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# The Nifty in 2022

## Exits from and entries into the Nifty over the next decade

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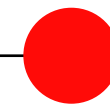
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## "Churn" is a constant

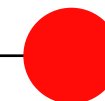
Of the initial 50 constituents of the Nifty index in Nov 1995, 44% were out by Apr 2002. This "churn" ratio was 48% for the 10-year period beginning April 2002. Churn in the Indian market is almost twice as high as it is in the US market; churn also appears to be higher in India than in the other large Emerging Markets.

- Of the 50 firms in the Nifty in 1995, 22 were out by 2002. Of the 22 firms exiting the Nifty by 2002, four belong to the BFSI and three each to the Automobile, Refineries & Metals/Steel sector. Of the 22 firms entering the Nifty by 2002, five firms belong to the FMCG sector while four each belong to the Pharma and IT sectors. Barring that, there was no obvious sector concentration. **But what does appear clear from these trends is the replacement of economy linked cyclical plays with defensive (or less cyclical) names.**
- Of the 50 firms in the Nifty in 2002, 24 were out by 2012. Of the 24 firms exiting the Nifty by 2012, barring FMCG (six firms exiting), there is no obvious sector concentration. Among the entrants, four belong to the BFSI and Power & Capital Goods while three belong to the Metals/Steel sector. **The trend thus is a complete mirror image of the previous decade with economy linked names replacing defensives.**
- 15 of the 24 exits in the 2002-2012 period are firms which had entered the Nifty in the previous decade, underscoring just how hard it is to stay at the top of the Indian market for a sustained period.

## The investment implications of "churn" - 'Megathemes' at work

- Clearly, an investor who can exit/enter stocks which will exit/enter the Nifty over the next decade will have an advantage over his peers.
- Even if we conservatively assume a 40% churn ratio going forward, 20 companies will be ejected from the Nifty over the next 10 years and 20 new firms will enter the index. We draw from the "Megathemes" note published alongside this piece by our Economy team (Ritika Mankar Mukherjee and Saurabh Mukherjea) to identify the following factors as key determinants of these potential Nifty entries and exits:
  1. Intuitively and empirically, the firm's current size has an important bearing on whether or not will it be a part of the Nifty 10 years hence.
  2. The fragmentation of political power in India has negative implications for firms where political links form the core competitive advantage as well for firms which rely heavily on Government approvals.
  3. The structurally high cost of capital in India implies that capital intensive businesses will continue to take it on the chin.
  4. A compromised banking system means that a number of lenders will get punished in the coming decade.
  5. Ambit's "greatness" model and "forensic" models (see our notes published on Jan 19, 2012, and Jan 20, 2012, respectively for more details)

# Summary- Likely Exits and Entrants by 2022 (slide 2 of 2)



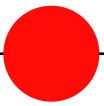
## Likely Exits

| Stock            | Ticker  | Mcap (US \$mn) |
|------------------|---------|----------------|
| H D F C          | HDFC IN | 21,451         |
| St Bk of India   | SBIN IN | 25,623         |
| O N G C          | ONGC IN | 40,036         |
| Axis Bank        | AXSB IN | 9,420          |
| Tata Steel       | TATA IN | 6,458          |
| NTPC             | NTPC IN | 25,204         |
| I D F C          | IDFC IN | 4,314          |
| B H E L          | BHEL IN | 10,227         |
| Tata Power Co.   | TPWR IN | 4,215          |
| GAIL (India)     | GAIL IN | 7,972          |
| Jindal Steel     | JSP IN  | 6,268          |
| Hindalco Inds.   | HNDL IN | 3,739          |
| Cairn India      | CAIR IN | 11,627         |
| Punjab Natl.Bank | PNB IN  | 4,567          |
| JP Associates    | JPA IN  | 3,522          |
| B P C L          | BPCL IN | 4,273          |
| DLF              | DLFU IN | 6,269          |
| Sesa Goa         | SESA IN | 2,621          |
| Reliance Infra.  | RELI IN | 2,200          |
| Siemens          | SIEM IN | 4,277          |

