

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 16 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 15 years of listed history, we are left with 557 companies. This universe covers about 80% of the total listed current market capitalization. The chosen period FY02 – 17 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. Post these exclusions, we are left with 494 companies (average market capitalization of INR 5578 crs or \$870 mn) totaling more than 30% of the above market capitalization.

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 FY17)	Current	Average	FY02 – 16 Range	Comment (please refer to detailed tables for year/sector wise numbers)
PEx (ttm*)	28.9	17.0	7.9 – 28.9	Current multiple is at historical highs (previous 25.5 in Jan'08). Key difference is that net margins are currently at 6.2% vs 9.9% reached in FY08 and overall average of 7.3%. Excludes Financial Sector (FS).
Normalized PEx (ttm)	21.2	19.5	10.3 – 43.3	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 10.0%. Using ROE of 13.6% based on FY09-17 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. Excludes FS.
PBx (ttm)	2.8	2.3	1.2 – 4.9	Current multiple is above average but way below 4.9 reached in Jan'08, though this is the highest level since then. PB is a much stable valuation metric vs PE and adjusts for cyclicity in profitability.
EV/EBITDA (ttm)	13.1	9.2	4.9 – 16.9	This is high considering EBITDA margins have also moved above historical average. Excludes FS.
ROE %	10.0	16.7	9.3 – 23.1	Current level is just above the lowest.
ROCE %	10.5	13.3	8.7 – 18.3	Current level is close to the lowest. Excludes FS.
PAT %	6.2	7.3	4.6 – 9.9	Excludes FS. This has improved significantly from the lows of 4.6% reached in FY15. Further improvement of earnings now rely heavily on topline growth.
EBITDA %	16.8	16.6	13.5 – 19.1	Excludes FS. Average of 16.6% and high of 19.1% reached in FY08
COGS %	51.9	56.6	51.9 – 60.3	Excludes FS. This is the lowest level in 15 years. Lower commodity prices have helped. Indication that pricing power is returning as companies are able to retain profits vs passing on to the customer.
Interest/Sales %	3.5	2.5	1.6 – 3.7	Excludes FS. Lowest level in FY06 and highest in FY02. Currently second highest.
EBIDTA/Interest	4.86	7.09	4.44 – 11.15	Excludes FS. Currently near lowest level, though have improved from since FY15.
D/Ex	0.92	0.80	0.58 – 1.01	Excludes FS. Currently close to highest level of leverage. Lowest in FY05.
Asset Turns (Sales/CE)	0.98	1.23	0.98 – 1.47	Excludes FS. Currently at lowest level. Highest in FY05.
Capacity Utilization %	65-70	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 %	5.6	15.0	(2.1) – 29.6	Highest in FY08; lowest in FY16. Note the divergence in FY08-17 CAGR of 10.7% vs 21.4% of FY02-08.
EBDTA Growth %	11.9	15.0	(0.1) – 36.2	Highest in FY07; lowest in FY09. Note the divergence in FY08-15 CAGR of 9.5% vs 24.1% of FY02-08.
PAT Growth %	27.0	15.6	(19.1) – 56.4	Highest in FY03; lowest in FY09. Note the divergence in FY08-15 CAGR of 5.1% vs 32.0% of FY02-08.
Equity Growth%	8.4	16.6	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 13.6 vs 21.4% during FY02-08.

