

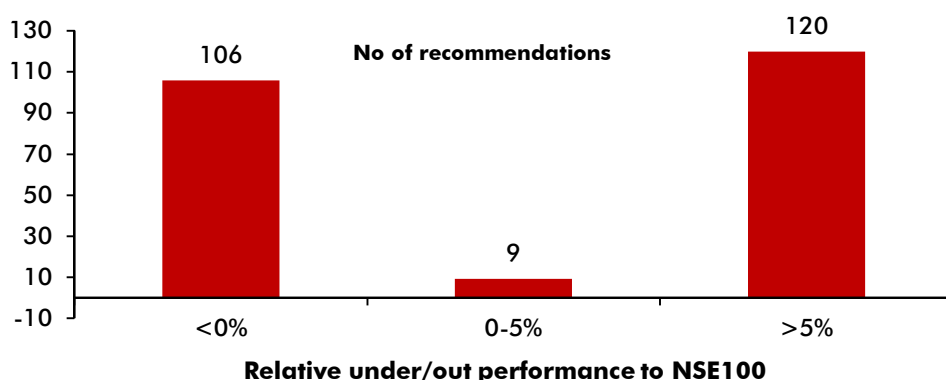
Sieving for a handful bets

Last year, we revised our 'greatness' framework to include drivers of greatness (improvement in sales/CE turnover/cash generation etc.) rather than final outcome (ROE, ROCE etc.) to identify 'great' firms. Interestingly, proportion of attractively valued stocks in our portfolio has risen since then. Last year's equally weighted BSE500 ten-bagger portfolio (~70% attractively valued stocks then) outperformed BSE500 index (ex-BFSI) by ~17%. This year's iteration (Ten-Baggers 9.0) consists of ~50% stocks which are attractively valued and have significant proportion (64%) of mid-cap names. Our framework helps find new ideas too! Our analysis of 235 recommendations made in previous eight 'BSE500 ten-bagger iterations' suggests >50% of them outperformed NSE100 by >5% in next one year from date of respective iteration. As small/mid-caps gain momentum, use our frameworks to identify quality franchises from larger sub-BSE 500 universe. Sub-BSE500 names suggested by us in this note showcase improving fundamentals.

Raise your probability of picking an outperformer quality franchise

Of 235 recommendations (117 unique stocks) made in previous eight iterations of ten-bagger portfolios from the BSE-500 (ex BFSI) universe, we observe that >50% of these outperformed NSE100 by >5% in next one year from the date of respective iteration. Needless to say, our BSE500 ten-bagger portfolios have managed to outperform the BSE500 Index by ~11% points per annum (on a cumulative basis) over the last eight years.

Over 50% recommendations in last 8 iterations outperformed NSE100 by >5% in next one year from iteration date



Source: Bloomberg, Ambit Capital research. Note: Performance is on a total-return basis; i.e. assuming dividends are reinvested back into the same stock on the ex-dividend date. Returns are calculated on 1-year forward basis; i.e. from date of one iteration to next.

Finding high-quality mid/small-caps is just a click away

Amidst momentum gained by mid-caps/small-caps, our HAWK platform can be easily used to identify high-quality franchises. We also mention list of 21 companies from the sub-BSE500 universe which showcase strong fundamentals.

Key financials (median) of 21 companies from sub-BSE500 universe

	3.0	4.0	5.0	6.0	7.0	8.0	9.0	Sub-BSE500 2019
Cash conversion (CFO/EBITDA)	56%	53%	71%	71%	72%	88%	73%	62%
ROE (%)	23%	29%	20%	23%	22%	26%	22%	11%
ROCE (%)	27%	34%	22%	25%	30%	32%	36%	17%
Debt / equity ratio	(0.1)	0.2	0.3	(0.1)	(0.2)	(0.1)	(0.1)	0.2
EBIT margins	14%	15%	12%	14%	16%	14%	13%	10%

Source: Company, Ambit Capital research

Exhibit A: Ten-Baggers 9.0

	Quality bucket	MDVT -6 months (US\$ mn)
Attractive valuations*		
Avenue Super.	Q2	11.9
Bosch	Q3	3.6
Page Industries	Q3	8.3
Natco Pharma	Q1	1.0
Sundram Fasten.	Q3	0.4
Graphite India	Q2	6.2
Tata Elxsi	Q3	7.7
Balrampur Chini	Q2	2.8
NOCIL	Q2	1.2
Jubilant Food.	Q3	17.3
L&T Technology	Q3	1.9
Dr Lal Pathlabs	Q2	1.8
PVR	Q2	9.2
Moderate valuations**		
Honeywell Auto	Q3	0.6
3M India	Q2	0.5
The Ramco Cement	Q2	3.0
Aditya Bir. Fas.	Q2	1.4
Avanti Feeds	Q2	3.0
Rich valuations***		
Hind. Unilever	Q3	38.5
Indraprastha Gas	Q2	8.8
L & T Infotech	Q3	2.5
Whirlpool India	Q1	1.9
Abbott India	Q2	1.4
Voltas	Q3	9.7
NIIT Tech.	Q2	6.7

Source: Ambit Capital research. Note: 6 months MDV as or 04 Feb 2020.

* Trading below five-year P/E, P/B, EV/EBITDA (on at least two of these three measures)

** Trading below either five-year P/E, five-year P/B or five-year EV/EBITDA (on one of these three measures)

*** Trading above five-year P/E, P/B, EV/EBITDA. Q1 represents greatness score of 67% to 82%, Q2 represents greatness score of 83% to 92% and Q3 represents greatness core of >93%

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What is the ten-bagger portfolio?

Objective of this process is to try to generate 26% CAGR over a 10-year holding horizon by buying a portfolio of companies which are improving on Greatness as well as accounting scores. The portfolio is churned every year.

Last year, we changed our framework to identify ‘Great’ firms. The methodology focuses on evaluating the companies on drivers of ‘Greatness’ (e.g. cash generation, incremental capex, efficiency in capital employed turnover etc.) rather than the actual outcome (i.e. RoE, RoCE, PAT etc.). Improving Greatness scores imply that the company’s RoCE metric will be improving as the Greatness score is built on inputs which lead for RoCE uplift gradually. We continue with the same framework.

Greatness score is built on comparing the last three years’ financials over the previous three years; we compare FY17/18/19 (FY16-19) vs FY14/15/16 (FY13-16). Interestingly, >70% of companies churn out from last year’s BSE-500 ten-bagger portfolio.

Please note that the stocks highlighted through this process are not necessarily all going to be individually ten-baggers. Investors can use this as a starting point to find ideas where underlying changes for RoCE improvement are taking place.

After removing financial services firms, firms with insufficient data, we have 404 firms from the BSE500 and 906 firms from the sub-BSE500 universe were ranked based on greatness scores.

Philosophy and framework

“Greatness is not in where we stand, but in what direction we are moving...”

- Oliver Wendell Holmes

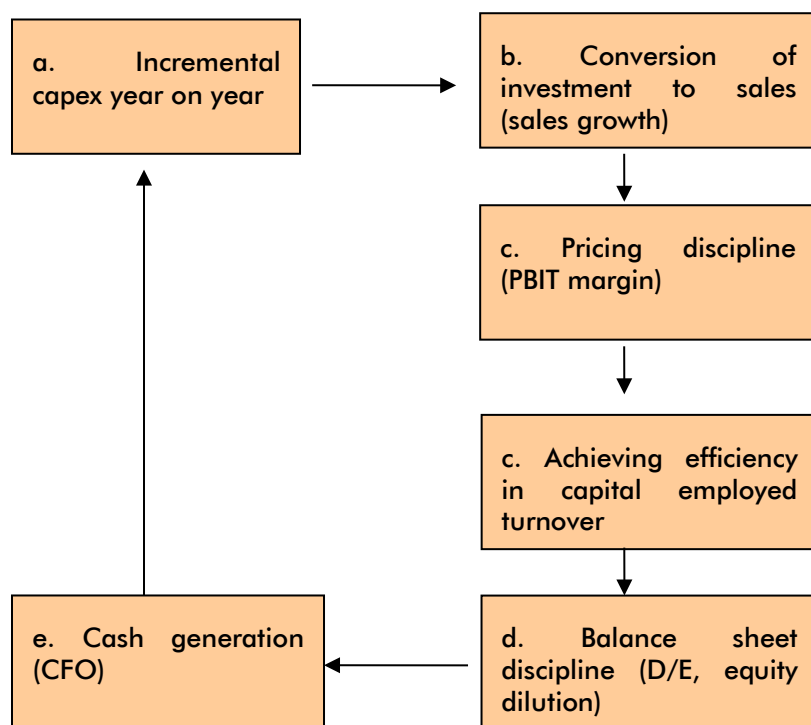
This quote appropriately captures the driving philosophy behind our ‘greatness’ framework that lies at the core of our process of identifying potential ten-baggers.

Focussing on drivers of ‘greatness’

Instead of evaluating on the basis of final outcomes (looking for companies with higher/consistent RoE, RoCE etc.), we made some changes in our framework last year to rather focus on the drivers which actually drive these final outcomes. We look for companies that in the quest of achieving ‘greatness’ believe in adhering to right processes over a period of time. These processes eventually make them structurally sound companies.

A basic sketch of the underlying process behind the making of a great firm has been captured in Exhibit 1 below.

Exhibit 1: Revised ‘greatness’ framework – emphasizing more on the drivers to greatness



Source: Ambit Capital research, Company

We rank the BSE500 universe of firms (excluding financial services firms and excluding firms with insufficient data) on our ‘greatness’ score, which consists of six equally weighted headings — investments, generation of sales, efficiency in capital employed turnover, pricing discipline, balance sheet discipline and cash generation.

Under each of these six headings, we further look at two kinds of improvements:

- **Percentage improvements in performance** over 3 fiscals FY17/18/19 (FY16-19) vs 3 fiscals FY14/15/16 (FY13-16); and
- **Consistency in performance** over FY13-19 (6 fiscals); i.e. improvements adjusted for underlying volatility in financial data.

The ‘greatness’ framework

The framework essentially hinges on using publicly available historical data to assess which firms have, over a sustained period of time (FY14-19), been able to relentlessly and consistently:

- (a) Invest capital
- (b) Turn investment into sales
- (c) Turn sales into profit
- (d) Turn profit into balance sheet strength
- (e) Turn all of that into free cash flow
- (f) Invest free cash flows again

Clearly, this approach will have limited value if there is a structural break in the sector or in the company, which makes past performance a meaningless guide to future performance. (For identifying structural breaks of this sort, we look to our sector leads for help.)

However, to the extent that such structural breaks tend to be the exception than the rule, the greatness model helps in creating a shortlist of stocks that investors can then analyse in greater detail.

Put simply, the greatness model separates the wheat from the chaff. Yet, it does not cook the whole meal for you!

A complete list of factors that are considered whilst quantifying greatness has been provided in Exhibit 2 below:

Exhibit 2: Factors used for quantifying greatness

Head	Criteria/formulas
1 Incremental capex	a. Above median incremental capex to depreciation (FY16-19 over FY13-16)
2 Conversion to sales	a. Improvement in sales (FY16-19 over FY13-16)* b. Above median sales increase to standard deviation
3 Efficiency in capital employed	a. Improvement in capital employed turnover (FY16-19 over FY13-16) b. Above median capital employed turnover increase to standard deviation
4 Pricing discipline	a. Above median PBIT margin increase (FY16-19 over FY13-16)* b. Above median PBIT margin increase to standard deviation
5 Balance sheet discipline	a. Below median debt-equity decline (FY16-19 over FY13-16)* b. Below median debt-equity decline to standard deviation c. Above median equity dilution increase (FY16-19 over FY13-16)*
6 Cash generation and PAT improvement	a. Above median CFO increase (FY16-19 over FY13-16)* b. Above median CFO increase to standard deviation

Source: Ambit Capital research. Note: * Rather than comparing one annual end-point to another annual end-point (say, FY14 to FY19), we prefer to average data over FY14-16 and compare that to the averaged data from FY17-19. This gives a more consistent picture of performance (vs simply comparing FY14 to FY19).

We rank the entire universe of firms with market cap greater than ₹1,000mn (excluding financial services firms) on this score to arrive at this year's rankings on this measure of improvement in the company's RoCE or profitability. After removing financial services firms, firms with insufficient data, we have 404 firms from the BSE500 and 906 firms from the sub-BSE500 universe were ranked based on greatness scores.

Both improvement and the consistency of those improvements are important

Note that to calculate the greatness scores, we have divided the entire universe into two parts: (a) all BSE500 companies; and (b) all sub-BSE500. The highlights from the distribution of firms (BSE500) on our 'greatness' score are displayed in the next page.

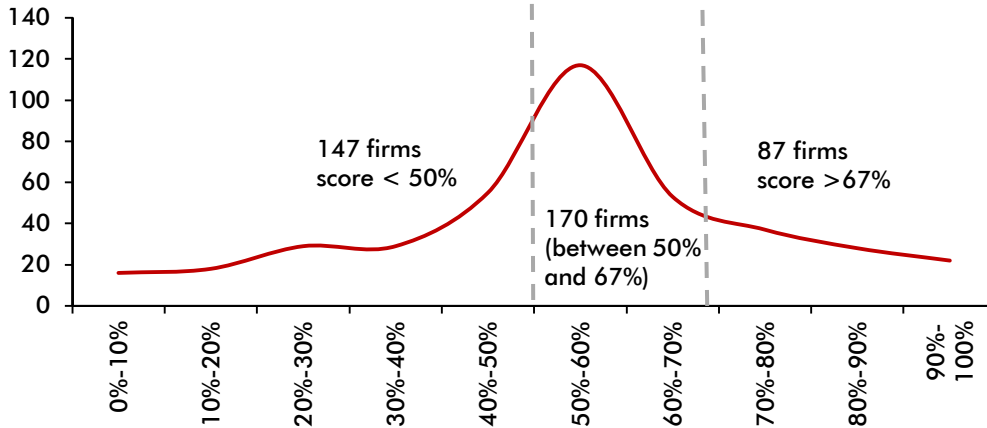
We show a back-test of this framework over 2004-2020 and find that it works on a consistent basis. Also, we show the real world performance of these sets of portfolios over the past year and demonstrate that the construct works in the real world as well. On a share price performance basis, the lists of great firm from the BSE500 (ex-BFSI) universe cumulatively delivered ~17% total average CAGR (over 2004-2020) vs. ~13% total CAGR returns for the BSE500 Index (ex-financials)

We also delve into this year's list of 25 firms that constitute our ten-baggers 9.0. This is followed by a list of 21 firms from the sub-BSE500 universe that do well on the same framework.

Quantifying greatness

Within the BSE500 universe (ex BFSI), after removing firms with insufficient data, 404 firms were scored on the six headings highlighted on the previous page. The cut-off for greatness was placed at 67% and only 87 firms (~22% of the total universe of 404 firms) could manage a score above this cut-off.

Exhibit 3: Distribution of firms on greatness score (total universe: 404 firms)



Source: Ambit Capital research. Note: Universe for this exhibit is BSE500 companies (ex-financials).

In the next exhibit, we present key financial data on the three zones defined above: Mediocrity (147 firms), Good but not great (170 firms), and Great (87 firms).

Exhibit 4: Zone of greatness – Financial summary

	Mediocre	Good but not great	Great
Number of firms	147	170	87
Mcap (US\$ mn)*	934	1010	1003
FF Mcap (US\$ mn)*	353	445	421
Share price (3-year CAGR)#	-2%	8%	17%
Gross block (3-year CAGR)	19%	18%	12%
Sales (3-year CAGR)	8%	12%	15%
Adj PAT (3-year CAGR)	5%	14%	23%
CFO (3-year CAGR)	-3%	6%	15%
EBIT Margin (3-year average)	14%	14%	14%
RoE (3-year average)	12%	16%	18%
RoCE (pre-tax) (3-year average)	22%	26%	28%
Net debt equity (3-year average)	0.1	0.1	0.0
FY20 P/E (x) ##	20	22	24
FY20 P/B (x) ##	2	3	4
FY21 P/E (x) ##	16	17	20
FY21 P/B (x) ##	2	3	3

Source: Capitaline, Ambit Capital research. Note: Universe for this exhibit is BSE500. *Market cap is dated 23 January 2020. # indicates share price performance from 23 Jan 2017 to 23 Jan 2020. 3 years is based on data for FY17/FY18/FY19. ## We have ignored the companies where no data is available. All above numbers are based on median of buckets.