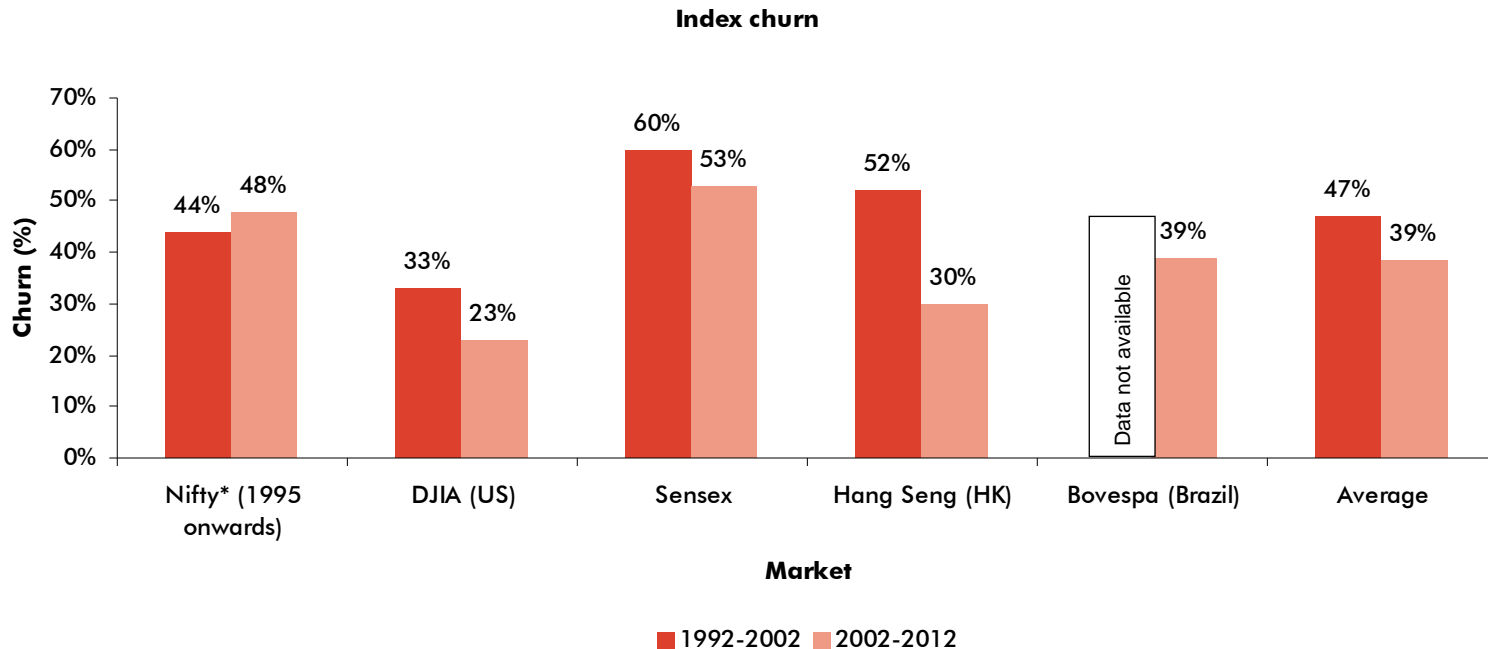
## Likely Entrants

| Stock            | Ticker    | Mcap (US \$mn) |
|------------------|-----------|----------------|
| Nestle India     | NEST IN   | 8,181          |
| Titan Inds.      | TTAN IN   | 4,709          |
| IndusInd Bank    | IIB IN    | 3,197          |
| Colgate-Palm.    | CLGT IN   | 3,255          |
| Glaxosmit Pharma | GLXO IN   | 3,075          |
| Bosch            | BOS IN    | 5,020          |
| Federal Bank     | FB IN     | 1,419          |
| Dabur India      | DABUR IN  | 3,933          |
| GlaxoSmith C H L | SKB IN    | 2,342          |
| NMDC             | NMDC IN   | 12,316         |
| Cummins India    | KKC IN    | 2,309          |
| Exide Inds.      | EXID IN   | 2,145          |
| United Breweries | UBBL IN   | 3,691          |
| Cadila Health.   | CDH IN    | 2,944          |
| Oracle Fin.Serv. | OFSS IN   | 4,294          |
| Castrol India    | CSTRL IN  | 2,699          |
| M & M Financial  | MMFS IN   | 1,854          |
| CRISIL           | CRISIL IN | 1,180          |
| Torrent Power    | TPW IN    | 1,376          |
| Bata India       | BATA IN   | 1,018          |

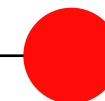
# "Churn" is a constant



- 44% of the Nifty's constituents in 1995 were no longer a part of the index in 2002.
- This "churn" was 48% for the 10 year period beginning Apr 2002.
- Churn in the Indian market is twice as high as it is in the US market (48% versus 23% in the last decade).
- Churn in the Indian market appears to be higher than that in other large EMs.
- Churn seems to have remained at similar levels in the most recent decade compared to the 1990s.



