1.86	<b>1.13</b>
Pharma/Chemicals/Life Sciences	0.49	0.55	0.73	0.71	0.70	0.79	0.88	0.75	0.96	1.04	0.86	0.96	0.75	0.72	0.73	0.81	0.91	<b>0.78</b>
Technology/Telecom/Media	0.37	1.14	1.34	1.27	1.23	1.23	1.10	0.85	0.80	1.02	0.79	0.68	0.70	0.60	0.60	0.50	0.41	<b>0.86</b>
Transportation/Logistics/Supplyc	1.09	0.99	0.95	1.87	1.91	1.89	2.02	1.35	1.16	1.14	0.90	0.82	0.64	0.65	0.72	0.70	0.75	<b>1.15</b>
<b>Grand Total</b>	<b>0.72</b>	<b>1.14</b>	<b>1.22</b>	<b>1.34</b>	<b>1.31</b>	<b>1.27</b>	<b>1.15</b>	<b>0.96</b>	<b>0.89</b>	<b>0.97</b>	<b>0.85</b>	<b>0.88</b>	<b>0.76</b>	<b>0.74</b>	<b>0.85</b>	<b>0.98</b>	<b>1.02</b>	<b>1.00</b>

### Interest Cover for Total Universe:

Interest Cover (EBIDTA/Interest) x by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	6.23	4.55	3.89	3.93	3.82	4.89	6.36	7.52	7.20	6.88	8.10	8.50	9.36	8.03	4.74	3.30	2.54	5.87
Consumption	11.80	9.41	9.06	9.17	9.01	9.51	9.34	11.02	11.03	7.94	9.67	9.69	11.82	9.02	9.19	7.40	5.97	9.42
Energy	6.08	5.94	5.44	5.07	5.88	5.63	6.80	9.72	11.65	7.17	12.61	11.81	11.92	12.52	8.93	9.45	6.01	8.39
Finance																		
Industrial/Engg	3.52	2.88	2.80	2.61	2.64	3.12	3.89	5.20	5.27	5.20	8.38	8.63	8.04	7.52	6.38	4.50	3.37	4.94
Materials	3.66	3.02	2.59	3.65	4.18	4.64	5.74	7.46	7.76	7.01	7.64	14.45	12.15	11.64	5.68	3.03	2.01	6.25
Pharma/Chemicals/Life Sciences	7.08	7.37	9.62	8.06	6.31	6.12	6.55	8.37	7.79	5.39	8.72	9.22	9.10	9.28	8.14	5.87	4.46	7.50
Technology/Telecom/Media	7.03	6.01	7.26	7.84	8.05	7.40	7.47	10.18	15.87	7.41	12.63	13.79	10.29	8.35	5.40	4.94	5.94	8.58
Transportation/Logistics/Supply	5.92	5.77	6.00	4.61	4.27	4.58	5.03	6.15	4.91	3.34	6.37	8.84	9.61	9.11	8.52	5.13	4.02	6.01
<b>Grand Total</b>	<b>5.41</b>	<b>4.86</b>	<b>4.79</b>	<b>4.69</b>	<b>4.94</b>	<b>5.15</b>	<b>5.99</b>	<b>7.90</b>	<b>8.53</b>	<b>6.34</b>	<b>9.58</b>	<b>11.15</b>	<b>10.81</b>	<b>10.55</b>	<b>7.62</b>	<b>6.18</b>	<b>4.44</b>	<b>7.00</b>