With regard to fundamentals, the superiority of the great firms compared with the other two groups is evident in the exhibit above. Of the great firms from BSE500 index, we identify the ones that perform the best on our accounting and corporate governance filters, which lead to our final list of 25 great companies. Before we move on to these 25 potential ten-baggers, we shall discuss a back-test of the 'greatness' framework in the next section to see whether 'great' firms have indeed managed to deliver superior returns historically.

*The greatness score is calculated by assigning equal weightages to the six factors outlined in Exhibit 2.

Thus, each of these six factors carries a weightage of 16.7%. The scoring on sub-criteria within each of these factors is binary, with a firm getting either 1 or 0 based on whether it has done better than the respective threshold or not.

These scores are then cumulated to arrive at a final greatness score on 100 for the firm.

Does this approach work?

The 'greatness' approach has served us well in live portfolios, both in the ten-baggers format and as a tool for stock selection in the Good & Clean portfolios ([Click here](#)) for the latest G&C portfolio which was published on 04 Oct 2019). That this approach works on a cross-cyclical basis is supported by a back-test of the framework.

Performance of 'Great' Firms

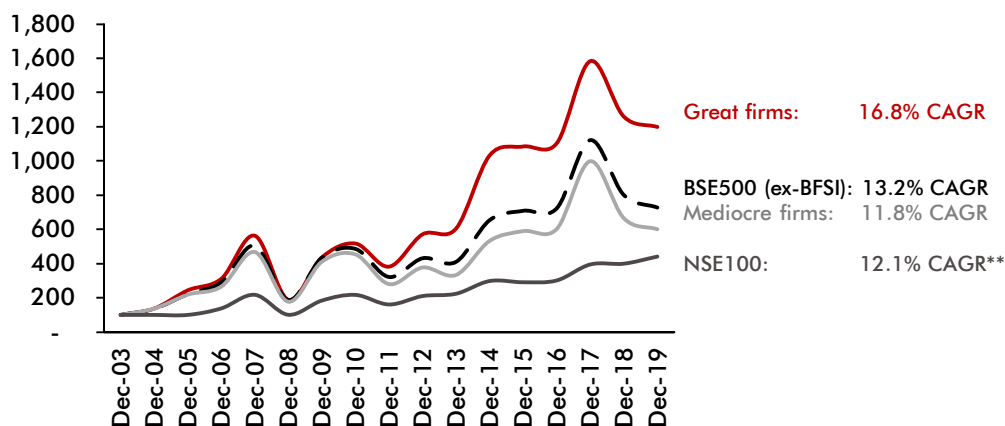
Our back-test of the 'greatness' framework in India goes back to 2003 (which implies using data since 1997-98) and shows that 'great' firms have historically delivered superior results. Using average returns as a measure to gauge the performance of 'great' firms, we note that they have managed to outperform the BSE index (ex-financials) by 3.6% (on average returns) and the mediocre firms by 4.9% (in CAGR terms; over a 16-year period from 2004 to 2020).

Over 2004-20, 'Great' firms have outperformed the mediocre firms by 4.9% points per annum (on average returns) and the BSE500 Index (ex-financials) by 3.6% points per annum

Calculation of average returns: The back-test is based on annual rebalancing with forward-looking returns being calculated from December 31 of year X to December 31 of year X+1; for example, iteration for the most recent year (Ten-bagger 8.0), the framework included numbers until FY18 and returns have been calculated from 31 December 2018 to 31 December 2019.

'Great' firms are those that score more than 67% on our framework. We rebalance these buckets once a year (on 31 December) taking into account the preceding six years of financial data (FY14-19 in the case of Ten-baggers 9.0). The performance over the subsequent year is measured on calendar year basis.

Exhibit 5: Average performance of 'Great' firms vs BSE500 index(ex-financials)/NSE100 and mediocre firms (2004-2020)

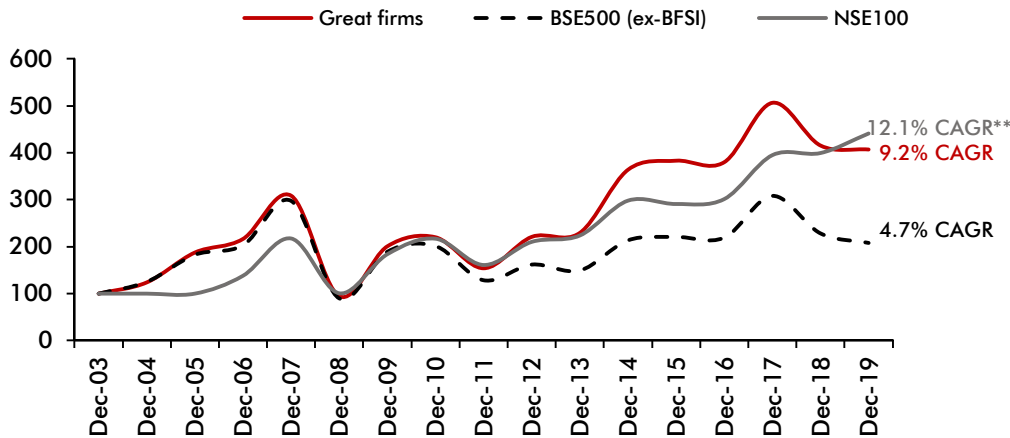


Source: Ambit Capital research. Note: The back-test is based on annual rebalancing with forward-looking returns being calculated from December 31 of year X to December 31 of year X+1; for example, in the exhibit above, for the most recent year, the framework included numbers until FY18 and returns have been calculated from 31 December 2018 to 31 December 2019. (Note: The above exhibit only considers the share price returns and not the total shareholder returns). **NSE100 data is considered from Dec-06

Outperformance was also seen on a median basis. A median firm in the BSE500 index (ex-financials) has delivered 4.7% CAGR returns (over 2004-2020). In contrast, a median 'great' firm has managed to deliver 9.2% CAGR returns, thus resulting in an outperformance of 4.5% (on a CAGR basis) for 'great' firm vs. BSE-500 index (ex-financials). NSE100 data is strictly not comparable given it is available from Dec-06

Exhibit 6: Median performance of 'Great' firms vs the BSE500 index (ex-BFSI)/NSE100 (2004-2020)

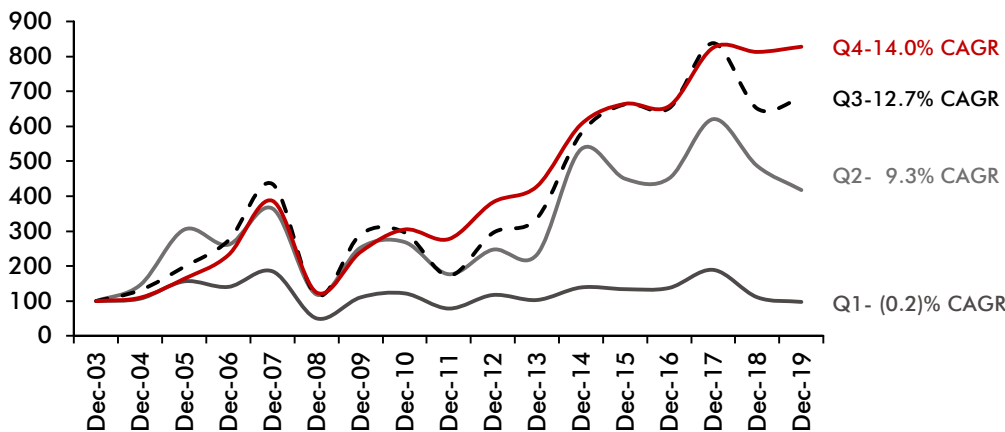
Outperformance was also seen on a median basis



Source: Ambit Capital research; Note: The back-test is based on annual rebalancing with forward-looking returns being calculated from December 31 of year X to December 31 of year X+1; for example, in the exhibit above for the most recent year, the framework included numbers until FY18 and returns have been calculated from 31 December 2018 to 31 December 2019. (Note: The above exhibit only considers the share price returns and not the total shareholder returns). **NSE100 data is considered from Dec-06

We observe that, interestingly, within the list of great firms, the performance of great firms with higher free float is better as compared to ones with low free float market cap. Say, if we split the entire BSE-500 (ex-financials) universe basis the free float market caps into quartiles such that Q4 has companies with the largest free float market cap as against Q1 with the lowest. The Q4 'great' companies have given 14% median CAGR returns (2004-2020) as against Q1 'great' companies which have given -0.2% median CAGR returns. Also note that the 'good but not great' or 'mediocre' companies have underperformed the great firms across different free float market cap segments. We show only median returns here as average returns may not be correct representative of respective category.

Exhibit 7: Median performance of 'Great' across quartiles ; Q4 has highest free float (FF) market cap whilst Q1 has lowest FF mcap



Source: Ambit Capital research, Company, Bloomberg. Note: The back-test is based on annual rebalancing with forward-looking returns being calculated from December 31 of year X to December 31 of year X+1; for example, in the exhibit above for the most recent year, the framework included numbers until FY18 and returns have been calculated from 31 December 2018 to 31 December 2019. (Note: The above exhibit only considers the share price returns and not the total shareholder returns). Quartiles are based on free float market cap as of 31 Dec of each year

Exhibit 8: Median performance of 'Great' firms vs 'Mediocre' firms across four quartiles basis free float market cap

CAGR returns (2004-2020)	Great	Good but not great	Mediocre
Q1 (Lowest free float market cap companies)	-0.2%	-3.8%	-4.5%
Q2	9.3%	2.6%	6.1%
Q3	12.7%	4.5%	5.1%
Q4 (Highest free float market cap companies)	14.1%	9.5%	7.5%

Source: Ambit Capital research, Bloomberg. Note: The back-test is based on annual rebalancing with forward-looking returns being calculated from December 31 of year X to December 31 of year X+1; for example, in the exhibit above for the most recent year, the framework included numbers until FY18 and returns have been calculated from 31 December 2018 to 31 December 2019. (Note: The above exhibit only considers the share price returns and not the total shareholder returns). Quartiles are based on free float market cap as of 31 Dec of each year

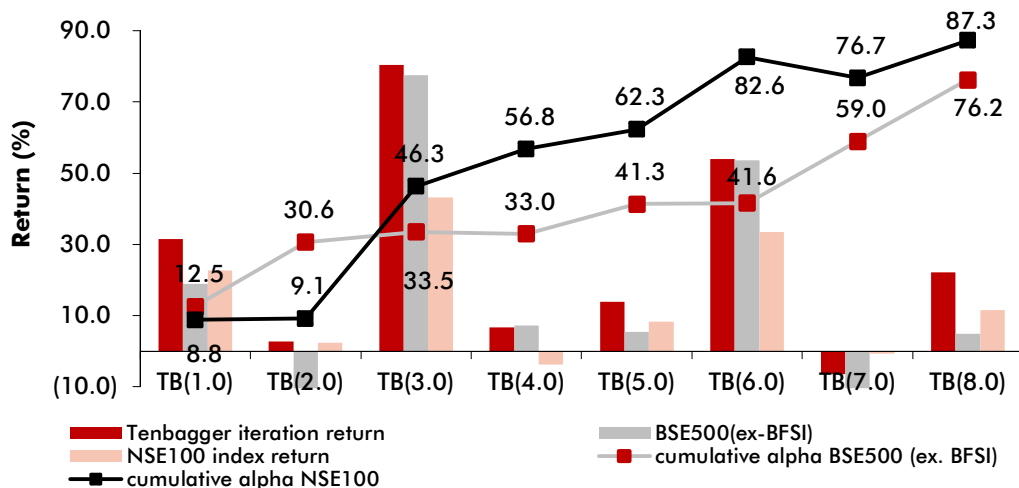
Note that this back-test does not consider accounting and management quality, which we believe are factors that should improve the performance of our live portfolios. That's what the next section of this note focuses on.

Performance of ten-bagger portfolios and BSE (ex-financials) index

Before we delve into this year's list of 25 firms that constitute our Ten-Baggers 9.0, the following two exhibits show the performance of the live ten-bagger portfolio since January 2012 when we first unveiled this framework. Whilst the BSE500 ten-baggers have managed to outperform the BSE500 Index/NSE100 by ~11%/9% points per annum (on a cumulative basis) over the last eight years, the ten-baggers from the sub-BSE500 universe that we highlighted in the previous six iterations have managed to outperform the BSE Small-cap Index (ex-financials) by ~9% points per annum (on a cumulative basis).

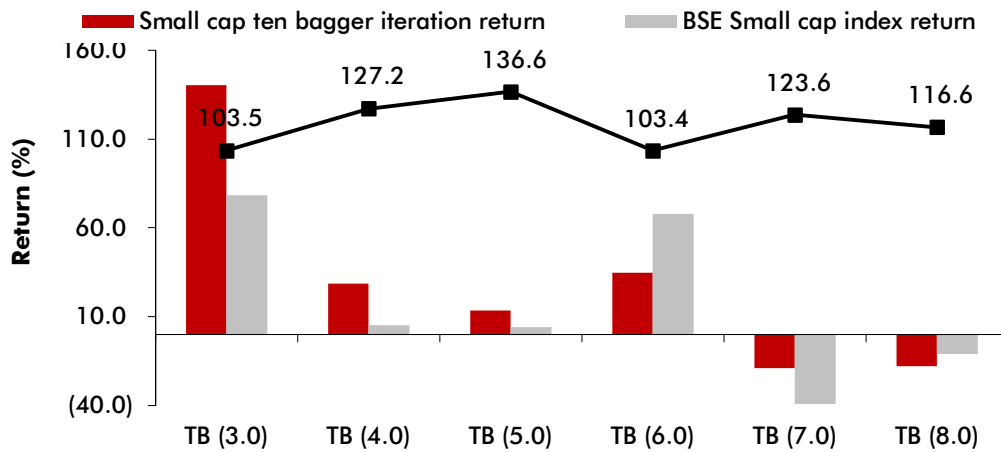
The live performance of our ten-bagger portfolios has been impressive too

Exhibit 9: Performance of the Annual BSE500 ten-bagger (TB) portfolios (since 19 January 2012)



Source: Bloomberg, Ambit Capital research. Note: Performance in the exhibit above is on a total-return basis; i.e. assuming that dividends are reinvested into the same stock on the ex-dividend date. We have used BSE500 index (ex-BFSI). Returns are calculated on 1-year forward basis; i.e. from date of one iteration to the next.

Exhibit 10: Performance of sub-BSE500 ten-bagger portfolios (since 14 January 2013)



Source: Bloomberg, Ambit Capital research. Note: Performance in the exhibit above is on a total-return basis; i.e. assuming that dividends are reinvested back into the same stock on the ex-dividend date. We have used BSE small-cap index (ex-BFSI). Returns are calculated on 1-year forward basis; i.e. from date of one iteration to next.