*Note: ttm is trailing twelve months as of January 25, 2018

SUMMARY FOR MID/SMALL CAP UNIVERSE

Parameter (ttm or FY15)	Current	Average	FY02 – 15 Range	Comment (please refer to detailed tables for year/sector wise numbers)
PEx (ttm*)	52.9	18.0	6.3 – 52.9	Current multiple is highest ever and almost double that reached in Jan'08. One has to be 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.
Normalized PEx (ttm)	28.6	19.5	8.1 – 57.4	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 10.0% vs current level of 5.4%. Using ROE of 10.0% based on FY09-17 average which is lower than overall average of 13.4%. 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. Current levels are 50% above average and something to worry about. Excludes FS.
PBx (ttm)	2.6	1.8	0.8 – 4.7	Current multiple is way above average but nearly half of 4.7 reached in Jan'08. To justify such valuations, ROE has to rise above typical expected returns from equities.
EV/EBITDA (ttm)	16.6	9.3	4.5 – 18.2	Premium to the total universe is > 26% which is the highest. Considering that the valuation for the total universe itself is high, these are unsustainable levels. Excludes FS.
ROE %	5.4	13.4	4.3 – 21.2	ROE has picked up since making the low in FY16.
ROCE %	8.2	11.0	7.6 – 16.6	Excludes FS.
PAT %	3.5	5.0	2.8 – 8.2	Excludes FS. Net margins have picked up since making the low of 2.8% in FY15.
EBITDA %	13.7	13.8	11.8 – 15.8	Excludes FS. Lowest level in FY13 and highest in FY08.
COGS %	53.0	56.8	52.7 – 60.0	Excludes FS. Lower commodity prices have helped maintain GM near highs. Indication that pricing power is returning as companies are able to retain profits vs passing on to the customer.
Interest/Sales %	4.9	3.3	2.0 – 4.9	Excludes FS. Highest levels currently and doesn't bode well for capex.
EBITDA/Interest	2.83	4.64	2.79 – 7.40	Excludes FS. Currently near lowest level and sign of worry.
D/Ex	1.14	1.02	0.74 – 1.34	Excludes FS. Current level has dropped since peaking in FY15. Lowest in FY05.
Asset Turns (Sales/CE)	0.99	1.20	0.97 – 1.58	Excludes FS. Currently near lowest level. Highest in FY05.
Capacity Utilization %	70-75	86	73 – 100	Broad approximation assuming peak utilization of 100% in FY05 when asset turns were highest.
Sales Growth %	4.3	15.1	3.8 – 30.4	Highest in FY07; lowest in FY10.
EBDTA Growth %	6.8	14.1	(2.1) – 42.1	Highest in FY07; lowest in FY16. Excludes FS
PAT Growth %	19.4	15.4	(24.4) – 89.4	Highest in FY04; lowest in FY09. Excludes FS
Equity Growth%	4.9	15.8	4.0 – 38.8	Highest in FY08; lowest in FY16. This is not adjusted for new fund raise or dividend payouts.

DETAILED VALUATION TABLES

For Finance sector, I have presented detailed analysis starting page 8. I have divided the sector into three groups: PSU (public) Banks, Private Banks and NBFCs (non-banking finance companies). Provisioning for NPAs in these companies have a significant impact on their profits and they skew the ratios and hence I have left finance sector out of parameters wherever applicable.

PEx for Total Universe:

Weighted PEx by Sectors																			
Row Labels	TTM (1/25/18)	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	12.9
Consumption	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	24.7
Energy	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	11.6
Finance																			
Industrial/Engg	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	25.6
Materials	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)	10.4
Pharma/Chemicals/Life Sciences	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	21.3
Technology/Telecom/Media	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	27.8
Transportation/Logistics/Supplycl	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	18.1
Grand Total	28.9	22.9	21.8	26.3	16.9	17.0	15.5	15.8	18.2	12.7	16.7	25.5	15.1	18.1	11.5	12.0	7.9	11.7	17.0

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:

Current multiple is the highest level not only in terms of absolute number, but also in terms of the premium (85% currently as against at par) vs total universe

Weighted PEx by Sectors																			
Row Labels	TTM (1/25/18)	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	12.9
Consumption	62.7	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	22.9
Energy	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	17.5
Finance																			
Industrial/Engg	51.7	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	23.6
Materials	-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)	9.9
Pharma/Chemicals/Life Sciences	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	19.2
Technology/Telecom/Media	177.6	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	22.8
Transportation/Logistics/Supplycl	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	23.7
Grand Total	52.9	36.3	30.4	24.6	16.3	13.2	13.9	14.6	16.5	8.7	15.6	27.5	12.8	15.8	9.7	9.8	6.3	8.9	18.0