### Interest Cover for Mid/Small Cap Universe:

Interest Cover (EBIDTA/Interest) x by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	6.23	4.58	3.75	3.93	3.82	4.89	6.36	7.52	7.20	6.88	8.10	8.50	9.36	8.03	4.74	3.30	2.54	5.87
Consumption	9.88	4.06	4.05	4.53	4.24	4.55	4.47	5.83	5.33	3.42	4.37	4.34	5.99	4.39	3.84	2.93	2.60	4.64
Energy	2.29	1.84	1.99	2.07	2.50	2.51	3.05	4.88	5.32	3.87	5.56	5.88	6.54	8.58	6.93	4.57	3.19	4.21
Finance																		
Industrial/Engg	3.46	2.66	2.84	2.49	2.48	2.70	3.13	4.49	4.64	4.50	7.67	7.23	6.50	6.14	5.39	4.04	2.94	4.31
Materials	3.27	1.84	1.75	2.74	3.19	3.90	4.91	6.34	8.37	6.18	8.11	11.33	8.66	9.27	4.49	2.52	1.75	5.21
Pharma/Chemicals/Life Sciences	9.71	7.24	6.09	4.95	4.81	4.43	4.91	5.49	5.63	4.01	6.71	7.12	7.84	8.09	6.36	4.77	3.46	5.98
Technology/Telecom/Media	11.41	4.53	5.54	4.27	4.29	3.81	3.87	5.14	4.50	3.71	5.84	5.59	3.57	3.57	2.32	3.40	5.57	4.76
Transportation/Logistics/Supply	2.98	3.37	3.30	2.44	2.22	2.46	2.94	4.48	3.68	3.71	5.78	6.39	6.83	6.53	7.79	5.33	4.49	4.40
<b>Grand Total</b>	<b>3.99</b>	<b>2.83</b>	<b>2.87</b>	<b>2.83</b>	<b>2.98</b>	<b>3.28</b>	<b>3.83</b>	<b>5.30</b>	<b>5.68</b>	<b>4.60</b>	<b>6.81</b>	<b>7.40</b>	<b>7.02</b>	<b>7.28</b>	<b>5.14</b>	<b>3.53</b>	<b>2.79</b>	<b>4.60</b>

### Asset Turns for Total Universe:

Asset Turns (Sales/Capital Employed) x by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	1.27	1.31	1.35	1.33	1.26	1.18	1.40	1.45	1.36	1.82	1.35	1.34	1.43	1.50	1.30	1.20	1.13	<b>1.35</b>
Consumption	1.13	2.08	2.11	1.89	1.85	1.92	1.98	1.77	1.60	1.60	1.60	1.57	1.75	1.77	1.85	1.77	1.80	<b>1.77</b>
Energy	1.08	0.87	0.88	1.16	1.32	1.39	1.40	1.27	1.17	1.32	1.37	1.48	1.46	1.45	1.34	1.41	1.32	<b>1.28</b>
Finance																		
Industrial/Engg	0.99	0.90	0.87	0.92	0.91	0.94	0.97	0.97	0.96	1.05	1.07	1.21	1.36	1.48	1.43	1.27	1.14	<b>1.08</b>
Materials	0.83	0.70	0.70	0.76	0.72	0.82	0.90	0.91	0.97	1.20	1.18	0.99	1.12	1.27	1.11	0.95	0.83	<b>0.94</b>
Pharma/Chemicals/Life Sciences	0.72	0.79	0.91	0.98	0.98	0.93	0.90	0.89	0.96	0.98	0.98	1.05	1.01	1.20	1.30	1.30	1.24	<b>1.01</b>
Technology/Telecom/Media	0.83	0.77	0.88	0.98	0.96	0.95	0.90	0.85	1.02	1.05	1.10	1.24	1.17	1.02	0.87	0.74	0.74	<b>0.95</b>
Transportation/Logistics/Supplyc	1.57	1.67	1.71	1.46	1.45	1.50	1.59	1.70	1.62	1.54	1.68	1.91	1.87	2.29	2.19	1.74	1.61	<b>1.71</b>
<b>Grand Total</b>	<b>1.04</b>	<b>0.98</b>	<b>1.00</b>	<b>1.10</b>	<b>1.14</b>	<b>1.20</b>	<b>1.23</b>	<b>1.17</b>	<b>1.15</b>	<b>1.27</b>	<b>1.29</b>	<b>1.37</b>	<b>1.41</b>	<b>1.47</b>	<b>1.38</b>	<b>1.31</b>	<b>1.23</b>	<b>1.22</b>