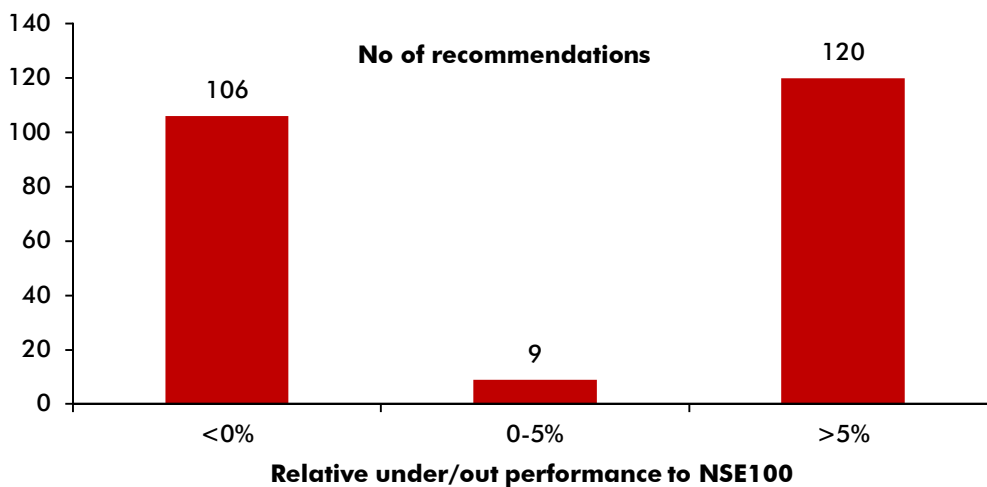
Probability of identifying a champion franchise is quite high

The returns shown in above exhibit are from the equal weighted portfolios created over the years. We observe that, if we were to create a portfolio considering free float market-cap-based weights, the rate of returns would be lower by 7% (median CAGR basis) as compared to an equally weighted portfolio. Given difference in market caps, free floats or liquidity of the portfolio companies, replicating our ten-bagger portfolio will be more suitable for small AUMs. Nonetheless, we believe, intertwining of our 'greatness' and 'accounting' framework could help generate individual ideas

An overlay of accounting and corporate governance checks to the greatness framework is the last but critical step

Out of 235 recommendations from BSE-500 universe which we highlighted over the previous eight iterations, >50% of these outperformed NSE100 by margin of more than 5% in the next one year from the date of iteration. Note that, for the purpose of our ten-bagger portfolio, we churn the companies every year.

Exhibit 11: >50% recommendations in last 8 iterations outperformed NSE100 by >10% in the next one year since iteration date



Source: Ambit Capital research, Company, Bloomberg. Note: Performance is on a total-return basis; i.e. assuming dividends are reinvested back into the same stock on the ex-dividend date. Returns are calculated on 1-year forward basis; i.e. from date of one iteration to next

Ten-baggers 9.0

In the latest iteration of the ten-bagger exercise, to identify stocks for the portfolio, we select firms which clear our 'greatness' filters (i.e. where the 'greatness score' is more than 67%) as well as 'accounting' filters (i.e. where the stock does not fall in the bottom three deciles on accounting in our accounting model).

To identify the stocks for our Ten-bagger 9.0 iteration, we start with firms with the highest 'greatness score'. Within these firms, we remove firms:

- That fall in the 'Zone of Darkness' in our accounting model (i.e. the bottom 3 deciles on accounting quality; for a full exposition of our accounting filter, please refer to our [08 January 2020 note](#) "When Accounting Predicted");
- Firms with suspect corporate governance; and
- Firms with 6 months median daily value traded (MDV) of below USD0.35mn.

This overlay of 'greatness', 'accounting', corporate governance and liquidity checks allows us to identify the 25 firms that comprise our ten-bagger portfolio. We highlight that we do not exclude the companies where our analysts may have a negative view for near-term earnings or valuations. Stocks are arranged in ascending order of their market cap in the exhibit below.

In Appendix 1 of this note, our in-house analysts comment on business aspects of these entities. These comments revolve around competitive advantage, reasons for improved business momentum for last few years and outlook on their businesses in near term.

Exhibit 12: Ten-bagger 9.0 portfolio

Ticker	Company	Mcap	FF Mcap	MDVT - 6m	Greatness score		Accounting decile		RoCE		Sales growth	
		(US\$ mn)	(US\$ mn)	(US\$ mn)	2019	2018	2019	2018	2019	2018	2019	2018
HUVR IN	Hind. Unilever	65,518	21,503	38.5	75%	50%	D3	D2	1183%	926%	11%	7%
DMART IN	Avenue Super.	18,997	3,851	11.9	92%	83%	D3	D4	30%	34%	33%	18%
BOS IN	Bosch	5,803	1,710	3.6	75%	67%	D4	D3	89%	83%	5%	4%
IGL IN	Indraprastha Gas	5,049	2,777	8.8	83%	58%	D6	D1	69%	64%	27%	19%
LTI IN	L & T Infotech	4,742	1,205	2.5	75%	50%	D2	D3	75%	55%	29%	12%
WHIRL IN	Whirlpool India	4,312	1,078	2.0	100%	75%	D2	D2	162%	200%	12%	23%
PAG IN	Page Industries	3,863	1,996	8.3	75%	58%	D1	D1	90%	88%	12%	20%
BOOT IN	Abbott India	3,919	980	1.4	92%	67%	D2	D1	144%	133%	12%	14%
3M IN	3M India	3,652	913	0.5	83%	75%	D5	D3	103%	146%	10%	17%
HWA IN	Honeywell Auto	4,056	1,014	0.6	75%	58%	D2	D3	113%	78%	18%	12%
JUBI IN	Jubilant Food.	3,581	2,079	17.3	75%	33%	D2	D2	88%	52%	18%	17%
VOLT IN	Volta	3,253	2,267	9.7	75%	67%	D7	D6	49%	81%	11%	6%
TRCL IN	The Ramco Cement	2,658	1,524	3.0	83%	75%	D1	D2	17%	19%	17%	12%
ABFRL IN	Aditya Bir. Fas.	2,495	1,021	1.4	83%	75%	D2	D5	12%	9%	13%	9%
LTTS IN	L&T Technology	2,490	629	1.9	75%	58%	D2	D3	55%	38%	36%	15%
DLPL IN	Dr Lal Pathlabs	1,997	863	1.8	83%	75%	D3	D2	101%	94%	14%	16%
NITEC IN	NIIT Tech.	1,686	504	6.8	83%	67%	D3	D4	53%	41%	23%	7%
NTCPH IN	Natco Pharma	1,599	816	1.0	100%	92%	D5	D5	32%	46%	-4%	8%
SF IN	Sundram Fasten.	1,440	727	0.4	75%	83%	D5	D3	29%	31%	18%	17%
AVNT IN	Avanti Feeds	1,280	721	3.0	92%	83%	D5	D4	74%	161%	3%	30%
PVRL IN	PVR	1,439	1,174	9.2	83%	92%	D3	D5	20%	16%	32%	10%
GRIL IN	Graphite India	821	286	6.2	83%	67%	D1	D1	231%	95%	141%	123%
TELX IN	Tata Elxsi	900	499	7.8	75%	67%	D3	D3	113%	108%	15%	12%
BRCM IN	Balrampur Chini	485	286	2.8	92%	67%	D1	D1	20%	13%	-1%	26%
NOCIL IN	NOCIL	211	140	1.2	83%	75%	D2	D5	37%	39%	8%	30%

Source: Ambit Capital research, Company, Bloomberg, Sorted on the basis of market cap in ascending order. Market cap, FF market cap and 6 months MDV is dated 04 Feb 2020. Several companies like Inox leisure were not considered for our portfolio owing to alleged corporate governance issues

A few other stocks pass our greatness and accounting filters; however we have ignored the same only on liquidity reasons, i.e. their 6 months' median daily traded value (MDV) is below USD0.35mn. Stocks are arranged below in ascending order of their market cap.

Exhibit 13: BSE-500 ten-bagger companies ignored for low liquidity

Sr. No.	Ticker	Company	Greatness score 2019	Accounting decile 2019	Mcap (US\$ mn)	6 Months MDV (US\$ mn)
1	ENDU IN	Endurance Tech.	83%	D2	2202	0.3
2	SCHFL IN	Schaeffler India	92%	D5	2031	0.3
3	SKF IN	SKF India	92%	D6	1531	0.2
4	TTKPT IN	TTK Prestige	75%	D3	1157	0.3
5	NARH IN	Narayana Hrudayalaya	75%	D3	1017	0.3
6	SFL IN	Sheela Foam	83%	D7	1003	0.1
7	GWN IN	Grindwell Norton	92%	D3	995	0.1
8	JCHAC IN	Johnson Con. Hit	75%	D4	914	0.1
9	TCNSBR IN	TCNS Clothing	83%	D5	505	0.1
10	GALK IN	Guj Alkalies	83%	D1	437	0.2
11	TVTN IN	T.V. Today Netw.	83%	D2	209	0.1

Source: Ambit Capital research, Company, Bloomberg. Market cap and 6 months MDV data are dated 04 Feb 2020

Having identified the 25 great firms that exhibit the ingredients required to be tomorrow's winners, we run a valuation check to ascertain if they are currently trading at reasonable prices for outright investments. In our view, whilst valuations do matter on a tactical basis, how the underlying fundamentals evolve for the firm over long periods plays a more important role in determining returns than the beginning-of-the-period valuation itself. Further, the performance of the previous iterations of our ten-bagger portfolio corroborates our finding that **beginning-of-the-period valuations do not play a significant role in shaping subsequent investment returns**. Nonetheless, we observe that, since 2019 (adoption of new 'greatness' framework) proportion of companies with attractive valuations have gone up. This is explained in detail in later part of the note.

For the long-term investor, beginning-of-period valuations do not have a significant impact on returns

To determine whether a particular stock is cheap or not, we categorise these stocks into three buckets based on their relative attractiveness on valuations with respect to their own history. We compare these firms with respect to their five-year average valuations on three metrics — P/B, P/E and EV/EBITDA. We find 13 firms to be inexpensive (on at least two of the three metrics). However, for the long term, all 25 stocks remain candidates to be ten-baggers from our perspective (as we have reiterated time and again that current period valuations do not have a significant effect on long-term returns! Just that, a higher number of companies with attractive valuations could indicate even higher returns.

We have bottom-up coverage with BUYs on 7 of these – Avenue Supermarket, Jubilant Food, Dr. Lal Pathlabs, Sundram Fasteners, PVR, Aditya Birla Fashion and Indraprastha Gas, while SELL on 2 of these- Page Industries and Ramco Cements

Exhibit 14: Ten-Baggers 9.0 – valuation perspective

Sr. No.	Ticker	Company	Mcap (US\$ mn)	FF Mcap (US\$ mn)	MDVT - 6m (US\$ mn)	Trailing		Blended FY19 and FY20 valuations			Cheap w.r.t. history?			Overall cheap on how many counts?
						P/E	P/B	P/E	P/B	EV/ EBITDA	P/E	P/B	EV/ EBITDA	
Attractive valuations*														
1	DMART IN	Avenue Super.	18,997	3,851	11.9	119.2	25.6	98.1	17.6	61.2	Yes	Yes	Yes	3
2	BOS IN	Bosch	5,803	1,710	3.6	37.6	4.6	33.3	5.1	23.8	Yes	Yes	Yes	3
3	PAG IN	Page Industries	3,863	1,996	8.3	68.4	34.6	65.4	32.4	43.4	Yes	Yes	Yes	3
4	NTCPH IN	Natco Pharma	1,599	816	1.0	21.2	3.4	17.7	2.9	14.3	Yes	Yes	Yes	3
5	SF IN	Sundram Fasten.	1,440	727	0.4	26.6	5.5	26.3	5.6	15.8	Yes	Yes	Yes	3
6	GRIL IN	Graphite India	821	286	6.2	3.4	1.1	4.9	1.4	3.0	Yes	Yes	Yes	3
7	TELX IN	Tata Elxsi	900	499	7.8	27.2	6.8	22.8	6.0	15.3	Yes	Yes	Yes	3
8	BRCM IN	Balrampur Chini	485	286	2.8	5.9	1.8	6.4	1.5	7.0	Yes	Yes	Yes	3
9	NOCIL IN	NOCIL	211	140	1.2	8.9	1.4	10.8	1.6	7.0	Yes	Yes	Yes	3
10	JUBI IN	Jubilant Food.	3,581	2,079	17.3	79.4	19.5	62.7	15.6	29.3	Yes	-	Yes	2
11	LTTS IN	L&T Technology	2,490	629	1.9	22.4	7.0	21.5	6.3	16.3	Yes	Yes	-	2
12	DLPL IN	Dr Lal Pathlabs	1,997	863	1.8	60.9	14.2	48.8	10.9	32.4	Yes	Yes	-	2
13	PVRL IN	PVR	1,439	1,174	9.2	57.7	7.7	47.3	6.5	14.9	Yes	-	Yes	2
Moderate valuations**														
14	HWA IN	Honeywell Auto	4,056	1,014	0.6	71.7	17.5	58.4	12.1	39.2	Yes	-	-	1
15	3M IN	3M India	3,652	913	0.5	72.1	18.4	79.6	19.1	50.0	-	Yes	-	1
16	TRCL IN	The Ramco Cement	2,658	1,524	3.0	30.2	4.1	31.4	3.8	17.5	-	Yes	-	1
17	ABFRL IN	Aditya Bir. Fas.	2,495	1,021	1.4	60.4	13.8	74.7	11.6	26.3	-	-	Yes	1
18	AVNT IN	Avanti Feeds	1,280	721	3.0	24.6	7.0	22.3	5.4	14.2	-	Yes	-	1
Rich valuations**														
19	HUVR IN	Hind. Unilever	65,518	21,503	38.5	70.8	59.3	62.9	52.3	43.6	-	-	-	0
20	IGL IN	Indraprastha Gas	5,049	2,777	8.8	35.2	8.5	29.3	6.1	18.9	-	-	-	0
21	LTI IN	L & T Infotech	4,742	1,205	2.5	22.9	6.3	21.0	6.0	15.4	-	-	-	0
22	WHIRL IN	Whirlpool India	4,312	1,078	2.0	64.1	14.7	50.4	10.4	32.2	-	-	-	0
23	BOOT IN	Abbott India	3,919	980	1.4	53.1	13.9	40.5	9.7	29.2	-	-	-	0
24	VOLT IN	Voltas	3,253	2,267	9.7	47.1	5.5	39.4	5.1	30.4	-	-	-	0
25	NITEC IN	NIIT Tech.	1,686	504	6.8	28.8	N/A	23.1	4.5	13.3	-	-	-	0

Source: Bloomberg, Capitaline, Ambit Capital research Note: Sorted on the basis of valuations.