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 10.0%. Using ROE of 13.6% based on FY09-17 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	TTM (1/25/18)	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	23.5	19.5	12.7	14.8	9.0	8.6	14.3	14.4	14.1	7.2	12.9	25.8	11.4	15.3	11.4	9.8	4.5	12.7
Consumption	38.3	28.9	29.8	32.8	28.5	28.4	26.2	23.4	19.4	14.2	22.3	27.5	23.6	30.4	19.9	20.0	15.3	25.1
Energy	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	19.2	15.4	15.2	7.2	14.2
Finance																		
Industrial/Engg	36.6	30.7	25.4	30.7	19.1	17.2	19.6	27.5	33.4	18.5	59.6	134.2	54.2	58.0	27.2	19.5	9.5	30.4
Materials	13.9	15.4	-VE	10.4	10.7	10.2	14.0	23.1	32.2	13.1	35.1	52.7	25.0	30.9	26.6	21.5	9.3	19.4
Pharma/Chemicals/Life Sciences	28.4	24.0	25.2	29.9	19.9	17.9	17.0	19.6	21.6	11.9	20.4	26.8	25.2	31.3	23.2	19.7	12.1	21.7
Technology/Telecom/Media	35.2	17.6	22.0	22.9	19.9	18.1	19.8	23.0	24.7	18.5	35.3	45.8	54.8	47.6	34.1	24.2	14.8	27.0
Transportation/Logistics/Supplyc	23.7	21.5	17.7	22.3	15.7	13.8	19.4	26.6	31.3	15.6	28.3	44.0	20.1	24.5	18.3	19.5	5.9	20.3
Grand Total	21.2	16.8	14.9	20.7	16.0	16.2	17.1	20.7	23.5	15.0	28.3	43.3	25.5	27.5	19.4	18.5	10.3	19.5

Green are top two undervalued and Red are top two 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 10.0% vs current level of 5.4%. Using ROE of 10.0% based on FY09-17 average which is lower than overall average of 13.4%. 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. Current levels are 50% above average and something to worry about.

Normalized PEx by Sectors																		
Row Labels	TTM (1/25/18)	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	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	12.6
Consumption	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	22.7
Energy	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	23.0
Finance																		
Industrial/Engg	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	29.7
Materials	-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	21.3
Pharma/Chemicals/Life Sciences	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	22.5
Technology/Telecom/Media	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	26.8
Transportation/Logistics/Supplyc	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	30.1
Grand Total	28.6	19.6	13.0	18.0	13.5	12.8	15.9	21.2	24.8	12.2	32.6	57.4	26.0	27.7	20.4	17.1	8.1	19.5

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

PBx for Total Universe:

Weighted PBx by Sectors																			
Row Labels	TTM (1/25/18)	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	1.8
Consumption	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	1.8	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	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	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	2.8
Materials	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	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	3.7	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/Supplycl	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	3.0
Grand Total	2.8	2.4	2.0	2.4	1.9	1.8	2.0	2.5	2.8	1.7	3.2	4.9	3.0	3.2	2.3	2.1	1.2	1.2	2.3

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	TTM (1/25/18)	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	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	1.3	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	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	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	2.3
Materials	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	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	2.8
Technology/Telecom/Media	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/Supplycl	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
Grand Total	2.6	2.1	1.6	1.8	1.3	1.2	1.5	2.0	2.3	1.1	2.8	4.7	2.3	2.5	1.8	1.6	0.8	0.8	1.8

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	TTM (1/25/18)	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	7.3
Consumption	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	14.2
Energy	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	7.2
Finance																			
Industrial/Engg	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	10.8
Materials	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	7.2
Pharma/Chemicals/Life Sciences	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	12.6
Technology/Telecom/Media	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	12.5
Transportation/Logistics/Supplycl	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	8.9
Grand Total	13.1	10.9	12.8	10.8	8.9	8.7	8.6	9.7	10.1	7.3	10.3	16.9	9.1	10.4	6.8	6.8	4.9	6.2	9.2

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	TTM (1/25/18)	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	Jan 8, '08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	7.3
Consumption	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	11.4
Energy	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	9.0
Finance																			
Industrial/Engg	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	10.1
Materials	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	8.2
Pharma/Chemicals/Life Sciences	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	10.7
Technology/Telecom/Media	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	10.6
Transportation/Logistics/Supplycl	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	11.4
Grand Total	16.6	12.7	13.8	11.3	9.6	9.0	9.2	9.6	10.1	6.3	10.0	18.2	8.4	9.7	6.7	5.8	4.5	4.9	9.3

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

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 2/3rd of that haven't been provided for until March 2016. 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-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	7.2%	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	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	2.2%	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%	1.1%	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%	3.5%	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)	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	-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	0.0%	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%	
ROA	-0.1%	-0.1%	0.5%	0.5%	0.8%	0.9%	0.9%	0.9%	1.0%	1.0%	0.9%	0.9%	1.0%	1.2%	1.0%	
Assets/Equity (Leverage)	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	
ROE	TTM	-1.8%	-2.5%	8.3%	9.3%	13.6%	15.8%	16.7%	17.3%	17.8%	17.7%	16.3%	15.7%	18.6%	25.1%	22.5%
Price / Book Value(x)	0.88	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 %	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 %	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 and GNPA's seem to be under control so far.