### Asset Turns for Mid/Small Cap Universe:

Asset Turns (Sales/Capital Employed) x by Sectors																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	1.27	1.33	1.37	1.33	1.26	1.18	1.40	1.45	1.36	1.82	1.35	1.34	1.43	1.50	1.30	1.20	1.13	<b>1.35</b>
Consumption	1.54	2.59	2.43	2.00	1.90	1.98	2.05	1.72	1.43	1.43	1.46	1.41	1.67	1.88	1.99	1.84	1.77	<b>1.83</b>
Energy	0.78	0.58	0.53	1.08	1.21	1.21	1.21	1.15	1.14	1.49	1.48	1.85	1.99	1.95	1.77	1.81	1.51	<b>1.34</b>
Finance																		
Industrial/Engg	0.99	0.85	0.85	0.87	0.86	0.84	0.88	0.87	0.83	0.91	0.97	1.09	1.22	1.37	1.33	1.21	1.07	<b>1.00</b>
Materials	0.75	0.61	0.72	0.76	0.74	0.80	0.88	0.87	0.95	1.09	1.08	1.11	1.08	1.28	1.11	0.94	0.81	<b>0.92</b>
Pharma/Chemicals/Life Sciences	0.88	0.93	0.86	0.99	1.04	1.00	0.93	0.95	0.90	0.93	0.97	1.04	1.09	1.26	1.33	1.38	1.26	<b>1.04</b>
Technology/Telecom/Media	1.31	0.84	0.87	1.44	1.46	1.45	1.39	1.36	1.40	1.34	1.32	1.39	1.24	1.07	0.90	0.87	0.97	<b>1.21</b>
Transportation/Logistics/Supplyc	1.83	1.47	1.66	0.96	1.01	1.03	1.26	1.44	1.42	1.55	1.87	2.11	1.95	2.51	2.31	1.69	1.65	<b>1.63</b>
<b>Grand Total</b>	<b>1.02</b>	<b>0.99</b>	<b>0.97</b>	<b>1.03</b>	<b>1.04</b>	<b>1.06</b>	<b>1.12</b>	<b>1.10</b>	<b>1.08</b>	<b>1.23</b>	<b>1.24</b>	<b>1.37</b>	<b>1.44</b>	<b>1.58</b>	<b>1.46</b>	<b>1.32</b>	<b>1.19</b>	<b>1.19</b>



## DETAILED SECTOR WEIGHT TABLES

### Market Cap Weights for Total Universe:

MCAp Contribution Weight %																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	1.6%	1.5%	1.2%	1.3%	1.0%	1.0%	1.5%	1.1%	1.1%	0.9%	0.8%	0.9%	1.2%	1.3%	1.3%	1.2%	1.1%	1.2%
Consumption	16.1%	15.2%	15.9%	15.1%	15.5%	15.8%	12.7%	9.4%	7.8%	9.2%	7.0%	8.3%	10.0%	9.1%	10.9%	16.5%	19.5%	12.6%
Energy	15.4%	16.1%	14.9%	14.1%	17.6%	19.5%	20.1%	21.7%	23.7%	31.3%	26.7%	23.9%	25.6%	30.2%	33.9%	29.9%	26.6%	23.0%
Finance	24.0%	23.0%	21.1%	21.8%	21.7%	22.0%	20.4%	20.6%	17.1%	14.3%	14.9%	15.0%	14.8%	15.8%	15.3%	14.0%	10.2%	18.0%
Industrial/Engg	11.1%	11.1%	11.2%	11.9%	9.7%	9.6%	10.3%	11.6%	13.0%	11.7%	17.5%	15.3%	14.2%	8.9%	7.3%	7.1%	6.2%	11.0%
Materials	7.6%	7.4%	5.7%	6.2%	7.8%	7.5%	9.5%	11.6%	13.8%	9.4%	12.3%	8.6%	9.2%	9.9%	7.7%	6.1%	5.4%	8.6%
Pharma/Chemicals/Life Sciences	6.6%	7.7%	8.7%	8.3%	6.5%	6.1%	5.1%	4.4%	4.1%	3.7%	3.3%	4.5%	5.1%	5.3%	4.9%	5.5%	6.2%	5.7%
Technology/Telecom/Media	9.2%	9.6%	12.5%	12.2%	12.5%	11.8%	12.1%	11.3%	11.0%	12.5%	11.0%	18.0%	13.5%	13.4%	11.8%	15.8%	20.3%	12.9%
Transportation/Logistics/Supplyc	8.4%	8.3%	8.7%	9.1%	7.7%	6.7%	8.3%	8.3%	8.5%	7.0%	6.5%	5.5%	6.3%	6.2%	6.8%	3.9%	4.4%	7.1%
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