* Trading below five-year average P/E, P/B, EV/EBITDA (on at least two of these three measures)

** Trading below either five-year average P/E, five-year P/B or five-year EV/EBITDA (on one of these three measures)

*** Trading above five-year average P/E, P/B and EV/EBITDA

For the 'greatness' and accounting scores for the entire listed companies universe (ex-financials), clients can now use our [HAWK](#) platform

Exhibit 15: Ten-Baggers 9.0 - financial snapshot

Ticker	Company	Mcap	FF Mcap	MDVT - 6m	Share price perf. 3yr	3yr CAGR				3yr median			FY19 Net Debt/Equity	FY20 P/E	FY20 P/B
		(US\$ mn)	(US\$ mn)	(US\$ mn)		Sales	PAT	CFO	FCF	EBIT margins	RoE	RoCE (pre-tax)			
Attractive valuations*															
DMART IN	Avenue Super.	18,997	3,851	11.9	98%	32%	41%	23%	N/A#	7%	18%	30%	0.1	98	18.7
BOS IN	Bosch	5,803	1,710	3.6	-14%	5%	5%	-23%	-70%	19%	17%	83%	-0.6	32	4.3
PAG IN	Page Industries	3,863	1,996	8.3	20%	17%	19%	2%	0%	21%	46%	88%	0.1	60	28.9
NTCPH IN	Natco Pharma	1,599	816	1.0	-5%	22%	59%	81%	-305%	39%	29%	46%	0.0	19	2.9
SF IN	Sundram Fasten.	1,440	727	0.4	13%	12%	31%	-8%	-278%	15%	28%	31%	0.5	27	4.9
GRIL IN	Graphite India	821	286	6.2	43%	72%	246%	105%	121%	45%	45%	95%	-0.5	7	1.1
TELX IN	Tata Elxsi	900	499	7.8	12%	14%	23%	21%	30%	25%	37%	108%	-0.5	25	5.7
BRCM IN	Balrampur Chini	485	286	2.8	1%	16%	34%	N/A	N/A%	15%	30%	20%	0.8	7	1.5
NOCIL IN	NOCIL	211	140	1.2	7%	13%	33%	-1%	-28%	26%	17%	37%	-0.1	9	1.2
JUBI IN	Jubilant Food.	3,581	2,079	17.3	61%	13%	49%	26%	-360%	10%	22%	52%	-0.5	66	16.8
LTTS IN	L&T Technology	2,490	629	1.9	27%	18%	22%	15%	21%	17%	33%	44%	-0.3	22	6.0
DLPL IN	Dr Lal Pathlabs	1,997	863	1.8	16%	15%	14%	11%	15%	25%	25%	101%	-0.7	54	12.5
PVRL IN	PVR	1,439	1,174	9.2	15%	19%	23%	33%	49%	12%	12%	17%	1.0	53	6.7
Moderate valuations**															
HWA IN	Honeywell Auto	4,056	1,014	0.6	51%	13%	37%	23%	24%	14%	19%	78%	-0.7	62	13.0
3M IN	3M India	3,652	913	0.5	26%	12%	23%	-1%	-5%	19%	29%	103%	-0.4	N/A	N/A
TRCL IN	The Ramco Cement	2,658	1,524	3.0	5%	13%	-2%	-10%	9%	19%	14%	19%	0.2	29	3.8
ABFRL IN	Aditya Bir. Fas.	2,495	1,021	1.4	17%	10%	N/A	19%	34%	4%	12%	10%	1.1	96	11.3
AVNT IN	Avanti Feeds	1,280	721	3.0	51%	20%	19%	15%	42%	13%	41%	117%	-0.6	24	6.2
Rich valuations***															
HUVR IN	Hind. Unilever	65,518	21,503	38.5	36%	7%	14%	12%	14%	21%	75%	926%	-0.8	65	56.4
IGL IN	Indraprastha Gas	5,049	2,777	8.8	38%	16%	20%	21%	4%	24%	21%	64%	-0.4	31	7.0
LTI IN	L & T Infotech	4,742	1,205	2.5	41%	17%	22%	18%	19%	17%	35%	58%	-0.4	23	6.0
WHIRL IN	Whirlpool India	4,312	1,078	2.0	33%	16%	19%	5%	-7%	12%	21%	183%	-0.7	53	11.8
BOOT IN	Abbott India	3,919	980	1.4	43%	12%	20%	26%	31%	19%	24%	138%	-0.8	46	11.6
VOLT IN	Voltas	3,253	2,267	9.7	28%	8%	16%	N/A	-17%	12%	16%	76%	-0.6	38	5.1
NITEC IN	NIIT Tech.	1,686	504	6.8	66%	11%	15%	8%	24%	14%	16%	41%	-0.4	26	5.0

Source: Source: Bloomberg, Capitaline, Ambit Capital research. 3 years is based on data for the FY17/FY18/FY19. 3-year CAGR share price performance is for Jan 2017 to Jan 2020

* Trading below five-year average P/E, P/B, EV/EBITDA (on at least two of these three measures)

** Trading below either five-year average P/E, five-year P/B or five-year EV/EBITDA (on one of these three measures)

*** Trading above five-year average P/E, P/B and EV/EBITDA

FCF are negative

Exhibit 16: Ten-Baggers 9.0 – forward-looking data using consensus

Sr. No.	Ticker	Company	Mcap	MDVT - 6m	FY21 P/E	FY22 P/E	FY19-FY22E	FY19-FY22E
			(US\$ mn)	(US\$ mn)			EPS CAGR	BPS CAGR
Attractive valuations*								
1	DMART IN	Avenue Super.	18,997	11.9	98	76	34%	25%
2	BOS IN	Bosch	5,803	3.6	32	27	4%	10%
3	PAG IN	Page Industries	3,863	8.3	60	51	17%	22%
4	NTCPH IN	Natco Pharma	1,599	1.0	19	18	2%	12%
5	SF IN	Sundram Fasten.	1,440	0.4	27	22	9%	15%
6	GRIL IN	Graphite India	821	6.2	7	6	-26%	11%
7	TELX IN	Tata Elxsi	900	7.8	25	20	4%	20%
8	BRCM IN	Balrampur Chini	485	2.8	7	6	-1%	13%
9	NOCIL IN	NOCIL	211	1.2	9	7	0%	11%
10	JUBI IN	Jubilant Food.	3,581	17.3	66	54	21%	21%
11	LTTS IN	L&T Technology	2,490	1.9	22	19	10%	19%
12	DLPL IN	Dr Lal Pathlabs	1,997	1.8	54	45	24%	21%
13	PVRL IN	PVR	1,439	9.2	53	38	19%	14%
Moderate valuations**								
14	HWA IN	Honeywell Auto	4,056	0.6	62	52	27%	26%
15	3M IN	3M India	3,652	0.5	N/A	N/A	N/A	N/A
16	TRCL IN	The Ramco Cement	2,658	3.0	29	25	21%	13%
17	ABFRL IN	Aditya Bir. Fas.	2,495	1.4	96	54	11%	18%
18	AVNT IN	Avanti Feeds	1,280	3.0	24	22	22%	22%
Rich valuations***								
19	HUVR IN	Hind. Unilever	65,518	38.5	65	54	17%	29%
20	IGL IN	Indraprastha Gas	5,049	8.8	31	29	20%	20%
21	LTI IN	L & T Infotech	4,742	2.5	23	19	10%	16%
22	WHIRL IN	Whirlpool India	4,312	2.0	53	45	25%	21%
23	BOOT IN	Abbott India	3,919	1.4	46	39	22%	20%
24	VOLT IN	Voltas	3,253	9.7	38	31	20%	12%
25	NITEC IN	NIIT Tech.	1,686	6.8	26	22	16%	14%

Source: Bloomberg, Ambit Capital research

* Trading below five-year average P/E, P/B, EV/EBITDA (on at least two of these three measures)

** Trading below either five-year average P/E, five-year P/B or five-year EV/EBITDA (on one of these three measures)

*** Trading above five-year average P/E, P/B and EV/EBITDA

Construction of a portfolio

Our 'Greatness' or 'Accounting' filters can be used to pick high-quality companies. Say for instance, to begin with, using [HAWK](#) a portfolio manager may choose to tighten the filters thereby restricting the greatness score to >92% and accounting deciles only from D1 to D5, i.e. (zone of safety companies). This will provide the portfolio manager with a list of companies with which he can make further in-depth analysis and build a portfolio. Portfolio construction depends on several other factors including fund size, liquidity of the stock, underlying valuations, expected rate of returns etc. We construct a sample portfolio below purely on liquidity basis using 6 months' MDV.

We assume a portfolio size of ₹10bn and put constraints on investment per stock depending on their 6 months' MDV as given in the exhibit below.

Exhibit 17: Sample portfolio of ₹10bn created basis constraints on 6 months' MDV

6 months MDV (US\$mn)	6 months MDV (₹.mn)	Maximum limit (%)	Number of companies	Companies	Per stock investment (₹.bn)	Total investment (₹.bn)
<0.5	<34	1.5%	1	Sundram Fasteners	0.2	0.2
0.5 - 0.9	35 - 69	2.5%	2	Honeywell Auto, 3M India	0.3	0.5
1.0 - 1.9	70 - 139	3.5%	6	Natco Pharma, NOCIL, L&T Technology, Dr. Lal Pathlabs, Aditya Birla Fashion, Abbott India	0.4	2.1
2.0 - 5.0	140 - 349	4.0%	6	Balrampur Chini, Ramco Cement, Avanti Feeds, L&T Infotech, Whirlpool India, Bosch	0.4	2.4
>5	>350	5.0%	10	Avenue Supermart, Page Industries, Graphite India, Tata Elxsi, Jubilant Food, PVR, HUL, Indrapastha Gas, Voltas, NIIT Tech	0.5	5.0
Total						10.0

Source: Ambit Capital research, Bloomberg. 6months MDV data is considered as at 04 Feb 2020

Also, fund managers may want to further shortlist the companies' basis their existing valuations and greatness scores. Basis our exercise done in this note to assess whether these 25 companies hold attractive or rich valuations in comparison to their own history, we present below an exhibit to give a quick snapshot of how these 25 companies look on valuations and greatness scores. Whilst these 25 companies have a greatness score of >67%, we further divide these companies into 3 buckets, i.e. Q1, Q2 and Q3 such that Q1 companies have greatness score of 93 or more, Q2 companies have a greatness score of 83% or more but less than 93%, while Q3 has greatness score of 67% to 82%

Exhibit 18: Valuations and greatness matrix for 25 portfolio companies

	Greatness score buckets		
	67% - 82%	83%- 92%	93%-100%
	Q3	Q2	Q1
Attractive valuations	Bosch, Honeywell Auto, Jubilant Food., L&T Technology, Sundram Fasten., Tata Elxsi	Avenue Super., Dr Lal Pathlabs, PVR, Graphite India, Balrampur Chini, NOCIL	Natco Pharma
Moderate valuations	Page Industries	3M India, Aditya Bir. Fashion., Avanti Feeds	-
Rich valuations	Hind. Unilever, L & T Infotech, Voltas	Indraprastha Gas, Abbott India, The Ramco Cement, NIIT Tech.	Whirlpool India

Source: Ambit Capital research, Company

Finding 'quality' firms from sub-BSE 500

As small and mid-caps gain momentum, we believe our greatness and accounting framework can provide lead to identify high quality firms. In July 2016, we launched our 'HAWK' platform giving clients access to Ambit's proprietary 'forensic' and 'greatness' models in an easy to use and intuitive format. Our 'HAWK' platform allows clients to screen the entire universe ex-financials (~1,500 listed Indian companies) on the basis of their accounting quality (quantified using our 'forensic' model) and capital allocation track record (quantified using our 'greatness' framework) over the last 10 years. Whilst the platform currently has the accounting scores for all the companies updated until FY18, in a few days from now, we will refresh our platform to incorporate FY19 financials as well.

We present below a list of companies from outside the BSE500 but above a market cap of US\$50mn or ₹3.5bn that fare well on this year's iteration of our greatness framework (after updating FY19 numbers). Also, we restrict six months' Median Daily Value Traded (MDVT) to US\$0.1mn.

Please contact your relevant sales representatives at Ambit if you have not yet received the login credentials for 'HAWK' or if you would like a demo on how to use the product.

Given lesser known names and minimum to no coverage on these stocks, we also present few other important details for these companies in Appendix 2 and Appendix 3. These details include observations from watch-out investors, promoter's holding, shares pledged percentage, name of auditors, board independence and brief business description

Exhibit 19: January 2020 greatness framework on companies outside BSE500

Ticker	Company name	Mcap (US\$ mn)	FF Mcap (US\$ mn)	MDVT - 6m (US\$ mn)	'Greatness' scores*		Deciles		FY19 P/E	FY19 P/B	Trailing P/E	Trailing P/B
					2019	2018	2019	2018				
IRCTC IN	IRCTC	3,173	400	11.8	75%	N/A	D3	N/A	N/A	N/A	79	22.6
AFFLE IN	Affle India	643	203	1.9	75%	N/A	D3	N/A	N/A	N/A	84	N/A
GTFL IN	Garware Tech.	470	232	0.1	67%	75%	D4	D4	26	5.0	23	4.9
AACL IN	Alkyl Amines	397	102	0.1	67%	75%	D5	D4	39	8.3	19	7.8
JKPAPER IN	JK Paper	309	159	1.5	100%	75%	D1	D1	6	1.2	5	1.1
INGR IN	Ingersoll-Rand	294	77	0.1	75%	50%	D4	D7	24	4.7	26	5.1
GABR IN	Gabriel India	219	103	0.1	92%	58%	D5	D4	22	3.5	17	2.7
SUBR IN	Subros	262	166	0.1	100%	83%	D5	D5	22	2.6	22	2.6
MAIT IN	Maithan Alloys	221	55	0.1	92%	83%	D4	D6	6	1.3	7	1.5
ALBC IN	Alembic	195	64	0.1	67%	50%	D2	D1	5	0.9	7	1.2
WCPM IN	West Coast Paper	204	90	0.3	83%	92%	D4	D1	6	1.6	5	1.4
BLA IN	Balaji Amines	186	86	0.1	92%	67%	D1	D1	14	2.8	12	2.4
HOE IN	Hind.Oil Explor.	185	185	0.2	83%	75%	D2	D8	11	3.2	8	2.4
EXL IN	Excel Inds.	156	74	0.1	100%	58%	D4	D3	9	2.1	7	1.6
NPL IN	Natl. Peroxide	146	43	0.1	75%	58%	D3	D1	11	1.4	7	0.9
HIL IN	Hil Ltd	139	82	0.2	67%	25%	D1	D1	14	2.2	10	1.5
ICP IN	IOL Chemicals	140	82	0.6	100%	83%	D2	D3	5	2.3	4	2.2
ACCE IN	Action Const.Eq.	118	33	0.2	100%	83%	D5	D4	24	3.1	17	2.2
IGM IN	Igarashi Motors	138	34	0.2	67%	75%	D4	D2	19	2.5	18	2.4
TMC IN	Thirumalai Chem.	91	53	0.3	67%	58%	D4	D4	8	1.4	6	1.0
NELCO IN	NELCO	71	36	0.1	92%	67%	D4	D4	28	11.2	23	9.1

Source: Ambit Capital research, Company, Bloomberg. Market cap and free float market cap are dated 04 February 2020. IRCTC is listed for period of less than 6 months and hence we have excluded the first 10 days of listing value traded

Note that whilst the ten-bagger list for the sub-BSE500 universe meet the greatness score cutoff of 67%, the criteria used to screen ten-baggers from sub-BSE500 universe has been made **much more stringent** in terms of accounting quality. Only firms with greatness score >67% that also are in the Zone of Safety (top five deciles) on accounting quality in the sub-BSE500 universe have been included in this list.

Key fundamental parameters of our ten-bagger portfolios

Identifying structurally sound companies has always been the crux of our process of picking potential ten-baggers. We unveiled this framework on 19 January 2012 with the first iteration of the 'Tomorrow's ten-bagger' note. The 'greatness' framework studies a firm's structural strength by focusing not on absolute but on improvements over a period of time and the consistency of those improvements.

Needless to say, the above exercise has always allowed us to identify high-quality companies. We present in the below exhibit a summary of key parameters for each of our ten-bagger portfolios (including the latest one) released in the previous years.

Exhibit 20: Key parameters (median) of BSE500 ten-bagger portfolios

	Ten-baggers 1.0	Ten-baggers 2.0	Ten-baggers 3.0	Ten-baggers 4.0	Ten-baggers 5.0	Ten-baggers 6.0	Ten-baggers 7.0	Ten-baggers 8.0	Ten-baggers 9.0	BSE500 2019
Cash conversion (CFO/EBITDA)	68%	65%	65%	73%	71%	76%	70%	68%	64%	66%
ROE (%)	30%	26%	29%	29%	29%	28%	24%	18%	23%	15%
Pre-tax ROCE (%)	37%	29%	32%	35%	35%	35%	29%	25%	74%	24%
Debt / equity ratio	(0.4)	0.0	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.0)	(0.4)	0.1
EBIT margins	18%	17%	16%	17%	18%	17%	17%	15%	19%	14%
EBITDA margins	19%	17%	18%	19%	18%	19%	18%	15%	18%	16%

Source: Ambit Capital research, Bloomberg, Company. The above parameters are calculated as a median of the underlying companies and the BSE500 companies (ex-BFSI). Above numbers are calculated for each financial year; for instance for Ten-bagger 9.0, the numbers pertain to FY19. Earlier ten-bagger iterations are not strictly comparable with ten-bagger 8.0 and 9.0 as quality parameters in those (RoCE and RoE) were an input and hence a bias for higher RoCE, which is not the case this year. RoCE for Ten-bagger 9.0 and BSE-500 is core RoCE; i.e. capital employed is net off capital work in progress, capital advances and includes net-debt, while till Ten-bagger 8.0, no adjustment is done for CWIP, capital advances or total debt

Exhibit 21: Key parameters (median) of sub-BSE500 ten-bagger portfolios

	Ten baggers 3.0	Ten baggers 4.0	Ten baggers 5.0	Ten baggers 6.0	Ten baggers 7.0	Ten baggers 8.0	Ten baggers 9.0	Sub-BSE500 2019
Cash conversion (CFO/EBITDA)	56%	53%	71%	71%	72%	88%	73%	62%
ROE (%)	23%	29%	20%	23%	22%	26%	22%	11%
ROCE (%)	27%	34%	22%	25%	30%	32%	36%	17%
Debt / equity ratio	(0.1)	0.2	0.3	(0.1)	(0.2)	(0.1)	(0.1)	0.2
EBIT margins	14%	15%	12%	14%	16%	14%	13%	10%
EBITDA margins	15%	17%	16%	17%	19%	15%	14%	11%

Source: Ambit Capital research, Bloomberg, Company. The above parameters are calculated as a simple average of the underlying companies and the Sub-BSE500 companies. Sub-BSE500 companies exclude financial stocks. Earlier ten-bagger iterations are not strictly comparable with ten-bagger 8.0 and 9.0 as quality parameters in those (RoCE and RoE) were an input and hence a bias for higher RoCE and which is not the case this year. RoCE for Ten-Baggers 9.0 and BSE-500 is core ROCE, i.e. capital employed is net of capital work in progress, capital advances and includes net-debt, while till Ten-Baggers 8.0; no adjustment is done for CWIP, capital advances or total debt.