# Churn in the 1995-2002 period: 22 companies



## Exits from the Nifty by 2002

| Name             | Sector                    | CAGR 95-02 | CAGR 95-02 (rel to Nifty) | Beginning of period mcap Ranks |
|------------------|---------------------------|------------|---------------------------|--------------------------------|
| Andhra Vall*     | Power Gen & Dist          | -3%        | -19%                      | 47                             |
| Apollo Tyres     | Tyres                     | -9%        | -11%                      | 50                             |
| Arvind Ltd       | Textiles                  | -31%       | -33%                      | 35                             |
| Ashok Leyland    | Automobile                | -8%        | -10%                      | 27                             |
| Brooke Bond*     | Plant. & Plant. Products  | 66%        | 49%                       | 14                             |
| GE Shipping Co   | Shipping                  | -8%        | -10%                      | 29                             |
| TVS Suzuki*      | Automobile                | 5%         | -5%                       | 48                             |
| Indian Aluminium | Non Ferrous Metals        | -14%       | -30%                      | 32                             |
| Aditya Bir. Nuv. | Textiles                  | -9%        | -11%                      | 22                             |
| Pond's*          | FMCG                      | 105%       | 89%                       | 33                             |
| Indo Gulf Corp.  | Non Ferrous Metals        | DNA        | DNA                       | 38                             |
| Essar Steel      | Steel                     | DNA        | DNA                       | 28                             |
| Kochi Refineries | Refineries                | 61%        | 45%                       | 36                             |
| Reliance Capital | Finance                   | -11%       | -13%                      | 31                             |
| SCIC*            | Finance                   | -27%       | -44%                      | 45                             |
| Nag. Fert & Chem | Fertilizers               | -24%       | -26%                      | 40                             |
| C P C L          | Refineries                | -8%        | -10%                      | 41                             |
| M R P L          | Refineries                | -22%       | -24%                      | 30                             |
| Chambal Fert.    | Fertilizers               | -8%        | -10%                      | 43                             |
| IFCI             | Finance                   | -30%       | -32%                      | 25                             |
| Thermax          | Cap. Goods-Non Elec Equip | -20%       | -22%                      | 42                             |
| IDBI Bank        | Banks                     | -20%       | -22%                      | 9                              |
| <b>Average</b>   |                           | <b>-1%</b> | <b>-7%</b>                |                                |

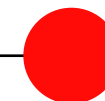
\* Exit due to merger or acquisition; DNA stands for 'data not available'

## Entry into the Nifty by 2002

| Name              | Sector                 | CAGR 95-02 | CAGR 95-02 (rel to Nifty) |
|-------------------|------------------------|------------|---------------------------|
| Asian Paints      | Paints/Varnish         | 8%         | 6%                        |
| Britannia Inds.   | FMCG                   | 26%        | 24%                       |
| Cipla             | Pharmaceuticals        | 42%        | 40%                       |
| Nestle India      | FMCG                   | 15%        | 13%                       |
| Glaxosmit Pharma  | Pharmaceuticals        | 9%         | 7%                        |
| GlaxoSmith C H L  | FMCG                   | 13%        | 11%                       |
| A B B             | Cap Goods - Elec Equip | -9%        | -10%                      |
| Novartis India    | Pharmaceuticals        | -2%        | -4%                       |
| M & M             | Automobile             | -10%       | -12%                      |
| P & G Hygiene     | FMCG                   | 9%         | 7%                        |
| Wipro             | IT - Software          | 89%        | 87%                       |
| Digital Equipment | IT - Software          | DNA        | DNA                       |
| M T N L           | Telecomm-Service       | -1%        | -3%                       |
| H P C L           | Refineries             | 6%         | 4%                        |
| B H E L           | Cap Goods - Elec Equip | 10%        | 8%                        |
| Satyam Computer   | IT - Software          | 88%        | 86%                       |
| NIIT              | Computer Education     | 11%        | 9%                        |
| Infosys           | IT - Software          | 93%        | 91%                       |
| Zee Entertainmen  | Entertainment          | 44%        | 42%                       |
| Dabur India       | FMCG                   | 15%        | 13%                       |
| Sun Pharma.Inds.  | Pharmaceuticals        | 36%        | 34%                       |
| ICICI Bank        | Banks                  | 24%        | 23%                       |
| <b>Average</b>    |                        | <b>24%</b> | <b>23%</b>                |

- Of the 22 firms exiting the Nifty by 2002, four belong to the Banks & Financial Services space and three each to Automobile, Refineries & Metals/Steel sectors.
- Of the 22 firms entering the Nifty by 2002, five firms belong to the FMCG sector while four each belong to Pharma and IT sectors.
- Overall, a number of economy linked plays were replaced by defensive names.**
- Obviously, identifying these exits and entrants early helps investment performance as is clear from the average CAGR return figures.