Profit & Loss (Common Size by Assets)	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	7.9%	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	4.6%	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	3.4%	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	2.9%	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	6.2%	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%	4.1%	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	1.9%	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	0.6%	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%	
ROA	1.3%	1.5%	1.6%	1.6%	1.6%	1.5%	1.4%	1.3%	1.0%	1.0%	1.0%	1.1%	1.0%	1.4%	1.2%	
Assets/Equity (Leverage)	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	
ROE	TTM	12.1%	14.6%	16.7%	17.2%	17.5%	16.3%	14.9%	13.5%	11.4%	12.8%	14.2%	15.1%	15.3%	22.4%	18.7%
P/B x	3.16	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 %		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 %		1.37	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

ROA and ROE have been trending down and when compared to the return numbers, PBx seems to be near highs. 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.

Profit & Loss (Common Size as a % of Avg Assets)		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		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		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		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%	0.2%	0.2%	0.2%	0.3%	0.4%	0.4%	0.7%	0.4%	0.4%	0.3%	0.8%	0.7%
Total Income		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)		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%	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		0.9%	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%
ROA		2.0%	2.1%	2.3%	2.5%	2.6%	2.4%	2.8%	2.8%	2.8%	3.1%	2.9%	2.8%	2.4%	0.7%	2.7%
Assets/Equity (Leverage)		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
ROE	TTM	13.8%	14.5%	15.6%	16.4%	16.9%	15.1%	17.0%	16.9%	16.6%	19.5%	20.6%	21.3%	18.7%	4.7%	17.3%
Price / Book Value(x)	2.87	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 %		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 %		1.69	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	FY02-17 CAGR	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03
Agriculture	12.8%	-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%
Consumption	17.8%	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%
Energy	11.5%	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%
Finance	15.9%	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%
Industrial/Engg	15.7%	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%
Materials	17.1%	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%
Pharma/Chemicals/Life Sciences	16.0%	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%
Technology/Telecom/Media	19.9%	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%
Transportation/Logistics/Supply	18.1%	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%
Grand Total	15.0%	5.6%	-2.1%	2.7%	11.1%	10.9%	25.9%	21.0%	3.5%	22.5%	29.6%	29.3%	19.7%	22.2%	14.1%	14.7%

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	FY02-17 CAGR	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03
Agriculture	12.5%	-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%
Consumption	20.9%	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%
Energy	12.8%	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%
Finance	14.9%	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%
Industrial/Engg	14.9%	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%
Materials	15.2%	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%
Pharma/Chemicals/Life Sciences	14.9%	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%
Technology/Telecom/Media	14.7%	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%
Transportation/Logistics/Supply	13.1%	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%
Grand Total	15.1%	4.3%	4.9%	5.5%	8.5%	8.8%	24.2%	19.6%	3.8%	21.7%	27.6%	30.4%	17.2%	22.9%	17.8%	14.5%

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	FY02-17 CAGR	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03
Agriculture	11.9%	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%
Consumption	15.4%	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%
Energy	12.1%	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%
Finance																
Industrial/Engg	15.5%	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%
Materials	18.9%	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%
Pharma/Chemicals/Life Sciences	16.8%	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%
Technology/Telecom/Media	20.1%	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%
Transportation/Logistics/Supply	17.8%	-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%
Grand Total	15.0%	11.9%	4.8%	4.5%	16.4%	3.3%	10.3%	11.0%	21.5%	-0.1%	29.0%	36.5%	10.2%	23.4%	24.6%	24.8%

Growth during FY02-08 period is double of that for the FY08-17 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	FY02-17 CAGR	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03
Agriculture	11.5%	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%
Consumption	17.7%	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%
Energy	14.3%	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%
Finance																
Industrial/Engg	14.9%	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%
Materials	14.5%	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%
Pharma/Chemicals/Life Sciences	15.4%	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%
Technology/Telecom/Media	11.6%	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%
Transportation/Logistics/Supply	11.6%	-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%
Grand Total	14.1%	6.8%	1.8%	7.7%	9.0%	4.5%	6.6%	10.1%	19.6%	-2.1%	32.7%	42.1%	5.1%	33.8%	26.2%	18.3%