Performance check: Jan 2019 ten-baggers

Exhibit 22: The ten-bagger list published on 28 January 2019 ([Click here](#)) for the 28 January 2019 note, 'Ten-baggers 8.0')

Ticker	Company	Mcap (US\$ mn)	FF Mcap (US\$ mn)	Price		Total returns
				27-Jan-19	04-Feb-20	
Attractive valuations						
MSIL IN	Maruti Suzuki	30,520	13,365	100	112	12%
DMART IN	Avenue Super.	18,997	3,851	100	158	58%
KNPL IN	Kansai Nerolac	3,857	965	100	114	14%
TPW IN	Torrent Power	2,055	954	100	124	24%
DLPL IN	Dr Lal Pathlabs	1,997	863	100	162	62%
WIL IN	WABCO India	1,797	449	100	108	8%
NTCPH IN	Natco Pharma	1,599	816	100	94	-6%
GOAGRO IN	Godrej Agrovet	1,562	483	100	118	18%
AVNT IN	Avanti Feeds	1,280	721	100	194	94%
TMKN IN	Timken India	1,047	337	100	180	80%
SFL IN	Sheela Foam	1,057	264	100	123	23%
JCHAC IN	Johnson Con. Hit	913	235	100	135	35%
JYL IN	Jyothy Lab.	787	292	100	87	-13%
HEIM IN	Heidelberg Cem.	628	192	100	136	36%
JBCP IN	J B Chem & Pharm	561	248	100	164	64%
CCLP IN	CCL Products	440	240	100	88	-12%
DAGRI IN	Dhanuka Agritech	350	88	100	127	27%
NILK IN	Nilkamal Ltd	298	107	100	113	13%
LOG IN	La Opala RG	276	95	100	83	-17%
ADVENZY IN	Advance. Enzyme.	264	111	100	109	9%
SOMC IN	Somany Ceramics	184	89	100	62	-38%
Average for this bucket						23%
Moderate valuations						
3M IN	3M India	3,652	913	100	113	13%
PVRL IN	PVR	1,439	1,174	100	128	28%
KJC IN	Kajaria Ceramics	1,253	657	100	105	5%
SCHI IN	Sudarshan Chem.	455	217	100	151	51%
WH IN	Venky's (India)	318	139	100	74	-26%
Average for this bucket						14%
Rich valuations						
BRIT IN	Britannia Inds.	10,908	5,385	100	101	1%
WHIRL IN	Whirlpool India	4,312	1,078	100	167	67%
ATLP IN	Atul	2,014	1,111	100	140	40%
SF IN	Sundram Fasten.	1,440	727	100	95	-5%
Average for this bucket						25.7%
Ten-bagger						22.2%
BSE500 index				100	111	10.9%
BSE500 (ex BFSI) index				100	105	5.0%
BSE100 Index				100	111	11.0%
NIFTY Index				100	113	12.5%

Source: Bloomberg, Ambit Capital research. Note: Performance is on a total-return basis; i.e. assuming that dividends are reinvested into the same stock on the ex-dividend date. Performance is calculated from 29Jan 2019 to 04 Feb 2020

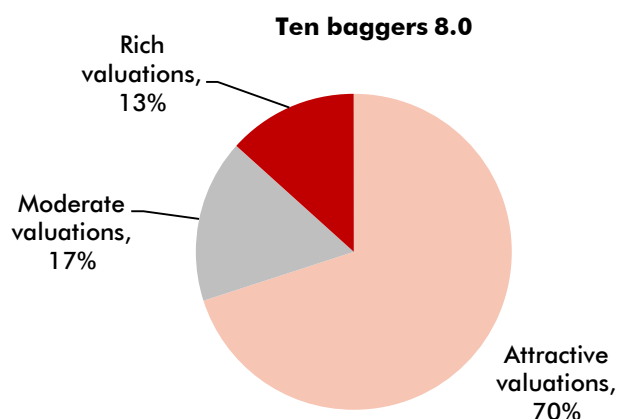
Last year's iteration of ten-baggers published on 28 January 2019 outperformed the BSE-500 index (ex-financials) by ~17%. The relative outperformance of ~17% could be partially explained by the fact that the previous year's portfolio (Ten-Baggers 8.0) consisted of larger proportion (~70%) of companies with attractive valuations which experienced significant increase in their share prices in the previous 12 months. Interestingly, even the stocks which were richly valued last year gave ~26% total shareholder returns.

New framework helps identify emerging companies, thereby indicating potentially higher relative returns (say to a BSE-500 index)

The above exhibit also highlights that beginning-of-the-period valuations have not made much difference to investment returns. Stocks categorised as attractively valued or richly valued, based on initial valuations, outperformed the BSE-500 index by >20%. This finding also emerged from earlier ten-bagger iterations. In effect, what our models have shown time and again is that **once you screen rigorously for high quality, there is little value-add in further screening through a demanding valuation filter.**

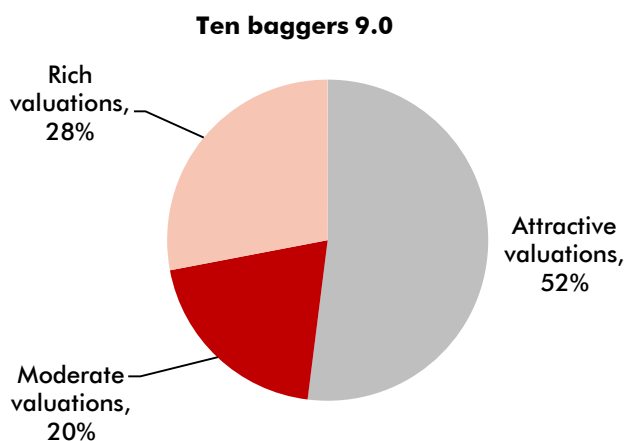
However, interestingly, we observe that since we changed our methodology to rather focus on drivers of 'greatness' over final outcomes (e.g. ROE, ROCE) from 2019, the contribution of attractively valued stocks to the total portfolio has gone up. This could potentially provide higher relative returns. In years prior to 2019, companies were selected basis better outcomes like ROE, ROCE etc. which obviously got accounted for in their valuations and hence earlier iterations consisted of large number of stocks richly valued. Since 2019, the proportion of companies with attractive valuations have gone up, which could mean companies consistently showcasing 'drivers of greatness' but previously ignored are getting picked up.

Exhibit 23: Since last year, our ten-bagger portfolio was dominated (~70%) by companies with attractive valuations



Source: Ambit Capital research

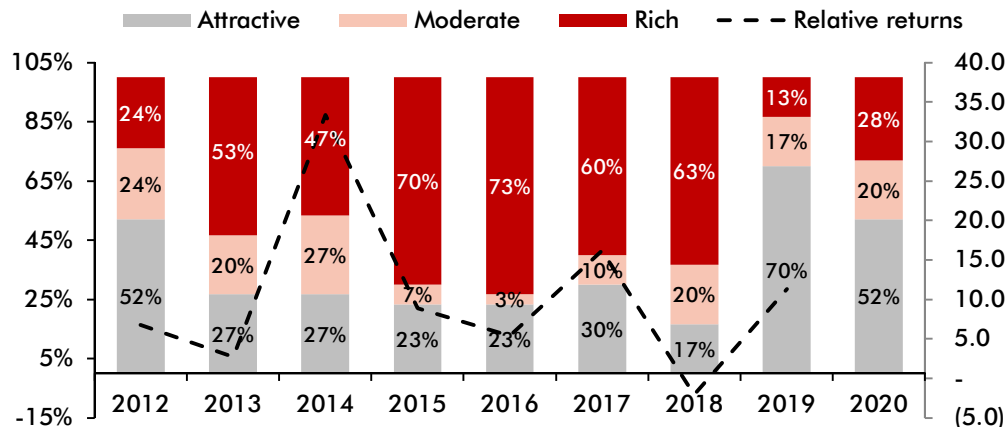
Exhibit 24: Almost half of current year's portfolio is also dominated by companies with attractive valuations



Source: Ambit Capital research

The 2019 iteration, being the first outcome of our new framework, earned 11% relative returns as compared to BSE-500 index, which is third highest since 2012. The 2014 and 2017 iterations were the first two with highest relative returns to BSE-500 index. 2017 iteration outperformance could also be attributed to excess liquidity in the system in that year.

Exhibit 25: Higher share of attractively valued stocks since 2019 indicates potentially higher relative returns in the coming years

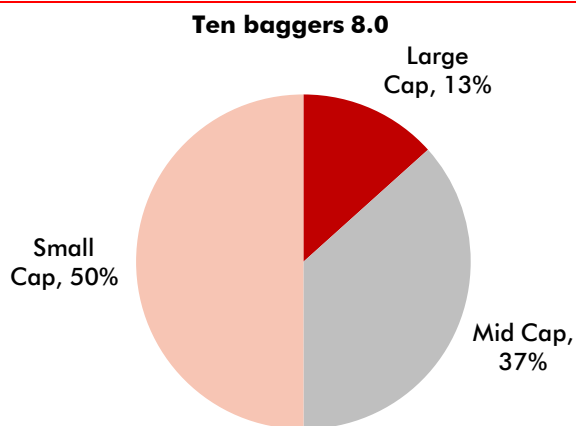


Source: Ambit Capital research, Bloomberg. Note: we have used BSE500 index to compare relative returns.

Higher number of 'Great' firms comes from small and mid-cap space

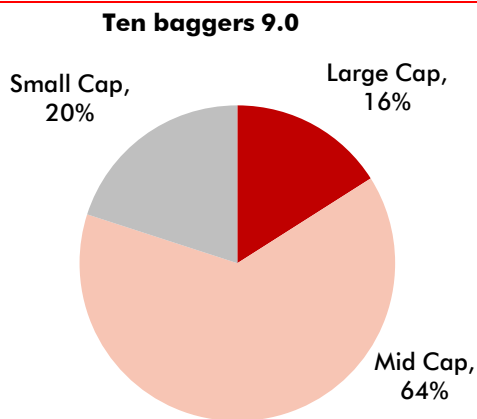
Basis our new greatness framework and FY19 AR-based accounting scores, it is observed that large-cap companies may not necessarily continue to dominate the greatness and good quality accounting space over a period of time. In fact, in the current year and previous year's ten-bagger iterations, small-caps and mid-caps have contributed >80% to the portfolio.

Exhibit 26: Small-caps and mid-caps contributed significantly to last year's iteration



Source: Ambit Capital research. Classification is basis latest AMFI criteria (Jul-Dec 2019)

Exhibit 27: Similar to last year, small-caps and mid-caps contribute >80 of total portfolio



Source: Ambit Capital research. Classification is basis latest AMFI criteria (Jul-Dec 2019)

Cumulative absolute returns of our ten-bagger portfolios still higher than BSE500 returns

Our first seven iterations of ten-baggers have given cumulative absolute returns of ~182% and relative returns (to BSE500) of ~71% ([click here](#) for the 19 January 2012 note on ten-baggers 1.0; [click here](#) for the 14 January 2013 note on ten-baggers 2.0; [click here](#) for the 26 November 2013 note on ten-baggers 3.0; [click here](#) for the 05 January 2015 note on ten-baggers 4.0; [click here](#) for the 05 January 2016 note on ten-baggers 5.0; [click here](#) for the 06 January 2017 note on ten-baggers 6.0; [click here](#) for the 15 January 2018 note on ten-baggers 7.0; [Click here](#) for the 29 January 2018 note on ten-baggers 8.0).

Performance check: Jan 2019 sub-BSE500 ten-baggers

Our Jan 2019 sub-BSE500 portfolio has underperformed SPBSSIP Index (ex-BFSI) by ~7%. Taking cue from same, this year we have put more emphasis on making some other checks on these companies, including corporate governance checks (e.g. shares pledged, number of independent directors etc.), auditor checks (name of auditors), track of key financial parameters (CFO/EBITDA, contingent liabilities, ROE/ROCE etc.).

Exhibit 28: Superior firms on 'greatness' from sub-BSE500 published on 28 January 2019 ([Click here](#) for the 28 January 2019 note, 'Ten-baggers 8.0')

Ticker	Company	Mcap	FF Mcap	Price		Total returns
		(US\$ mn)	(US\$ mn)	27-Jan-19	04-Feb-20	
ORIENT IN	Orient Refrac.	429	144	100	128	28%
KNM IN	Kennametal India	321	80	100	100	0%
VORG IN	Valiant organics	229	120	100	97	-3%
LUMX IN	Lumax Inds.	197	49	100	98	-2%
MATRIM IN	Matrimony.com	142	70	100	103	3%
FSC IN	Foseco India	129	32	100	94	-6%
IGLY IN	India Glycols	127	49	100	107	7%
BEPL IN	Bhansali Engg.	111	50	100	69	-31%
DECM IN	Deccan Cements	63	28	100	85	-15%
SHEM IN	Shemaroo Entert.	57	20	100	36	-64%
NRA IN	N R Agarwal Inds	56	15	100	72	-28%
HARS IN	Harita Seating	56	19	100	104	4%
MEN IN	Menon Bearings	46	13	100	75	-25%
RDL IN	Rushil Décor	28	13	100	26	-74%
MUIL IN	Multibase India	28	7	100	36	-64%
Ten-bagger						-18.0%
SPBSSIP Index (ex BFSI)						-11.0%
Underperformance						-7.0%

Source: Bloomberg, Ambit Capital research. Note: Performance is on total return basis; i.e. assuming that dividends are reinvested back into the same stock on the ex-dividend date.