# Churn in the 2002-2012 period: 24 companies



## Exits from the Nifty by 2012

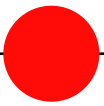
| Name               | Sector                               | CAGR-02-12 | CAGR-02-12 (rel to Nifty) | Beginning of period mcap Ranks |
|--------------------|--------------------------------------|------------|---------------------------|--------------------------------|
| Asian Paints       | Paints/Varnish                       | 31%        | 14%                       | 35                             |
| Britannia Inds.    | FMCG                                 | 19%        | 2%                        | 41                             |
| Colgate-Palm.      | FMCG                                 | 23%        | 6%                        | 37                             |
| Nestle India       | FMCG                                 | 25%        | 8%                        | 19                             |
| Glaxosmit Pharma   | Pharmaceuticals                      | 21%        | 4%                        | 32                             |
| GlaxoSmith C H L   | FMCG                                 | 22%        | 5%                        | 39                             |
| A B B              | Capital Goods - Electrical Equipment | 32%        | 15%                       | 43                             |
| Novartis India     | Pharmaceuticals                      | 12%        | -5%                       | 49                             |
| Indian Hotels      | Hotels & Restaurants                 | 15%        | -2%                       | 47                             |
| Castrol India      | Chemicals                            | 19%        | 2%                        | 33                             |
| P & G Hygiene      | FMCG                                 | 21%        | 4%                        | 44                             |
| Tata Chemicals     | Fertilizers                          | 23%        | 6%                        | 48                             |
| Tata Global        | Plantation & Plantation Products     | 21%        | 4%                        | 45                             |
| ICICI*             | Finance                              | DNA        | DNA                       | 20                             |
| Digital Equipment* | IT - Software                        | DNA        | DNA                       | 38                             |
| MT N L             | Telecomm-Service                     | -15%       | -32%                      | 10                             |
| H P C L            | Refineries                           | 0%         | -16%                      | 9                              |
| I P C L*           | Petrochemicals                       | 27%        | -1%                       | 36                             |
| Satyam Computer    | IT - Software                        | -5%        | -22%                      | 11                             |
| NIIT               | Computer Education                   | 6%         | -11%                      | 46                             |
| Zee Entertainmen   | Entertainment                        | 9%         | -8%                       | 14                             |
| Rel. Petro*        | Refineries                           | -26%       | -1%                       | 6                              |
| Dabur India        | FMCG                                 | 28%        | 11%                       | 40                             |
| Oriental Bank      | Banks                                | 21%        | 4%                        | 50                             |
| <b>Average</b>     |                                      | <b>15%</b> | <b>0%</b>                 |                                |

\* Exit due to merger or acquisition; DNA stands for 'data not available'

- Of the 24 firms exiting the Nifty by 2012, barring FMCG (six firms exiting), there is no obvious sector concentration; among the entrants, four each belong to Banks & Financial Services and Power & Capital Goods while five belong to the Metals/Mining/Steel sector.
- This trend thus was a complete contrast to the previous decade with defensives being replaced by economy linked plays.**
- 15 of the 24 exits in the 2002-2012 period are firms which had entered the Nifty in the previous decade, underscoring just how hard it is to stay at the top of the Indian market for a sustained period.
- Finally, a look at the CAGR return figures towards the end of these tables highlights how identifying these exits and entrants early helps investment performance- **This point is brought about more vividly in the next slide.**

## Entry into the Nifty by 2012

| Name              | Sector                               | CAGR-02-12 | CAGR-02-12 (rel to Nifty) |
|-------------------|--------------------------------------|------------|---------------------------|
| Sesa Goa          | Mining & Mineral products            | 66%        | 50%                       |
| Siemens           | Capital Goods - Electrical Equipment | 40%        | 24%                       |
| Sterlite Inds.    | Non Ferrous Metals                   | 43%        | 26%                       |
| B P C L           | Refineries                           | 8%         | -9%                       |
| S A I L           | Steel                                | 34%        | 18%                       |
| Kotak Mah. Bank   | Banks                                | 44%        | 27%                       |
| TCS               | IT - Software                        | 20%        | 5%                        |
| Power Grid Corpn  | Power Generation & Distribution      | -7%        | -4%                       |
| Maruti Suzuki     | Automobile                           | 17%        | 2%                        |
| Axis Bank         | Banks                                | 40%        | 23%                       |
| HCL Technologies  | IT - Software                        | 14%        | -2%                       |
| O N G C           | Crude Oil & Natural Gas              | 19%        | 3%                        |
| DLF               | Realty                               | -29%       | -27%                      |
| Punjab Natl. Bank | Banks                                | 39%        | 19%                       |
| NTPC              | Power Generation & Distribution      | 10%        | -5%                       |
| Coal India        | Mining & Mineral products            | 27%        | 37%                       |
| GAIL (India)      | Gas Distribution                     | 22%        | 5%                        |
| Reliance Power    | Power Generation & Distribution      | -12%       | -15%                      |
| JP Associates     | Construction                         | 20%        | 5%                        |
| Bharti Airtel     | Telecomm-Service                     | 33%        | 17%                       |
| Jindal Steel      | Steel                                | 72%        | 55%                       |
| I D F C           | Finance                              | 12%        | -1%                       |
| Rel. Comm.        | Telecomm-Service                     | -19%       | -27%                      |
| Cairn India       | Crude Oil & Natural Gas              | 20%        | 14%                       |
| <b>Average</b>    |                                      | <b>22%</b> | <b>10%</b>                |