### Market Cap Weights for Mid/Small Cap Universe:

MCAp Contribution Weight %																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	4.8%	3.5%	3.0%	4.2%	3.5%	3.4%	4.4%	3.3%	2.9%	3.0%	2.1%	2.6%	3.6%	4.0%	4.3%	4.4%	4.3%	3.6%
Consumption	12.3%	12.8%	12.9%	15.4%	13.7%	14.1%	10.4%	8.2%	6.5%	6.6%	5.6%	7.5%	8.3%	6.6%	5.3%	7.6%	8.6%	9.6%
Energy	3.9%	5.4%	5.2%	6.1%	7.3%	8.3%	10.0%	10.1%	11.7%	14.9%	14.3%	8.1%	10.1%	12.8%	20.0%	17.0%	17.2%	10.7%
Finance	18.6%	18.0%	16.2%	18.0%	23.7%	22.4%	20.6%	20.6%	15.5%	15.7%	13.8%	17.8%	20.1%	21.8%	21.2%	19.3%	12.5%	18.6%
Industrial/Engg	22.6%	21.9%	22.1%	21.1%	17.5%	17.7%	16.8%	17.9%	19.5%	18.9%	27.1%	27.4%	23.0%	16.7%	14.0%	15.7%	14.7%	19.7%
Materials	10.1%	8.8%	8.7%	11.2%	14.4%	14.7%	16.7%	19.0%	22.3%	17.3%	17.3%	16.8%	16.5%	19.5%	17.8%	17.1%	16.6%	15.6%
Pharma/Chemicals/Life Sciences	14.6%	14.5%	14.3%	9.4%	7.6%	7.9%	5.8%	4.5%	3.9%	3.8%	3.6%	5.6%	6.9%	7.8%	5.9%	6.4%	7.4%	7.6%
Technology/Telecom/Media	7.8%	8.9%	9.7%	6.4%	6.2%	5.5%	5.2%	4.4%	4.8%	6.4%	5.4%	9.1%	7.1%	5.6%	5.8%	6.9%	13.1%	7.0%
Transportation/Logistics/Supplyc	5.4%	6.3%	7.9%	8.2%	6.2%	6.0%	10.1%	12.0%	13.0%	13.3%	10.8%	5.2%	4.6%	5.2%	5.8%	5.6%	5.7%	7.7%
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