PAT Growth for Total Universe:

PAT Growth by Sectors																
Row Labels	FY02-17 CAGR	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03
Agriculture	19.1%	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%
Consumption	16.6%	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%
Energy	12.4%	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%
Finance																
Industrial/Engg	15.4%	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%
Materials	24.4%	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%
Pharma/Chemicals/Life Sciences	17.4%	-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%
Technology/Telecom/Media	17.3%	-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%
Transportation/Logistics/Supply	18.3%	-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%
Grand Total	15.6%	27.0%	11.7%	-13.6%	18.3%	-9.4%	-8.0%	19.5%	30.3%	-19.1%	31.9%	41.4%	10.0%	36.9%	40.1%	46.8%

Net profit has grown at a CAGR 5.1% during FY08-17 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	FY02-17 CAGR	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03
Agriculture	19.0%	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%
Consumption	24.1%	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%
Energy	16.6%	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%
Finance																
Industrial/Engg	14.9%	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%
Materials	14.0%	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%
Pharma/Chemicals/Life Sciences	15.9%	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%
Technology/Telecom/Media	5.7%	-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%
Transportation/Logistics/Supply	11.2%	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%
Grand Total	15.4%	19.4%	-2.5%	-3.6%	-2.5%	-12.0%	-16.5%	10.3%	29.9%	-24.4%	39.3%	51.9%	0.2%	58.6%	89.4%	54.7%

Equity Growth for Total Universe:

Equity Growth by Sectors																
Row Labels	FY02-17 CAGR	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03
Agriculture	12.4%	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%
Consumption	16.6%	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%
Energy	13.5%	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%
Finance	19.6%	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%
Industrial/Engg	16.2%	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%
Materials	19.0%	-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%
Pharma/Chemicals/Life Sciences	19.6%	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%
Technology/Telecom/Media	16.5%	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%
Transportation/Logistics/Supply	17.2%	-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%
Grand Total	16.6%	8.4%	7.8%	6.5%	14.5%	10.9%	14.6%	17.3%	17.8%	16.9%	36.4%	25.0%	24.3%	22.4%	15.7%	12.3%

Equity Growth for Mid/Small Cap Universe:

Equity Growth by Sectors																
Row Labels	FY02-17 CAGR	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03
Agriculture	12.7%	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%
Consumption	16.8%	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%
Energy	13.4%	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%
Finance	18.4%	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%
Industrial/Engg	15.8%	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%
Materials	16.2%	-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%
Pharma/Chemicals/Life Sciences	18.2%	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%
Technology/Telecom/Media	8.7%	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%
Transportation/Logistics/Supply	13.1%	-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%
Grand Total	15.8%	4.9%	4.0%	6.3%	8.5%	9.7%	12.7%	17.0%	19.7%	15.6%	38.8%	27.1%	27.6%	24.8%	16.3%	10.1%

DETAILED PROFITABILITY TABLES

ROE for Total Universe:

Weighted ROE% by Sectors																
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	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	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	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	5.6%	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%	14.9%
Industrial/Engg	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	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%	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	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/Supplycl	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%
Grand Total	10.0%	9.3%	10.7%	12.9%	13.0%	15.1%	17.9%	17.6%	16.1%	23.1%	22.9%	20.6%	22.9%	21.0%	17.7%	16.7%

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	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	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%	15.3%
Consumption	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%	14.3%
Energy	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	1.9%	-0.4%	8.2%	9.8%	12.9%	14.3%	17.0%	17.0%	16.9%	18.6%	17.9%	16.8%	17.8%	18.9%	21.0%	13.9%
Industrial/Engg	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%	13.0%
Materials	-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%	16.1%
Pharma/Chemicals/Life Sciences	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%	17.0%
Technology/Telecom/Media	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%	7.9%
Transportation/Logistics/Supplycl	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%	14.2%
Grand Total	5.4%	4.3%	7.4%	8.3%	9.8%	11.5%	14.6%	15.1%	14.1%	21.0%	20.5%	17.7%	21.2%	17.5%	12.9%	13.4%