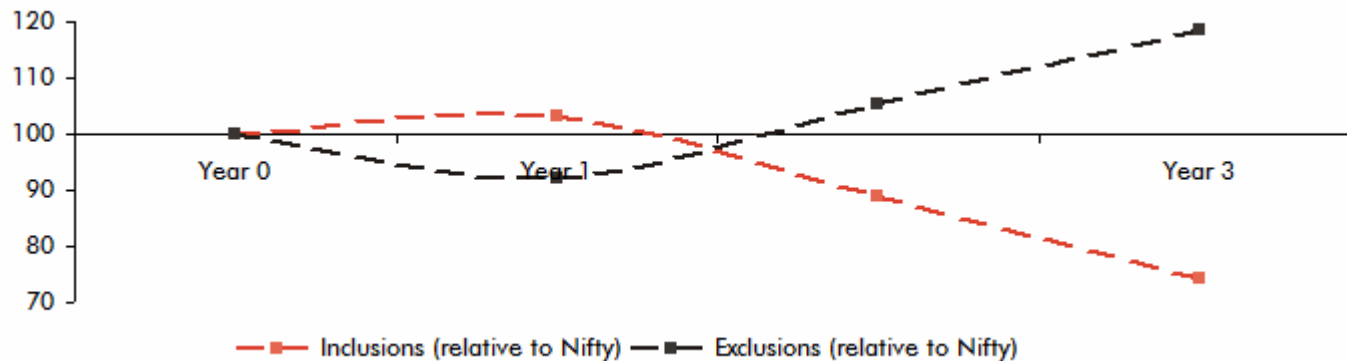
**Exhibit A: Pre and post event performance of inclusions and exclusions**

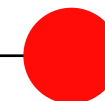
|            | Pre entry performance (rel. to Nifty) |                      | Post entry performance (rel. to Nifty) |                      |
|------------|---------------------------------------|----------------------|----------------------------------------|----------------------|
|            | 1 year (median CAGR)                  | 3 year (median CAGR) | 1 year (median CAGR)                   | 3 year (median CAGR) |
| Inclusions | 28%                                   | 38%                  | 3%                                     | -9%                  |
| Exclusions | -26%                                  | -19%                 | -8%                                    | 6%                   |

Source: Company, Ambit Capital research. This analysis was conducted on Nifty inclusions and exclusions Sep '96 onwards.

- As is clear from the exhibit above, by the time they are included, the Nifty inclusions have already outperformed significantly. While the outperformance persists for another year it is too small and is eventually followed by a far more meaningful underperformance over the subsequent two years.
- Similarly, Nifty exclusions have already underperformed significantly by the time they are excluded. While the underperformance persists for another year, it is eventually followed by significant outperformance over the subsequent two years.
- Overall, exclusions outperform inclusions by a median CAGR of 15% over the three year period from the point of exclusion/inclusion – exhibit B below will make this clearer.

**Exhibit B: Post-event performance of inclusions and exclusions**





## Firms which were in the Nifty in 1995 and 2012

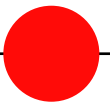
| Name            | Sector                              | CAGR 95-02 | CAGR 95-02<br>(rel to Nifty) | CAGR 02-12 | CAGR 02-12<br>(rel to Nifty) | Forward<br>(FY 13) PE | Rank<br>(1995) | Rank<br>(2012) |
|-----------------|-------------------------------------|------------|------------------------------|------------|------------------------------|-----------------------|----------------|----------------|
| ACC             | Cement                              | 0%         | -2%                          | 24%        | 8%                           | 19.3                  | 21             | 39             |
| Bajaj Auto*     | Automobile                          | -2%        | -4%                          | 75%        | 57%                          | 17.2                  | 8              | 22             |
| Reliance Infra. | Power Generation & Distribution     | 6%         | 4%                           | 10%        | -6%                          | 8.1                   | 24             | 50             |
| Ambuja Cem.     | Cement                              | 6%         | 4%                           | 20%        | 4%                           | 20.6                  | 23             | 37             |
| Grasim Inds     | Textiles                            | -11%       | -13%                         | 28%        | 12%                          | 11.0                  | 11             | 43             |
| H D F C         | Finance                             | 16%        | 14%                          | 26%        | 9%                           | 21.6                  | 18             | 13             |
| Hero Motocorp   | Automobile                          | 49%        | 47%                          | 20%        | 3%                           | DNA                   | 49             | 27             |
| Hindalco Inds.  | Non Ferrous Metals                  | 3%         | 1%                           | 7%         | -10%                         | 7.9                   | 10             | 41             |
| Hind. Unilever  | FMCG                                | 22%        | 20%                          | 6%         | -11%                         | 36.0                  | 2              | 14             |
| ITC             | Tobacco Products                    | 15%        | 13%                          | 26%        | 9%                           | 29.7                  | 6              | 5              |
| Larsen & Toubro | Infrastructure Developers & Operatc | -7%        | -8%                          | 34%        | 17%                          | 19.7                  | 7              | 16             |
| Ranbaxy Labs.   | Pharmaceuticals                     | 17%        | 15%                          | 6%         | -11%                         | 16.1                  | 16             | 46             |
| Reliance Inds.  | Refineries                          | 14%        | 12%                          | 21%        | 4%                           | 12.7                  | 1              | 1              |
| Tata Power Co.  | Power Generation & Distribution     | -1%        | -3%                          | 24%        | 8%                           | 15.7                  | 34             | 44             |
| Tata Motors     | Automobile                          | -17%       | -19%                         | 27%        | 11%                          | 7.1                   | 3              | 15             |
| Tata Steel      | Steel                               | -14%       | -15%                         | 23%        | 7%                           | 10.6                  | 5              | 25             |
| Dr Reddy's Labs | Pharmaceuticals                     | 37%        | 36%                          | 12%        | -4%                          | 18.6                  | 46             | 36             |
| St Bk of India  | Banks                               | 0%         | -2%                          | 26%        | 9%                           | 8.0                   | 4              | 7              |
| HDFC Bank       | Banks                               | 35%        | 33%                          | 27%        | 10%                          | 21.5                  | 44             | 10             |