### Net Sales Weights for Total Universe:

Sales Contribution Weight %																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	1.9%	1.9%	2.1%	1.9%	1.8%	1.8%	2.0%	2.0%	2.0%	2.6%	1.9%	1.9%	2.1%	2.3%	2.3%	2.3%	2.5%	2.1%
Consumption	5.9%	10.7%	9.6%	7.7%	6.9%	7.2%	6.9%	7.1%	7.3%	6.5%	6.7%	6.9%	7.1%	6.9%	7.4%	7.2%	7.7%	7.4%
Energy	32.2%	26.3%	26.4%	31.4%	35.2%	36.0%	35.3%	33.9%	33.1%	34.8%	35.7%	39.7%	41.2%	40.7%	40.8%	42.6%	41.8%	35.7%
Finance	18.4%	19.6%	19.7%	17.7%	16.4%	16.2%	15.3%	14.5%	14.9%	13.8%	13.3%	13.3%	13.6%	13.6%	15.3%	16.6%	16.9%	15.8%
Industrial/Engg	9.9%	10.1%	10.3%	9.7%	9.6%	10.0%	10.3%	11.0%	11.3%	11.0%	11.1%	10.7%	10.0%	9.5%	9.2%	8.9%	8.9%	10.1%
Materials	10.9%	9.8%	9.8%	10.9%	10.7%	9.9%	10.7%	11.6%	11.8%	13.5%	14.5%	9.4%	9.1%	9.8%	8.9%	8.3%	7.7%	10.4%
Pharma/Chemicals/Life Sciences	3.5%	3.5%	3.5%	3.1%	2.8%	2.7%	2.5%	2.6%	2.8%	2.6%	2.7%	3.0%	2.9%	2.9%	3.1%	3.1%	3.1%	3.0%
Technology/Telecom/Media	5.5%	6.7%	6.8%	6.6%	6.2%	5.8%	5.8%	6.1%	6.2%	5.8%	5.5%	5.6%	5.0%	4.4%	3.8%	3.7%	3.9%	5.5%
Transportation/Logistics/Supply	11.8%	11.4%	11.9%	11.0%	10.4%	10.4%	11.3%	11.2%	10.7%	9.4%	8.6%	9.5%	9.0%	10.0%	9.0%	7.2%	7.5%	10.0%
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

### Net Sales Weights for Mid/Small Cap Universe:

Sales Contribution Weight %																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	5.3%	4.1%	4.4%	4.5%	4.4%	4.3%	4.5%	4.4%	4.5%	5.7%	4.2%	4.2%	4.7%	4.9%	5.0%	5.1%	5.6%	4.7%
Consumption	7.1%	19.0%	15.2%	11.1%	10.1%	10.5%	9.9%	9.9%	10.0%	8.5%	8.9%	8.7%	8.8%	8.0%	8.9%	8.4%	8.7%	10.1%
Energy	8.9%	8.4%	7.8%	17.0%	19.5%	19.5%	18.2%	17.2%	17.0%	19.4%	19.4%	20.7%	22.2%	21.0%	20.7%	21.8%	19.6%	17.5%
Finance	27.5%	24.0%	24.4%	21.3%	20.5%	19.9%	18.6%	17.3%	16.9%	15.6%	15.0%	15.4%	15.8%	15.5%	17.4%	19.2%	20.6%	19.1%
Industrial/Engg	19.0%	16.2%	15.9%	14.2%	14.2%	14.2%	14.9%	16.0%	16.0%	15.7%	16.8%	16.0%	15.2%	14.4%	14.2%	13.9%	13.6%	15.3%
Materials	10.8%	8.8%	12.8%	15.6%	15.3%	15.6%	16.0%	16.7%	17.1%	17.3%	18.1%	15.6%	15.3%	17.0%	15.7%	15.1%	14.0%	15.1%
Pharma/Chemicals/Life Sciences	7.8%	5.5%	5.0%	3.7%	3.6%	3.6%	3.2%	3.3%	3.7%	3.4%	3.6%	3.9%	4.0%	4.0%	4.2%	4.3%	4.2%	4.2%
Technology/Telecom/Media	4.3%	5.8%	5.6%	5.1%	4.9%	4.8%	4.5%	4.8%	5.2%	4.8%	4.9%	5.3%	4.8%	4.0%	3.8%	4.5%	5.6%	4.9%
Transportation/Logistics/Supply	9.3%	8.1%	9.0%	7.4%	7.5%	7.8%	10.1%	10.4%	9.7%	9.4%	9.2%	10.3%	9.3%	11.2%	10.0%	7.5%	8.1%	9.1%
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