Finding multi-baggers: Intertwining Greatness and Forensic model

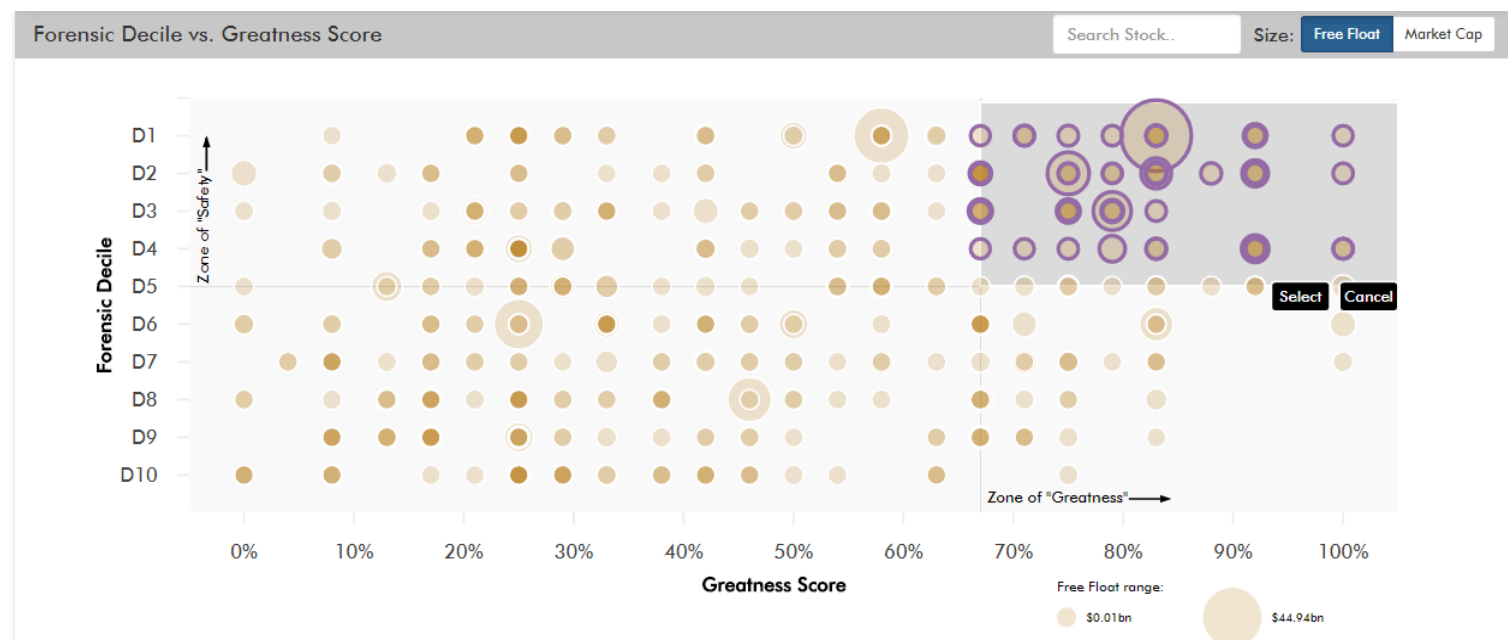
Our HAWK platform gives clients access to Ambit’s proprietary ‘forensic’ and ‘greatness’ models in an easy-to-use and intuitive format. Clients can construct model portfolios using ‘HAWK’ as a tool to identify 1) multi-bagger stocks, 2) high-quality franchises within sectors and 3) companies on the cusp of sliding to mediocrity or turnaround plays.

How can clients use ‘HAWK’ to build model portfolios?

Using ‘HAWK’ to identify ten-bagger stocks

Once clients enter their login credentials, towards the end of the dashboard, they can see the ‘Forensic and Greatness Model Bubble Chart’ (see Exhibit below).

Exhibit 29: Identifying ten-bagger stocks using ‘HAWK’



Source: Ambit Capital research. Note: The size of bubble represents either free float or market-cap based on toggle selection. Click on the bubble to view details for that stock

In the ‘bubble chart’, clients can select the “region” that is of interest. For example, to identify companies that do well on both our ‘forensic’ and ‘greatness’ frameworks, clients can simply select the top right hand region in the bubble chart (see the ‘Selection’ in the exhibit above). Once selected, the entire dashboard will automatically update based on your selection.

Using ‘HAWK’ to identify sector-level champion franchises

Once clients have logged into ‘HAWK’, there are several global level filters available that clients can use to refine the universe selection (see exhibit below)

Exhibit 30: Using ‘HAWK’ to identify champion franchises within sectors



Source: Ambit Capital research

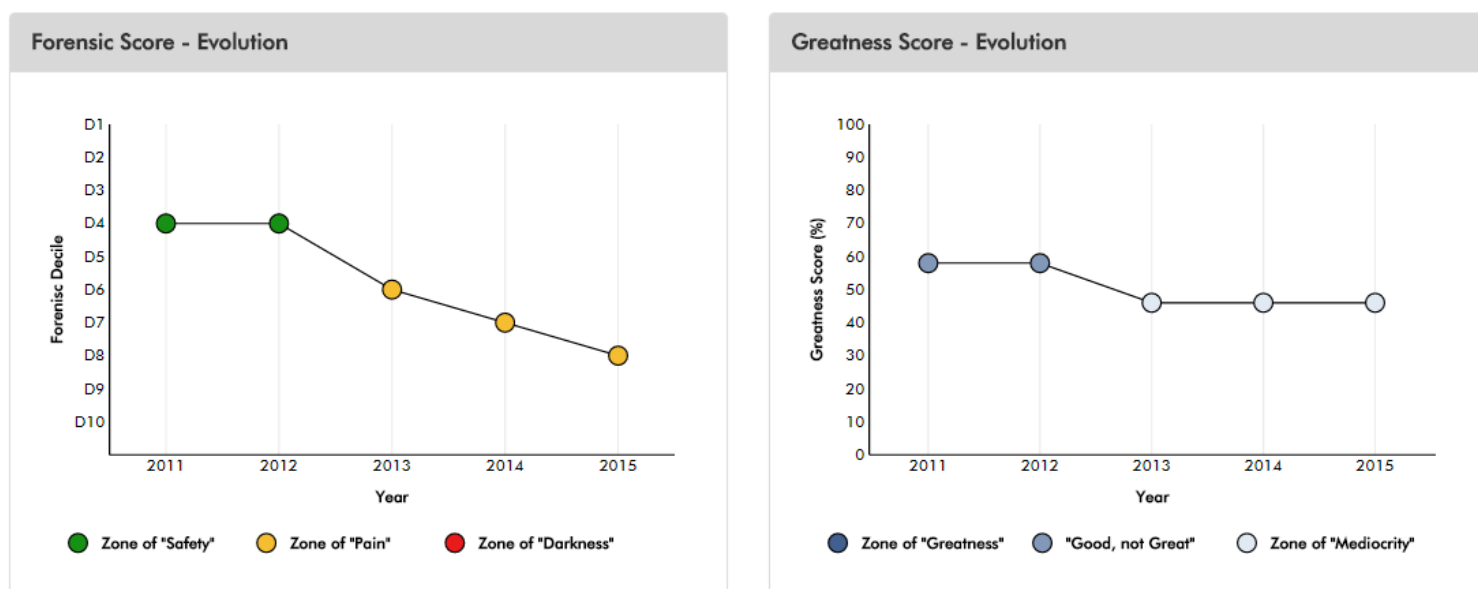
Amongst these global level filters there are two features available – ‘Forensic Decile’ and ‘Greatness Score’ – using which clients can shortlist companies on the basis of both ‘forensic’ as well as ‘greatness’ scores on our model.

To identify champion franchises within sectors, clients can simply shortlist companies that are in the top half of their sector on accounting as well as top half in their sector on capital allocation. Once shortlisted, the entire dashboard will automatically update based on the selection.

Using 'HAWK' to identify companies that are on the cusp of sliding to mediocrity

In our 'HAWK' platform, not only have we provided the latest accounting and capital allocation scores (i.e., scores for the year 2018) for all the companies in our universe, as you can see in the exhibit that follows, we have also provided a glimpse of how these scores have evolved for the company over the last five years. This means we have analysed the 'forensic' and 'greatness' scores for nearly 1,400 listed Indian companies using more than ten years of consolidated financials for these firms!

Exhibit 31: 'HAWK' can also be used to identify companies that are falling from grace



Source: Ambit Capital research, Company

As you can see in the exhibit above, once clients have entered the name of a specific company, they can see the accounting and capital allocation track records for the companies over the last five years. Firms that have been showing deterioration in their 'forensic' or 'greatness' scores over the last few years are clearly on the verge of sliding to mediocrity and, hence, should be avoided at all costs.

Using 'HAWK' to identify turnaround plays

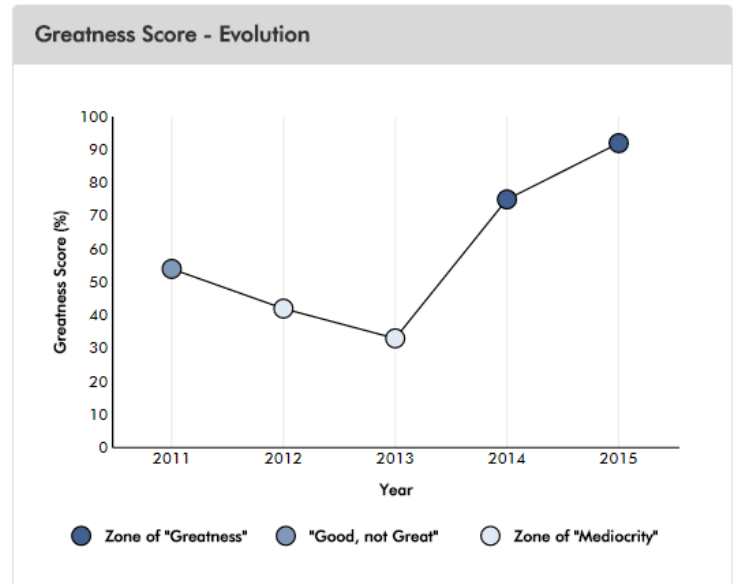
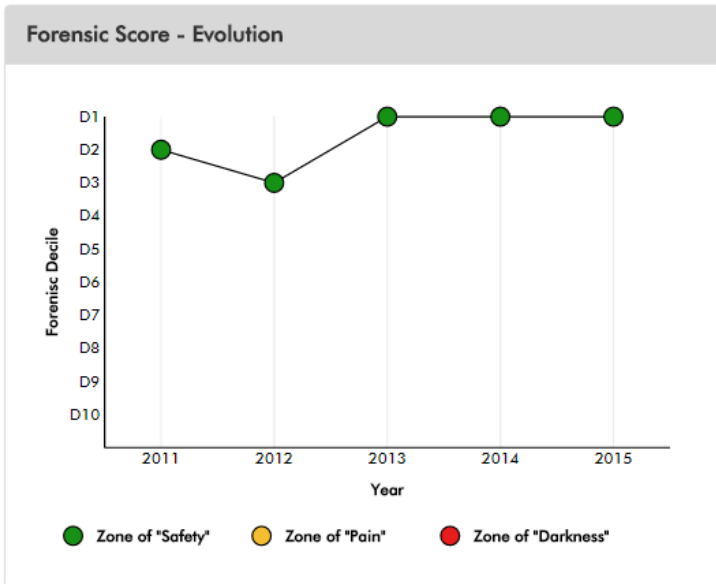
Whilst identifying companies that are falling from grace is important, the real 'alpha' lies in identifying turnaround plays, i.e. companies that have been showing an improvement in capital allocation as well as accounting quality over the past few years.

In our bottom-up coverage, we have used our 'forensic' and 'greatness' models extensively to identify companies that are on the cusp of a turnaround.

As you can see in the exhibit that follows, clients can also use 'HAWK' as a platform to identify companies that have been showing an improvement in their accounting quality as well as capital allocation over the last few years.

Refer Appendix to see few cases which have continued to be 'great firms' for a longer period of time

Exhibit 32: HAWK can identify companies that are on the cusp of a turnaround [this example is for Idea Cellular]



Source: Ambit Capital research

Appendix – Analyst comments on a few Jan 2020 ten-bagger portfolio companies

Appendix 1: Ten-baggers 9.0 – Analysts comments

Company	Analyst comments broadly on competitive advantage and business momentum	Ratings
Avenue Super. (BUY)	Longevity of efficient retailers like DMart is under-appreciated in India. DMart's investments in building leadership talent, prevalent distress in real estate prices and opening itself to leasing model would gradually accelerate store expansion. DMart posted 35% EBITDA CAGR in FY14-20E vs <20% by peers; RoCE of ~20% consistently beats peers. Even if DMart's 1-year fwd P/E de-rates 50%, exit multiple of 27x will drive 12% stock CAGR in the next 10 years on 21% EPS CAGR.	
Bosch (NOT RATED)	Leadership in diesel fuel injection systems in CVs other than a well-diversified presence in the aftermarket segment by selling blue labelled products. Access to global technology of Bosch helps Bosch India bring new products in the market in the form of 2W actuator systems, EV components, gasoline engine injection systems etc. Going ahead with rising competition in the diesel FIP from Denso, Delphi etc., it would get tougher for Bosch to derive growth from the cyclical CV market in India.	
Indraprastha Gas (BUY)	IGL reaped benefits of its entrenched presence in the NCR region owing to pollution issues driving judicial curbs that favoured Natural Gas over liquid fuel. We expect this trend to continue and further strengthen as retail CNG conversion will accelerate after BS-VI implementation (Apr'20), which will make diesel vehicles costlier than CNG variants. IGL's NCR opportunity is also enlarged due to its recent acquisitions; the same now comprises NCT of Delhi, Gautam Buddh Nagar (Noida and Greater Noida) and Ghaziabad in the East and Gurugram and Rewari in the West.	
L & T Infotech (NOT RATED)	LTI is one of the strongest challengers to tier 1 IT companies with full service offering across app modernization, enterprise solutions, infrastructure management and data analytics. Strong leadership of CEO Sanjay Jalona and improved management bandwidth, good client satisfaction scores, operational control and differentiated positioning have helped it post best-in-class growth. In addition, capability-focused acquisitions have helped in augmenting offerings. The company is expected to post low-teen growth in revenue and mid-teen growth in earnings over FY20-22E on consensus estimates.	
Page Industries (SELL)	In innerwear, no one has been able to maintain product consistency, keep brand fresh, expand distribution and still manage strong profitability barring Jockey. However, competition is emerging in male innerwear; gaining dominant market share in female innerwear (more fashion vs utility) and outerwear (more fashion, less consumer loyalty) limit optimism. Our TP of ₹22,130 (40x FY22E EPS) already builds 15% EPS CAGR over the next two decades.	
Abbott India (NOT RATED)	Abbott's outperformance can be attributed to: (i) focused approach towards specialty categories (in Tier I & II cities only); (ii) best-in-class MR productivity at ₹8mn/MR; and (iii) top 10 brands featuring in best 3 in respective therapy areas. New product launches (>70 over FY15-19) and foray into vaccines have improved business momentum over the last 4-5 years. Higher than IPM sales growth would continue owing to: (i) market leading position amongst strong brands in high-growth segments; and (ii) launches in high traction segments including vaccines, women's health and gastro.	
Honeywell Auto (NOT RATED)	HAIL is a leader in integrated automation and software solutions. It has a wide product portfolio in environmental and combustion controls and also provides engineering services in the field of automation and control. Honeywell distinguishes itself by earning superior return ratios than its peers, namely ABB and Siemens, due to better working capital management, fixed asset turnover and margin profile. In the near term, Honeywell's business would get a boost due to its focus on SME sector where the story would be of scale and not premium. Further, one of the key trends that the company expects to play out in a huge way is Industrial Internet of Things.	
Jubilant Food. (BUY)	JUBI's execution improved with every disruption – threat from Yum/other QSR in early 2000s, issues like management churn and rapid expansion of Domino's/Dunkin in FY15-17, and now food aggregators. JUBI boosted value proposition (better products, EDV meal) and operational efficiencies (400/200bps dip in staff/rent costs, FY16-19) and stuck to own delivery while improving SSSG (16%/5% in FY19/1HFY20) and margins (17%, FY19). Domino's store count has room to increase 2x over next decade (500 cities vs 276 now, 9 states/UTs with <10 stores). Long-term SSG would be ~7% (in line with global Domino's in last decade) led by menu expansion, longer operational hours (until 3am), and growing food delivery market.	
The Ramco Cement (SELL)	Ramco's competitive advantage comes from its strong brand and high exposure to Tamil Nadu and Kerala, which on an average have among the highest EBITDA/t in India. After volumes falling in FY14-16 at 8% CAGR, growth has picked up with demand growth in East and now recently in Tamil Nadu. FY16-19 volume CAGR for Ramco was 15%. By FY20-end, with culmination of its 4MTPA (increase of 25%) capacity expansion in East, Ramco should see improvement in product mix, reduction in logistics cost and improvement in brand positioning & realisation with an established network now also in East. Over FY19-22, we expect 12%/20% CAGR in revenue and EBITDA, which are already reflected in CMP with Ramco trading at 15x FY21E EV/EBITDA.	

Source: Ambit Capital research, Company, Bloomberg; Note:  - Strong;  - Relatively Strong;  - Average;  - Relatively weak.