\* Bajaj Auto existed within Bajaj Holdings till 2008; even though ICICI Bank in its current form does not feature as a constant in the index, SCICI and ICICI were a part of Nifty in '95 which were later merged with each other and eventually got merged into ICICI Bank.

- It is hard to find common denominators across these constants
- It is hard to rationalise some of these firms' durability even with the benefit of hindsight
- While the slides so far have been backward looking and highlight how important it is to identify Nifty entries and exits early, we now turn to determining the likely make of the Nifty ten years hence

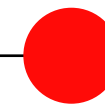


# Which will be the exits and entrants of 2022?



- The next ten years are more likely to be akin to the 1990s – a decade defined by the end of the “License Raj” in 1991 - than the noughties. Civil servants in New Delhi are already viewing the 2010-12 period as being the end of the “Old Raj”.
- Even if we conservatively assume a 40% churn ratio going forward, **20 companies will be ejected from the Nifty over the next 10 years and 20 new firms will enter the index.**
- As shown in the preceding slides, identifying these exits and entrants has a meaningful bearing on investment performance.
- What determines their identity?
  - Sector specific forces?
  - Company specific forces?
  - Current size?
- We draw from the “Megathemes 3.0” note published alongside this piece by our Economy team (Ritika Mankar Mukherjee and Saurabh Mukherjea) to identify the following factors as key determinants of Nifty entries and exits:
  1. Intuitively and empirically, the firm’s current size has an important bearing on whether or not will it be a part of the Nifty 10 years hence.
  2. The fragmentation of political power in India has negative implications for firms where political links form the core competitive advantage as well for firms which rely heavily on Government approvals.
  3. The structurally high cost of capital in India implies that capital intensive businesses will continue to take it on the chin.
  4. A compromised banking system means that a number of lenders will get punished in the coming decade.
  5. Ambit's "greatness" model and “forensic” models (see our notes published on Jan 19, 2012, and Jan 20, 2012, respectively for more details)

# Our framework for identifying Nifty entries and exits- 1



## Size matters!

- **Exits:** The firm's current size and consequently weightage in the Nifty has a high correlation with it being a part of the index at the end of the decade or not:
  - Of all Nifty exits by decade end (average over the 1995-2012 period), only 9% of stocks were a top 10 component of the Nifty at the beginning of the decade
  - Of all Nifty exits by decade end (average over the 1995-2012 period), 24% of stocks were in the next 20 components of the Nifty at the beginning of the decade (i.e. had a rank between 11 and 30)
  - The remaining 67% Nifty exits by decade end (average over the 1995-2012 period) were concentrated in the bottom 20 stocks by weightage at the beginning of period (i.e. ranks 31-50)

**Distribution of 'exits' based on mcap buckets**

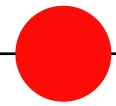
| Mcap Bucket (beginning of period) | 95-02       | 02-12       | 12-22 (E)   |
|-----------------------------------|-------------|-------------|-------------|
| Top 10                            | 5%          | 13%         | 10%         |
| Middle 20                         | 32%         | 17%         | 25%         |
| Bottom 20                         | 64%         | 71%         | 65%         |
| <b>Total</b>                      | <b>100%</b> | <b>100%</b> | <b>100%</b> |

- **Entrants:** Similarly for identifying potential Nifty entrants over the next decade size plays an important role as well:

**Distribution of 'entrants' based on mcap buckets**

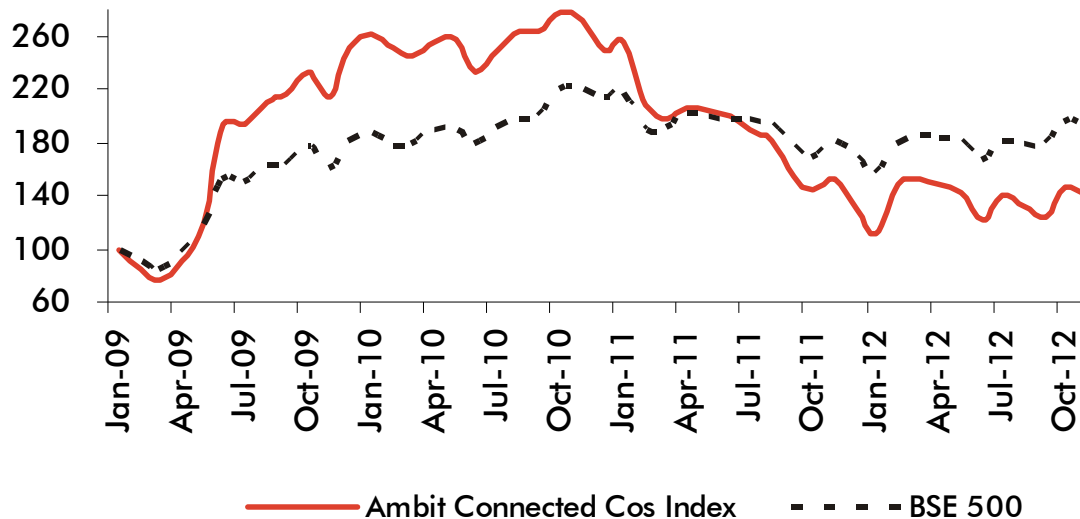
| Mcap Bucket (beginning of period) | 95-02       | 02-12       | 12-22 (E)   |
|-----------------------------------|-------------|-------------|-------------|
| 51-100                            | 64%         | 92%         | 80%         |
| 101-150                           | 18%         | 0%          | 20%         |
| 151-200                           | 14%         | 0%          | 0%          |
| >200                              | 5%          | 8%          | 0%          |
| <b>Total</b>                      | <b>100%</b> | <b>100%</b> | <b>100%</b> |

- Of all Nifty entries by decade end (average over the 1995-2012 period), less than 7% of stocks had a beginning of period weight outside of the top 200 of the listed universe
- Of all Nifty entries by decade end (average over the 1995-2012 period), less than 7% of stocks had a beginning of period weight between top 150 to 200 of the listed universe
- Of all Nifty entries by decade end (average over the 1995-2012 period), about 9% of stocks had a beginning of period weight between top 100 to 150 of the listed universe
- The remaining 78% Nifty entrants over the decade (average over the 1995-2012 period) were concentrated in the immediate next 50 stocks at the beginning of period (i.e. ranks 51-100).



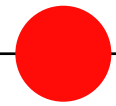
## Political connections and government approvals

- The fragmentation of political power in India (in addition to the unending corruption exposes) has been a result of the power shift toward regional parties and the emergence of independent regulators and alternative institutions.
- This has significantly weakened the potential of politically connected firms to generate shareholder returns – Ambit's index of 75 political connected firms has massively underperformed the BSE500 since early-2010 (54 %points since Feb 2010).
- A related implication is that the Government's decision making has also been significantly impeded. As a consequence sectors and firms with a high degree of dependence on government approvals to get business done are likely to suffer going forward as well.



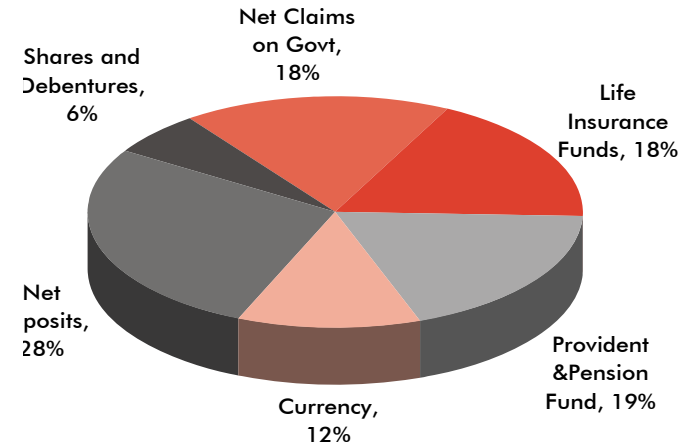
Politically linked stocks have been underperforming the BSE500 since early 2010