### Net Profit Weights for Total Universe:

PAT Contribution Weight %																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	2.8%	2.1%	1.6%	1.3%	0.9%	1.6%	1.6%	1.5%	1.4%	2.2%	1.3%	1.4%	1.7%	1.6%	1.4%	0.7%	1.3%	1.6%
Consumption	13.3%	10.6%	11.6%	10.5%	8.7%	9.6%	7.7%	6.4%	6.7%	6.4%	6.4%	6.2%	6.3%	5.3%	6.3%	6.7%	9.1%	8.1%
Energy	36.1%	32.2%	30.6%	22.7%	25.1%	24.1%	23.6%	23.7%	29.3%	26.7%	28.4%	30.4%	32.6%	36.6%	40.5%	46.3%	43.9%	31.3%
Finance	0.7%	17.4%	17.8%	32.4%	28.2%	32.2%	27.5%	23.0%	22.9%	24.1%	18.2%	17.9%	19.6%	18.6%	22.9%	25.5%	25.0%	22.0%
Industrial/Engg	11.5%	7.7%	7.6%	3.2%	4.5%	6.5%	8.7%	9.6%	9.7%	10.9%	12.2%	11.0%	9.1%	7.0%	6.5%	6.1%	6.0%	9.1%
Materials	10.8%	5.6%	-0.7%	2.9%	11.7%	7.4%	12.7%	14.4%	12.2%	14.1%	17.3%	16.0%	14.3%	15.9%	10.5%	4.3%	-0.7%	9.9%
Pharma/Chemicals/Life Sciences	7.2%	6.1%	7.7%	6.6%	4.2%	4.5%	3.4%	7.0%	3.1%	2.2%	3.3%	3.6%	3.2%	2.8%	3.2%	3.4%	4.2%	4.5%
Technology/Telecom/Media	8.5%	10.4%	13.9%	11.8%	9.6%	7.2%	7.1%	7.3%	9.4%	10.5%	8.0%	7.6%	5.3%	4.9%	3.0%	3.1%	7.1%	7.9%
Transportation/Logistics/Supply	9.2%	7.9%	10.0%	8.6%	7.0%	7.0%	7.7%	7.1%	5.2%	2.9%	4.8%	5.9%	7.8%	7.2%	5.8%	3.8%	4.2%	6.6%
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

### Net Profit Weights for Mid/Small Cap Universe:

PAT Contribution Weight %																		
Row Labels	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	19.0%	8.1%	6.1%	4.8%	3.2%	5.0%	4.7%	4.2%	3.8%	5.7%	3.3%	3.5%	4.7%	4.2%	4.2%	2.3%	4.5%	5.4%
Consumption	30.1%	15.1%	18.5%	12.5%	10.1%	9.9%	7.6%	6.3%	5.5%	4.3%	6.3%	5.2%	5.4%	2.8%	3.4%	3.3%	4.8%	8.9%
Energy	20.6%	10.5%	10.9%	4.6%	8.1%	4.1%	5.8%	9.2%	10.2%	8.6%	8.9%	8.5%	9.0%	12.7%	16.9%	16.4%	14.7%	10.6%
Finance	-92.7%	12.5%	-3.0%	38.1%	39.2%	41.9%	37.6%	32.5%	30.2%	32.2%	24.5%	25.7%	27.9%	24.1%	29.9%	42.9%	42.3%	22.7%
Industrial/Engg	51.7%	19.9%	23.9%	10.1%	8.6%	10.4%	13.1%	16.7%	15.6%	18.4%	22.8%	19.1%	15.9%	11.6%	12.4%	14.6%	12.4%	17.5%
Materials	17.7%	-2.9%	-5.6%	11.0%	14.6%	17.1%	19.7%	19.6%	24.8%	20.1%	21.9%	25.7%	24.3%	30.0%	22.2%	7.4%	-6.6%	15.3%
Pharma/Chemicals/Life Sciences	30.9%	16.9%	20.3%	8.2%	6.2%	6.7%	5.0%	3.7%	3.4%	3.2%	4.3%	4.3%	5.2%	4.5%	4.8%	5.5%	6.3%	8.2%
Technology/Telecom/Media	17.0%	11.1%	16.3%	5.0%	5.8%	1.7%	2.1%	2.6%	2.9%	2.0%	3.0%	2.5%	-0.7%	1.3%	-1.1%	1.4%	12.9%	5.0%
Transportation/Logistics/Supply	5.7%	8.7%	12.6%	5.8%	4.3%	3.2%	4.4%	5.0%	3.6%	5.5%	5.0%	5.5%	8.3%	8.9%	7.3%	6.3%	8.7%	6.4%
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

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