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	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	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%	12.1%
Consumption	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%	18.5%
Energy	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%	12.0%
Finance																
Industrial/Engg	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%	12.2%
Materials	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%	13.9%
Pharma/Chemicals/Life Sciences	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%	15.3%
Technology/Telecom/Media	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%	14.8%
Transportation/Logistics/Supplyc	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%	13.9%
Grand Total	10.5%	9.0%	8.7%	10.1%	9.7%	11.4%	13.2%	12.8%	12.6%	17.7%	17.9%	16.6%	18.3%	16.5%	13.9%	13.3%

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	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	Avg
Agriculture	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%	11.8%
Consumption	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%	11.6%
Energy	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	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%	11.2%
Materials	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%	12.3%
Pharma/Chemicals/Life Sciences	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%	13.2%
Technology/Telecom/Media	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	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%	11.4%
Grand Total	8.2%	7.6%	7.6%	7.7%	7.8%	8.9%	10.2%	10.6%	10.7%	15.3%	15.3%	13.8%	16.6%	13.5%	10.5%	11.0%

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

Net Margins for Total Universe:

PAT as a % of Net Sales by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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%	5.6%
Consumption	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%	8.0%
Energy	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%	6.9%
Finance																	
Industrial/Engg	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	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%	8.2%
Pharma/Chemicals/Life Sciences	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	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%	10.8%
Transportation/Logistics/Supplyc	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%	5.1%
Grand Total	6.2%	5.4%	4.6%	5.4%	5.0%	6.1%	8.3%	8.4%	6.6%	9.9%	9.8%	9.0%	9.7%	8.9%	7.3%	5.8%	7.3%

Net Margins for Mid/Small Cap Universe:

PAT as a % of Net Sales by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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%	5.5%
Consumption	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%	3.8%
Energy	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%	3.3%
Finance																	
Industrial/Engg	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	-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%	6.7%
Pharma/Chemicals/Life Sciences	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%	8.3%
Technology/Telecom/Media	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%	3.5%
Transportation/Logistics/Supplyc	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%	4.0%
Grand Total	3.5%	3.2%	2.8%	3.1%	3.4%	4.1%	6.0%	6.5%	5.1%	8.2%	7.6%	6.5%	7.6%	6.0%	3.8%	2.9%	5.0%

Operating Margins for Total Universe:

EBIDTA as a % of Net Sales by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	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%	14.7%
Energy	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	15.1%	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	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%	21.5%
Pharma/Chemicals/Life Sciences	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%	20.4%
Technology/Telecom/Media	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%	25.1%
Transportation/Logistics/Supplyc	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%	12.2%
Grand Total	16.8%	16.2%	14.7%	14.2%	13.5%	14.4%	16.3%	17.8%	15.0%	18.3%	18.4%	17.4%	18.9%	19.1%	17.8%	16.4%	16.6%

Operating Margins for Mid/Small Cap Universe:

EBIDTA as a % of Net Sales by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	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%	9.0%
Energy	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%	10.8%
Finance																	
Industrial/Engg	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	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%	19.2%
Pharma/Chemicals/Life Sciences	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%	18.4%
Technology/Telecom/Media	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%	15.2%
Transportation/Logistics/Supplyc	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%	9.7%
Grand Total	13.7%	13.4%	12.3%	11.9%	11.8%	12.1%	13.9%	15.0%	12.8%	15.8%	15.3%	14.1%	15.6%	14.7%	14.0%	13.8%	13.8%

DETAILED EXPENSE TABLES

COGS for Total Universe:

COGS as a % of Net Sales by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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%	54.8%
Consumption	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%	53.3%
Energy	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%	69.0%
Finance																	
Industrial/Engg	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	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%	42.5%
Pharma/Chemicals/Life Sciences	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%	43.8%
Technology/Telecom/Media	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%	15.8%
Transportation/Logistics/Supplyc	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%	64.7%
Grand Total	51.9%	53.0%	56.5%	58.6%	60.0%	60.3%	57.1%	55.8%	58.0%	56.7%	57.7%	58.3%	56.7%	55.5%	54.2%	55.0%	56.6%

COGS for Mid/Small Cap Universe:

COGS as a % of Net Sales by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	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%	61.6%
Energy	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%	67.8%
Finance																	
Industrial/Engg	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%	47.3%
Materials	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%	46.9%
Pharma/Chemicals/Life Sciences	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%	47.6%
Technology/Telecom/Media	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%	33.5%
Transportation/Logistics/Supplyc	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%	71.7%
Grand Total	53.0%	52.7%	57.3%	58.1%	58.8%	60.0%	57.9%	56.0%	58.0%	57.6%	58.8%	59.5%	57.7%	55.7%	54.2%	53.1%	56.8%

Non-COGS (operating expenses) for Total Universe:

Total non-COGS Expenses as a % of Net Sales by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	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%	34.0%
Energy	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%	19.1%
Finance																	
Industrial/Engg	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	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%	38.9%
Pharma/Chemicals/Life Sciences	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%	38.5%
Technology/Telecom/Media	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%	62.2%
Transportation/Logistics/Supplyc	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%
Grand Total	33.8%	32.9%	30.8%	29.0%	28.2%	27.2%	29.3%	30.6%	30.1%	28.6%	27.1%	27.3%	27.5%	29.5%	31.2%	31.8%	29.7%

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	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	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%	31.1%
Energy	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%	23.4%
Finance																	
Industrial/Engg	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%	39.0%
Materials	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%	36.6%
Pharma/Chemicals/Life Sciences	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%	36.8%
Technology/Telecom/Media	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%	54.7%
Transportation/Logistics/Supplyc	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%	20.7%
Grand Total	35.2%	35.6%	32.2%	31.7%	31.0%	29.6%	30.3%	31.9%	31.8%	29.6%	28.6%	29.1%	29.2%	32.5%	34.4%	36.3%	31.8%

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	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	1.2%	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	2.9%	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%	1.9%
Finance																	
Industrial/Engg	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%	3.7%
Materials	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	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%	2.8%
Technology/Telecom/Media	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%	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%
Grand Total	3.5%	3.4%	3.1%	2.9%	2.6%	2.4%	2.1%	2.1%	2.4%	1.9%	1.6%	1.6%	1.8%	2.5%	2.9%	3.7%	2.5%

Interest Expense for Mid/Small Universe:

Interest Expense as a % of Net Sales by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	1.5%	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%	2.2%
Energy	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%	3.4%
Finance																	
Industrial/Engg	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	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	2.7%	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%	3.4%
Technology/Telecom/Media	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%	3.5%
Transportation/Logistics/Supplyc	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%
Grand Total	4.9%	4.7%	4.3%	4.0%	3.6%	3.2%	2.6%	2.6%	2.8%	2.3%	2.1%	2.0%	2.1%	2.9%	4.0%	4.9%	3.3%

DETAILED LEVERAGE AND ASSET TURNS TABLES

Leverage for Total Universe:

Weighted D/E Ratio by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	0.87
Consumption	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	0.59
Energy	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	0.75
Finance																	
Industrial/Engg	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	0.92
Materials	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	1.06
Pharma/Chemicals/Life Sciences	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	0.66
Technology/Telecom/Media	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	0.59
Transportation/Logistics/Supplyc	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	1.06
Grand Total	0.92	0.99	1.01	0.99	0.95	0.88	0.78	0.74	0.83	0.72	0.69	0.61	0.58	0.65	0.71	0.77	0.80

Leverage for Mid/Small Cap Universe:

Weighted D/E Ratio by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	0.87
Consumption	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	0.92
Energy	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	1.20
Finance																	
Industrial/Engg	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	0.96
Materials	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	1.15
Pharma/Chemicals/Life Sciences	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	0.80
Technology/Telecom/Media	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	0.89
Transportation/Logistics/Supplyc	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	1.15
Grand Total	1.14	1.22	1.34	1.31	1.27	1.15	0.96	0.89	0.97	0.85	0.88	0.76	0.74	0.85	0.98	1.02	1.02

Interest Cover for Total Universe:

Interest Cover (EBIDTA/Interest) x by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	5.85
Consumption	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	9.27
Energy	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	8.53
Finance																	
Industrial/Engg	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	5.03
Materials	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	6.41
Pharma/Chemicals/Life Sciences	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	7.52
Technology/Telecom/Media	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	8.68
Transportation/Logistics/Supplyc	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	6.02
Grand Total	4.86	4.79	4.69	4.94	5.15	5.99	7.90	8.53	6.34	9.58	11.15	10.81	10.55	7.62	6.18	4.44	7.09