Company	Analyst comments broadly on competitive advantage and business momentum	Ratings
Aditya Bir. Fas. (BUY)	ABFRL is built on industry-lowest working capital (46 days, FY19), brand extensions and expanding reach. Madura provides steady cash generation (₹4bn-5bn CFO) for funding and eventual deleveraging of Pantaloons, but importantly culture and experience to manage critical factors for new retailing platforms. Expect premium valuations to peers given decreasing debt:equity (10x, FY20E) and expanding RoCE (15% by FY20E). At 18x FY22E EV/EBITDA, the stock is inexpensive vs peers such as Trent which trade at 21x FY22E EV/EBITDA.	
L&T Technology (NOT RATED)	LTTS is among the strongest E&RD players in India. Diversified offerings across hi-tech, manufacturing, industrial, medical equipment and aerospace have helped LTTS tap the large ER&D market. The company has benefited from entry barriers in the space, wherein client familiarity and success are key to scale up. Also, ER&D remains the fastest growing service within Indian IT and LTTS leadership position here has helped in posting better than industry growth. The company has also progressively improved margins. After a weak FY20E, the company is expected to post low to mid-teen revenue and earnings growth over FY20-22E.	
Dr Lal Pathlabs (BUY)	DLPL's moats are (i) widest range of tests offerings and (ii) strong reach and reputation amongst doctors in northern and central regions (characterized by under-penetration and high population density). Uptrend in PSCs served per lab coupled with patient volume growth has been the key EBITDA margin driver over FY16-19. East and West would also contribute to growth given DLPL already has one of the largest PSC networks in the former, while it's amidst setting up infrastructure in tier II/III western cities.	
NIIT Tech. (NOT RATED)	NIIT Tech is a tier 2 IT player, with strengths in insurance and travel & transportation. The company's fortunes changed after Sudhir Singh joined as CEO in Jan-18. Under the new leadership, the company closed inefficiency gaps on growth and improved margins by: 1) restructuring business to vertical centric sales and delivery, 2) bringing in new leadership and expanding second level leadership, 3) improving incentive structures, 4) incubating new offerings like RPA, and 5) better client mining and hunting. The company's strong growth momentum is expected to continue with consensus expecting mid-teen earnings growth over FY20-22.	
Natco Pharma (NOT RATED)	Natco follows a differentiated path by focusing only on limited competition opportunities. So, it has led to >15 para IV opportunities (gRevlimid being largest) in the US over 3-4 years with cumulative value exceeding current US run-rate (excluding Copaxone and Tamiflu). Double-digit domestic sales growth and market share gains in gCopaxone have improved business momentum over last 2-3 years. However, increased competition in Hep-C market has adversely impacted its domestic business. Near-term catalysts include: (i) smoothly rolling out gRevlimid in FY22-end exclusively and US base business stability; (ii) domestic market and RoW branded formulations growth uptick; and (iii) concrete developments in agro-chemicals.	
Sundram Fasten. (BUY)	A diversified metal components player catering to CVs, PVs, 2Ws, industrials and export markets. It is the leader in the domestic car fastener market with ~60% market share (nearest competitor has ~10% market share). It has been expanding in exports and after-market at a brisk pace and thus pushing up EBITDA margin steadily. Going ahead, expansion in non-auto and exports would be the key drivers with disciplined capital allocation and focus on RoCE.	
Avanti Feeds (NOT RATED)	Avanti holds ~45% share in shrimp feed in India. Shrimp feed accounts for ~82% of Avanti's revenues with the rest being processed shrimp exports. Regulatory clearance for Vannamei (2009) and disease in peer markets in South East Asia (2013) were key drivers for strong Indian shrimp exports to US (CY12-18 CAGR of 25%); technical partnership with TUF (since 2002) helped Avanti get early-mover advantage in manufacturing shrimp feed for new species. Emergence of China as an alternative market offset looming risks like maturing industry, antidumping/countervailing duties by the US, volatility in shrimp prices globally and competitiveness of local players and from other regions.	
PVR (BUY)	PVR is playing all the levers to boost its growth - organic expansion acceleration, synergistic integration of profitable acquisitions, premiumising screens quickly as catchment per capita income grows, perfecting its F&B strategy and improving its attractiveness as an advertising property. Growing content diversification - small budget Hindi movies doing well and reducing dependence on superstar movies, growing movie consumption for regional and Hollywood content - continues to reduce content risks for PVR. Recent cut in GST on ticket prices support value equation for PVR and gives it the flexibility to pass on future cost increases. SPI acquisition is turning out better than expected, adding another feather to PVR's acquisition cap.	
Tata Elxsi (NOT RATED)	Tata Elxsi is a tier 2 IT player with differentiated offerings across embedded product design (87% of revenue), largely across transportation and broadcast & communication, with an upcoming offering across healthcare & medical devices. The company has benefited from uptake in technologies like AI, analytics, automation and IOT across its target markets. This has helped drive strong revenue and earnings growth. While weakness in auto and client specific issues impacted FY20E numbers, consensus estimates build in low-teen revenue and earnings growth expectations over FY20-22.	

Source: Ambit Capital research, Company, Bloomberg; Note:  - Strong;  - Relatively Strong;  - Average;  - Relatively weak.

Appendix 2 : 'Great' firms that featured in our Ten Bagger portfolios for more than 3 times

Co. Name	Ten-Bagger 1.0	Ten-Bagger 2.0	Ten-Bagger 3.0	Ten-Bagger 4.0	Ten-Bagger 5.0	Ten-Bagger 6.0	Ten-Bagger 7.0	Ten-Bagger 8.0	Ten-Bagger 9.0
ITC Ltd.	67%	75%	88%	83%	79%	71%	83%	-	-
Kajaria Ceramics Ltd.	-	75%	83%	75%	75%	92%	83%	75%	-
Torrent Pharmaceuticals Ltd.	67%	88%	88%	83%	67%	67%	-	-	-
Lupin Ltd.	67%	67%	83%	92%	83%	-	-	-	-
Glaxosmithkline Consumer Healthcare Ltd.	67%	92%	83%	100%	75%	-	-	-	-
Supreme Industries Ltd.	67%	79%	92%	75%	75%	-	-	-	-
Eicher Motors Ltd.	-	92%	92%	83%	75%	75%	-	-	-
PI Industries Ltd.	-	-	92%	92%	83%	100%	100%	-	-
Page Industries Ltd.	-	-	79%	92%	92%	79%	-	-	75%
Britannia Industries Ltd.	-	-	-	83%	75%	83%	83%	83%	-
Cadila Healthcare Ltd.	67%	100%	92%	-	-	-	100%	-	-
Persistent Systems Ltd.	-	83%	92%	92%	92%	-	-	-	-
Whirlpool Of India Ltd.	-	75%	-	-	-	-	92%	75%	100%
MRF Ltd.	-	-	100%	75%	75%	83%	-	-	-
HCL Technologies Ltd.	-	-	-	92%	92%	92%	83%	-	-
Berger Paints India Ltd.	-	-	-	92%	67%	83%	83%	-	-
Finolex Cables Ltd.	-	-	-	75%	79%	71%	79%	-	-
Sundram Fasteners Ltd.	-	-	-	83%	75%	-	-	83%	75%
La Opala RG Ltd.	-	-	-	-	92%	92%	83%	83%	-
Atul Ltd.	-	-	-	-	100%	92%	100%	75%	-
Avanti Feeds Ltd.	-	-	-	-	-	92%	100%	83%	92%
Asian Paints Ltd.	67%	92%	83%	-	-	-	-	-	-
Cummins India Ltd.	67%	71%	79%	-	-	-	-	-	-
Torrent Power Ltd.	-	92%	83%	-	-	-	-	75%	-
Bata India Ltd.	-	67%	83%	67%	-	-	-	-	-
Ipca Laboratories Ltd.	-	83%	100%	92%	-	-	-	-	-
Tata Motors Ltd.	-	-	83%	67%	83%	-	-	-	-
Tata Consultancy Services Ltd.	-	-	-	100%	100%	83%	-	-	-
Gujarat Pipavav Port Ltd.	-	-	-	-	92%	92%	83%	-	-
Ajanta Pharma Ltd.	-	-	-	-	92%	100%	100%	-	-
Hatsun Agro Products Ltd.	-	-	-	-	92%	88%	75%	-	-
Hindustan Unilever Ltd.	-	-	-	-	75%	83%	-	-	75%
Marico Ltd.	-	-	-	-	67%	83%	83%	-	-
AIA Engineering Ltd.	-	-	-	-	92%	92%	92%	-	-
Tata Elxsi Ltd.	-	-	-	-	-	83%	92%	-	75%
Johnson Controls - Hitachi Air Conditioning India Ltd.	-	-	-	-	-	92%	92%	92%	-
Avenue Supermarts Ltd.	-	-	-	-	-	-	96%	83%	92%

Source: Ambit Capital research

Appendix 3: Key fundamentals of a few companies from sub-BSE500 universe

Company Name	Revenues (₹ bn)		Revenue growth (%)		ROCE (pre-tax) (%)		ROE (%)		EBIT margin (%)		PAT margin (%)		ND/E (x)		CE turns (x)		CFO/EBITDA (%)		CL / NW (%)		Trailing P/E (x)		Share price perf. 12M (%)
	FY18	FY19	FY18	FY19	FY18	FY19	FY18	FY19	FY18	FY19	FY18	FY19	FY18	FY19	FY18	FY19	FY18	FY19	FY18	FY19	P/E	P/B	
JK Paper	28	33	8	15	20	31	17	23	18	24	9	13	0.6	0.4	1.1	1.3	104	100	2	1	5	1.1	(5)
Subros	19	21	25	11	20	23	16	15	6	7	3	4	0.9	0.2	3.1	3.1	155	53	2	7	22	2.6	20
IOL Chemicals	10	17	38	71	15	58	14	69	9	23	3	14	1.9	0.5	1.6	2.6	105	83	0	0	4	2.2	(17)
Action Const.Eq.	11	13	45	24	26	29	14	14	8	7	5	4	0.0	(0.0)	3.3	4.1	111	93	27	25	17	2.2	(13)
Excel Inds.	6	8	30	38	48	91	16	25	19	29	12	19	(0.5)	(0.6)	2.5	3.2	115	84	1	1	7	1.6	(22)
Maithan Alloys	19	20	40	6	75	70	40	25	20	17	16	13	(0.4)	(0.6)	3.7	4.1	97	120	7	13	7	1.5	38
Balaji Amines	9	9	28	10	38	36	27	22	19	19	13	12	0.3	0.4	2.0	2.0	99	75	0	0	12	2.4	3
NELCO	1	2	4	28	29	31	43	31	14	14	8	7	1.4	1.1	2.0	2.2	124	67	145	87	23	9.1	(2)
Gabriel India	18	21	21	13	36	34	19	17	8	7	5	5	(0.2)	(0.2)	4.7	4.9	85	85	12	10	17	2.7	(26)
West Coast Paper	17	20	(3)	16	24	31	30	30	15	18	13	15	0.4	0.1	1.6	1.7	102	86	9	8	5	1.4	(15)
Hind.Oil Explor.	0	3	91	444	26	65	9	33	70	59	68	58	(0.5)	(0.4)	0.4	1.1	(26)	88	11	10	8	2.4	(7)
I R C T C	15	19	(4)	27	2,734	1,049	26	27	23	24	15	15	(0.9)	(1.1)	119.1	44.4	48	161	18	16	79	22.6	341
Affle India	1	2	28	198	85	187	35	95	18	24	11	20	(0.5)	(0.3)	4.8	7.7	115	78	-	-	84	N/A	141
Ingersoll-Rand	6	7	(1)	20	35	39	8	10	21	17	14	11	(0.7)	(0.3)	1.7	2.3	137	64	6	16	26	5.1	18
Natl. Peroxide	3	4	31	31	65	75	11	14	48	59	31	38	(0.8)	(0.6)	1.4	1.3	93	100	0	0	7	0.9	(41)
Alkyl Amines	6	8	23	37	27	31	24	25	17	17	11	10	0.6	0.4	1.6	1.8	102	108	4	3	34	7.8	83
Alembic	1	1	(15)	(1)	22	24	16	18	132	175	127	171	(0.2)	(0.1)	0.2	0.1	201	119	10	4	7	1.2	57
Hil Ltd	13	22	14	72	26	27	14	19	10	10	6	5	(0.2)	0.9	2.7	2.8	145	77	15	10	10	1.5	(31)
Igarashi Motors	7	6	30	(10)	56	25	25	14	22	17	14	9	(0.0)	0.2	2.5	1.5	75	135	0	0	18	2.4	(38)
Garware Tech.	9	10	5	15	42	46	21	20	17	18	12	12	(0.2)	(0.4)	2.5	2.5	48	100	0	0	27	5.2	40
Thiрумalaі Chem.	13	13	28	(4)	71	45	35	18	20	14	13	9	(0.2)	(0.2)	3.5	3.1	55	133	1	1	6	1.0	(16)

Source: Ambit Capital research, Bloomberg, Company, ROCE, Net debt-equity, CE turns are calculated basis average balances

Appendix 4: Ten-bagger ideas from the sub-BSE500 universe – business description and other details

Company	Business Description	'Greatness' scores		Deciles		Checks		Auditor Name
		2019	2018	2019	2018	Promoter Sh. Hol. (%)	Board Independence (%)	
I R T C	Indian Railway Catering and Tourism Corporation Limited provides rail transportation, catering, and tourism services. The Company offers online ticket booking and cancellation, meals, holiday packages, and travel support services. Indian Railway Catering and Tourism serves passengers in India.	75%	N/A	D3	N/A	87	67%	Serva Associates
Affle India	Affle (India) Limited operates as a technology company. The Company offers consumer intelligence platform that delivers consumer engagements, acquisitions, and transactions through mobile advertising, as well as platform aims to enhance returns on marketing investment through contextual mobile ads and also by reducing digital ad fraud. Affle (India) serves customers worldwide.	75%	N/A	D3	N/A	68	50%	S R Batliboi & Associates LLP
Garware Tech.	Garware Technical Fibres Limited provides technical textiles solutions. The Company offers gill and dole netting, vertical ropes, yarns, threads, jute bags, and shelter fabrics, as well as trawling, mooring, stitching, weaving, and abseiling services. Garware Technical Fibres serves shipping, sports, aquaculture, and agricultural industries in India.	67%	75%	D4	D4	51	57%	Mehta Chokshi & Shah
Alkyl Amines	Alkyl Amines Chemicals Limited manufactures and supplies amines and amine-based chemicals to the pharmaceutical, agrochemical, rubber chemical, and water treatment industries. The Company's products include aliphatic amines, amine derivatives, and fine chemicals. The Company also has a bioprocess technology division which conducts research in the field of industrial biotechnology.	67%	75%	D5	D4	74	56%	N M Rajji & Co
JK Paper	JK Paper Ltd. manufactures and distributes copier paper, color cards, cover papers, plain paper, white and color poster paper, and paper related products.	100%	75%	D1	D1	48	54%	Lodha & Co
Ingersoll-Rand	Ingersoll-Rand India Limited manufactures industrial equipment. The Company's products include air compressors and stationary generators.	75%	50%	D4	D7	74	50%	B S R & Co LLP
Gabriel India	Gabriel India Limited manufactures shock absorbers. McPherson struts, bimetal strips, bimetal bearings and front forks. The Company's products are sold to manufacturers of two wheeler scooters, motorcycles, cars, light commercial vehicles and trucks. Gabriel India sells its products in India and abroad.	92%	58%	D5	D4	53	50%	B K Khare & Co
Subros	Subros Ltd. manufactures automotive air-conditioning systems. The Company's other related products include fan motor assemblies (ventilators) and multi flow condensers.	100%	83%	D5	D5	37	46%	Price Waterhouse Chartered Accountants LLP
Maithan Alloys	Maithan Alloys, Ltd. provides coal based power project. The Company specializes in ferro alloy and silicones.	92%	83%	D4	D6	75	50%	M Choudhury & Co
Alembic	Alembic Limited is an integrated pharmaceutical company. The Company's products include active pharmaceutical ingredients, bulk pharmaceuticals, international and domestic formulations, herbs and nutraceuticals, and veterinary. The Company is also involved in three main areas of research, namely chemistry and synthesis, formulations development, and contract research.	67%	50%	D2	D1	67	50%	CNK & Associates LLP
West Coast Paper	West Coast Paper Mills Limited manufactures paper and pulp. The Company's products include various kinds of printing papers, writing papers, wrapping papers, greeting cards, and security papers. West Coast Paper Mills also manufactures cable products for the telecommunications industry.	83%	92%	D4	D1	56	55%	Singhi & Co