Interest Cover for Mid/Small Cap Universe:

Interest Cover (EBIDTA/Interest) x by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	5.84
Consumption	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	4.31
Energy	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	4.33
Finance																	
Industrial/Engg	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	4.37
Materials	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	5.33
Pharma/Chemicals/Life Sciences	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	5.74
Technology/Telecom/Media	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	4.34
Transportation/Logistics/Supplyc	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	4.48
Grand Total	2.83	2.87	2.83	2.98	3.28	3.83	5.30	5.68	4.60	6.81	7.40	7.02	7.28	5.14	3.53	2.79	4.64

Asset Turns for Total Universe:

Asset Turns (Sales/Capital Employed) x by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	1.36
Consumption	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	1.81
Energy	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	1.29
Finance																	
Industrial/Engg	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	1.09
Materials	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	0.94
Pharma/Chemicals/Life Sciences	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	1.02
Technology/Telecom/Media	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	0.95
Transportation/Logistics/Supplyc	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	1.72
Grand Total	0.98	1.00	1.10	1.14	1.20	1.23	1.17	1.15	1.27	1.29	1.37	1.41	1.47	1.38	1.31	1.23	1.23

Cyclical sectors such as Industrial/Engg, Materials and Transportation seem to have capacity utilization around 60%, while Consumption and Technology seem to be running at highest levels

Asset Turns for Mid/Small Cap Universe:

Asset Turns (Sales/Capital Employed) x by Sectors																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	1.36
Consumption	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	1.85
Energy	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	1.37
Finance																	
Industrial/Engg	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	1.00
Materials	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	0.93
Pharma/Chemicals/Life Sciences	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	1.05
Technology/Telecom/Media	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	1.21
Transportation/Logistics/Supplyc	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	1.62
Grand Total	0.99	0.97	1.03	1.04	1.06	1.12	1.10	1.08	1.23	1.24	1.37	1.44	1.58	1.46	1.32	1.19	1.20

DETAILED SECTOR WEIGHT TABLES

Market Cap Weights for Total Universe:

MCap Contribution Weight %																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	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%	12.4%
Energy	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%	23.5%
Finance	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%	17.6%
Industrial/Engg	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	7.4%	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	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%	5.6%
Technology/Telecom/Media	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%	13.1%
Transportation/Logistics/Supplyc	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%	7.0%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Market Cap Weights for Mid/Small Cap Universe:

MCap Contribution Weight %																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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%	3.5%
Consumption	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%	9.4%
Energy	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%	11.1%
Finance	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	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%	19.5%
Materials	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%	15.9%
Pharma/Chemicals/Life Sciences	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%	7.2%
Technology/Telecom/Media	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%	6.9%
Transportation/Logistics/Supplyc	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%	7.9%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Net Sales Weights for Total Universe:

Sales Contribution Weight %																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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	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%	7.5%
Energy	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%	35.9%
Finance	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%	15.7%
Industrial/Engg	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	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%	3.1%	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%	2.9%
Technology/Telecom/Media	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/Supplyc	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%	9.9%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Net Sales Weights for Mid/Small Cap Universe:

Sales Contribution Weight %																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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%	4.6%
Consumption	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%	10.3%
Energy	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%	18.1%
Finance	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%	18.6%
Industrial/Engg	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%	15.1%
Materials	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%	15.4%
Pharma/Chemicals/Life Sciences	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%	3.9%
Technology/Telecom/Media	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/Supplyc	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%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Net Profit Weights for Total Universe:

PAT Contribution Weight %																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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%	1.5%
Consumption	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%	7.8%
Energy	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%	31.0%
Finance	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%	23.3%
Industrial/Engg	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%	7.9%
Materials	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	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%	4.3%
Technology/Telecom/Media	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/Supplyc	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%	6.4%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Net Profit Weights for Mid/Small Cap Universe:

PAT Contribution Weight %																	
Row Labels	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04	FY03	FY02	Avg
Agriculture	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%	4.5%
Consumption	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%	7.6%
Energy	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%	9.9%
Finance	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%	29.9%
Industrial/Engg	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%	15.3%
Materials	-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%	15.2%
Pharma/Chemicals/Life Sciences	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%	6.8%
Technology/Telecom/Media	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%	4.3%
Transportation/Logistics/Supplyc	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%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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