Company	Business Description	'Greatness' scores *		Deciles		Checks		Auditor Name
		2019	2018	2019	2018	Promoter Sh. Hol. (%)*	Board Independence (%)	
Balaji Amines	Balaji Amines Ltd. manufactures methylamines, ethylamines, and derivatives of specialty chemicals and natural products. The Company supplies its products to companies in the pharmaceutical and pesticide industries in India and elsewhere throughout the world.	92%	67%	D1	D1	54	50%	Ayyedavara & Co
Hind Oil Explor.	Hindustan Oil Exploration Company Limited is an oil exploration and production company. The Company has participating interest in nine oil and gas fields in India's Cambay basin, Cauvery basin, Assam Arakan basin and Rajasthan basin, which are in varying stages of exploration, development and production.	83%	75%	D2	D8	-	43%	Deloitte Haskins & Sells LLP
Excel Inds.	Excel Industries Limited manufactures phosphorous and its compounds along with other specialty chemicals. The Company's phosphorous based products include phosphorous white, phosphoric acid, phosphorous pentasulphide and phosphorous chlorides. Excel Industries also manufactures aluminum phosphide, wettable sulfur, endosulfan, phosphophate, oxalic acid and poly behenite.	100%	58%	D4	D3	52	58%	Price Waterhouse Chartered Accountants LLP
Natl. Peroxide	National Peroxide Limited specializes in the production of hydrogen peroxide. The Company also develops and sells residential property.	75%	58%	D3	D1	71	43%	Price Waterhouse Chartered Accountants LLP
Hil Ltd	HIL Limited manufactures asbestos cement products which are marketed under the brand name "Charminar". The Company also manufactures related accessories such as mill boards, molded thermal insulation articles, jointings and thermal insulation products. Hyderabad Industries also makes machinery for the cement industry, as well as crushers, screens and pumps.	67%	25%	D1	D1	41	50%	B S R & Associates LLP
IOL Chemicals	IOL Chemicals and Pharmaceuticals Limited (IOLCP) operates as a generic pharmaceutical company. The Company manufactures active pharmaceutical ingredients such as ibuprofen and organic chemicals, as well as products, ethyl acetate, isobutyl benzene, monochloroacetic acid, acetyl chloride, and bulk ibuprofen. IOLCP delivers its products in India.	100%	83%	D2	D3	42	50%	Ashwani & Associates
Action Const.Eq.	Action Construction Equipment Ltd. manufactures cranes. The Company produces hydraulic mobile cranes, mobile tower cranes, and other construction equipment.	100%	83%	D5	D4	72	56%	BRAN & Associates
Igarashi Motors	Igarashi Motors India Limited manufactures automobile parts. The Company produces direct current electrical motors for power windows and seats. Igarashi Motors serves customers worldwide.	67%	75%	D4	D2	75	33%	B S R & Co LLP
Thiurmalai Chem.	Thiurmalai Chemicals Ltd makes phthalic anhydride, maleic anhydride and chemicals from waste gases of phthalic anhydride. The Company's other products include fumaric acid, malic acid, etc.	67%	58%	D4	D4	42	60%	Walker Chandlok & Co LLP
NELCO	Nelco Limited manufactures automation and control products including unattended ground sensors for the Indian army. The Company also has a network systems division which manages and operates the Tata VSAT Network. Nelco Systems is also engaged in property development and its other products include radios, radiograms, radio components and other electronic products.	92%	67%	D4	D4	50	50%	Price Waterhouse Chartered Accountants LLP

Source: Bloomberg, Watchout investors, NSE infobase, BSE filings, Ambit HAWK, Ambit Capital research. Note: There are no significant observations on Watch-out Investors. Also, none of the companies has its shares pledged.

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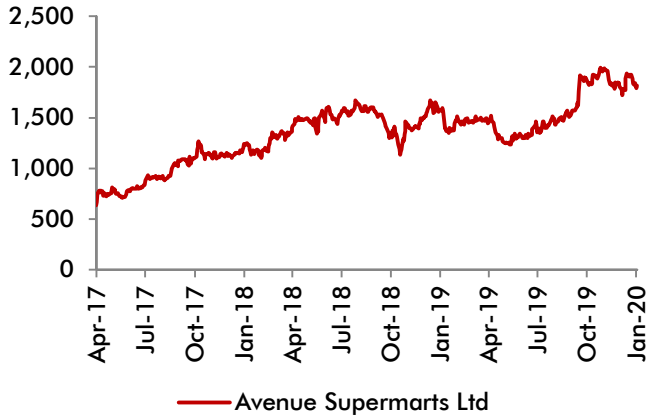
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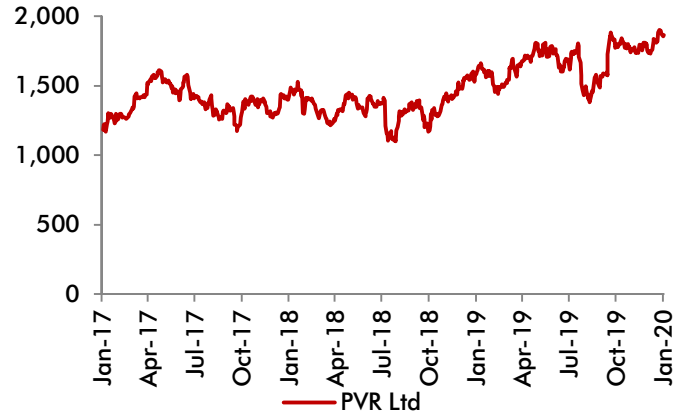
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Avenue Supermarts Ltd (DMART IN, BUY)



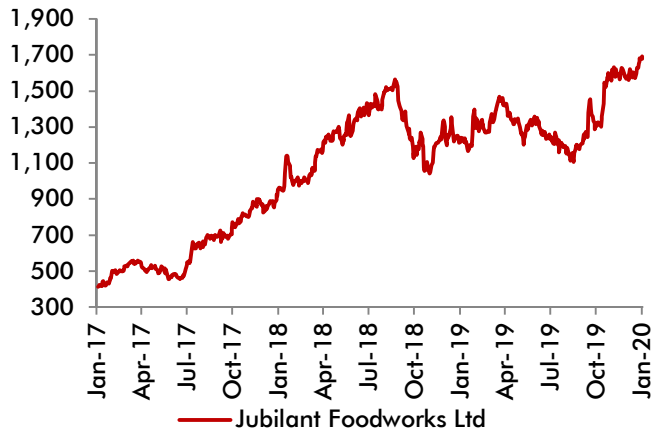
Source: Bloomberg, Ambit Capital research

PVR Ltd. (PVRL IN, BUY)



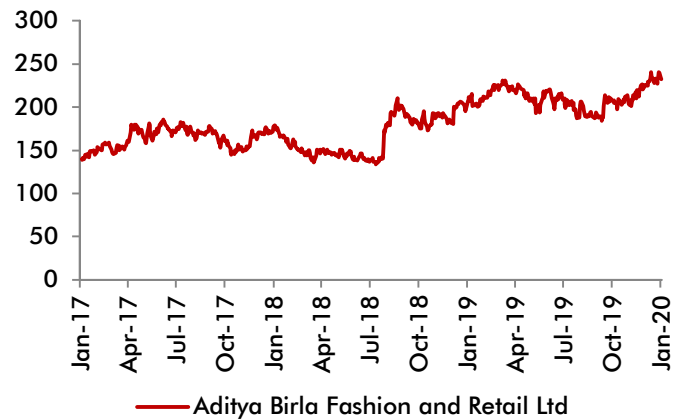
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Jubilant Foodworks Ltd (JUBI IN, BUY)



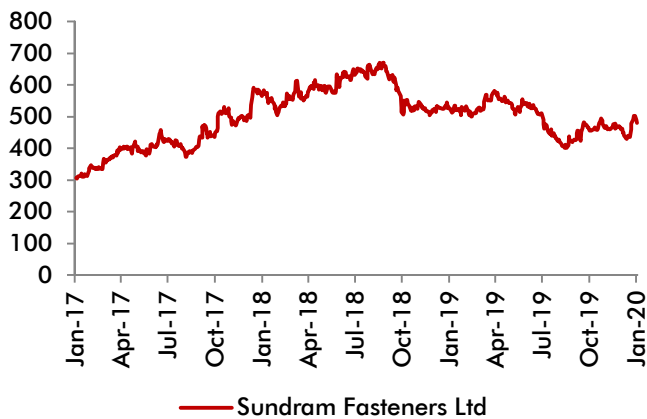
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Aditya Birla Fashion and Retail Ltd (ABFRL IN, BUY)



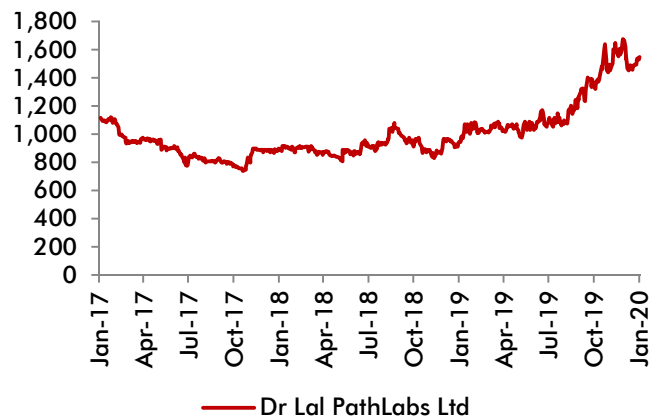
Source: Bloomberg, Ambit Capital research

Sundram Fasteners Ltd (SF IN, BUY)



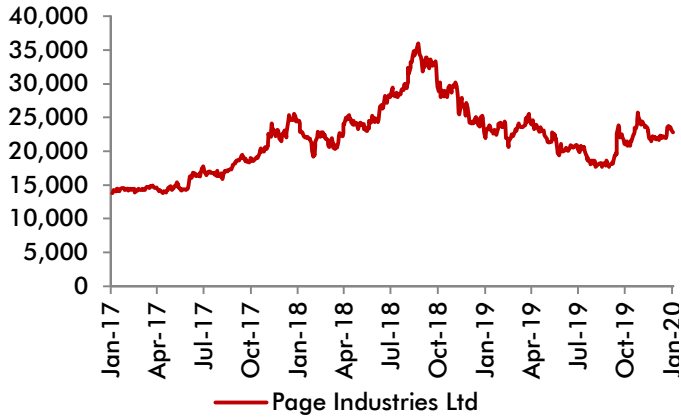
Source: Bloomberg, Ambit Capital research

Dr Lal PathLabs Ltd (DLPL IN, BUY)



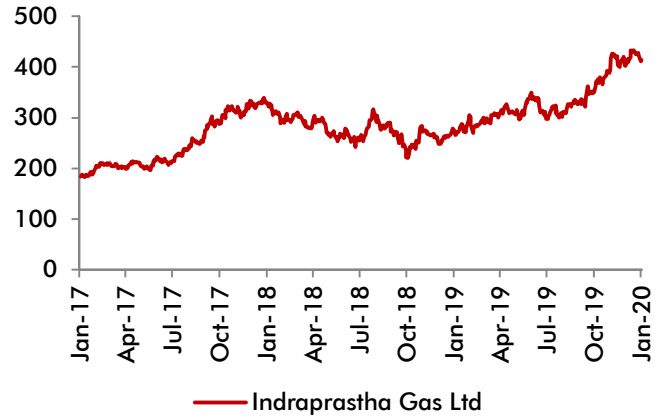
Source: Bloomberg, Ambit Capital research

Page Industries Ltd (PAG IN, SELL)



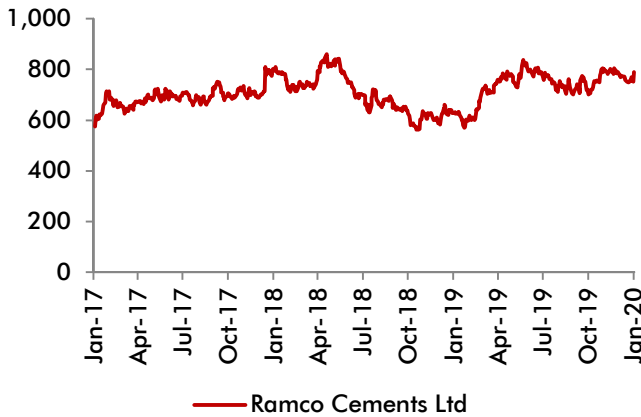
Source: Bloomberg, Ambit Capital research

Indraprastha Gas Ltd (IGL IN, UNDER REVIEW)



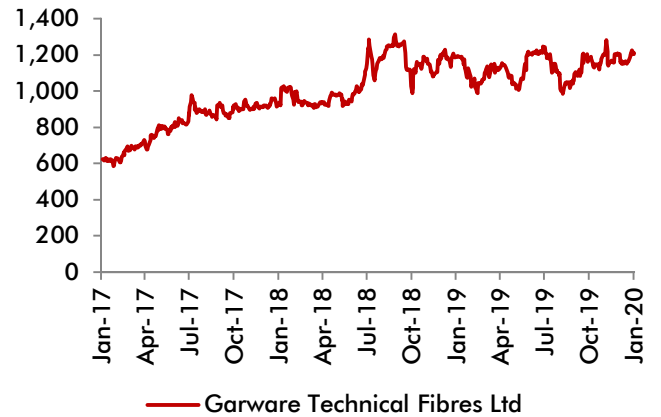
Source: Bloomberg, Ambit Capital research

Ramco Cements Ltd (TRCL IN, SELL)



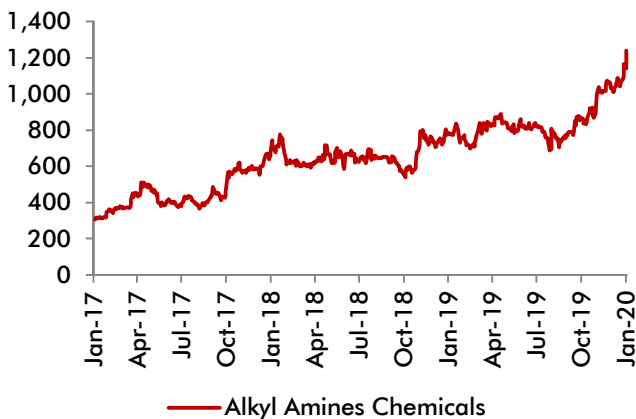
Source: Bloomberg, Ambit Capital research

Garware Technical Fibres Ltd (GTFL IN, NOT RATED)



Source: Bloomberg, Ambit Capital research

Alkyl Amines Chemicals (AACL IN, NOT RATED)



Source: Bloomberg, Ambit Capital research

Explanation of Investment Rating

Investment Rating	Expected return (over 12-month)
BUY	>10%
SELL	≤10%
NO STANCE	We have forward looking estimates for the stock but we refrain from assigning valuation and recommendation
UNDER REVIEW	We will revisit our recommendation, valuation and estimates on the stock following recent events
NOT RATED	We do not have any forward looking estimates, valuation or recommendation for the stock
POSITIVE	We have a positive view on the sector and most of stocks under our coverage in the sector are BUYs
NEGATIVE	We have a negative view on the sector and most of stocks under our coverage in the sector are SELLs

* In case the recommendation given by the Research Analyst becomes inconsistent with the rating legend, the Research Analyst shall within 28 days of the inconsistency, take appropriate measures (like change in stance/estimates) to make the recommendation consistent with the rating legend.

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