# Our framework for identifying Nifty entries and exits- 3



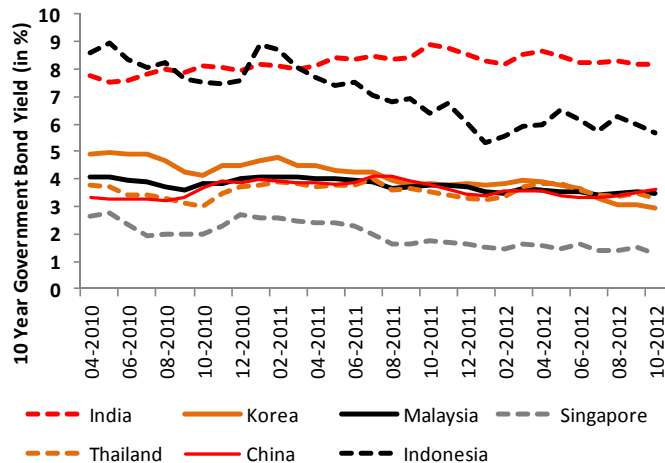
## High cost of capital- Negative for capital intensive businesses

- India is a capital scarce economy with only around 2-5% Indian household savings flowing into the equity markets; nearly half of household savings are in physical assets like gold and real estate while even from financial savings, only a small part ends up being available for productive investment

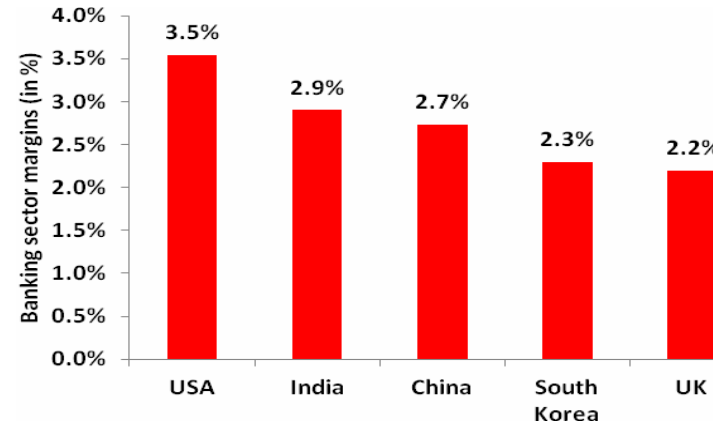


Break-up of Indian household financial savings

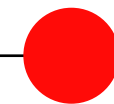
- The cost of debt capital is high too mainly due to powerful institutional factors like the near monopoly of banks over debt finance in addition to sustained high levels of government borrowing



India's risk free rate is one of the highest amongst peers

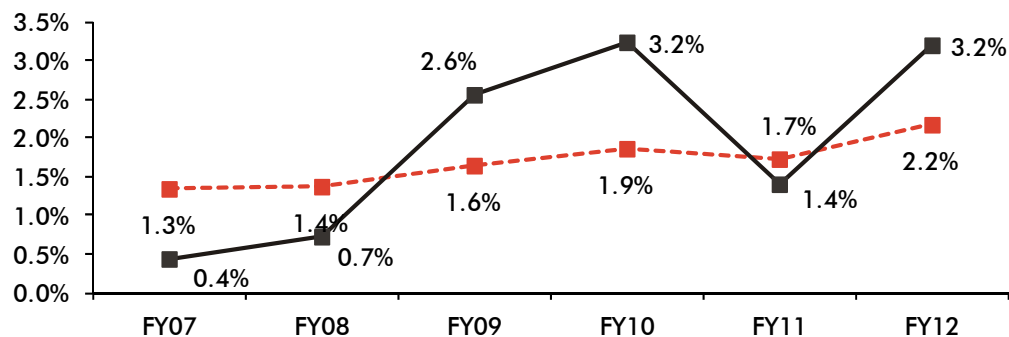


Indian banks enjoy some of the healthiest net interest margins by global standards



## A compromised banking system

- The lax regulation of Indian banks over the past four years has meant that Indian banks' financial statements are highly suspect as banks refuse to give full disclosure on their dud assets.
- If our estimate of the proportion of loans that are dud in the Indian banking system is right (at 9% of system-wide assets) then that implies that Indian banks' Tier 1 is 5% (and not over 10% as the banking system and the RBI often claims it to be). Obviously, 5% is significantly short of the RBI's core Tier-1 requirement of 8% (under Basel-III) suggesting that we have a grossly under-capitalized banking system.
- The scale of this Balance Sheet challenge facing Indian banks act as a major qualifier to the investment opportunities presented by the Indian banking sector.
- As a corollary, given that India remains a capital scarce country, sensibly run banks with clean accounts should continue to be a good cross-cycle investment.



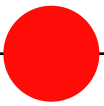
---■ Slippage to Gross NPA (% of loan book) —■ Slippage to Restructured (% of loan book)

Slippages to gross NPA and slippages to restructured assets on the rise

| Gross NPAs<br>(as a % of gross advances) | 2009 | 2010 | 2011 | 2012 |
|------------------------------------------|------|------|------|------|
| SBI                                      | 2.46 | 2.7  | 3.4  | 4.6  |
| Nationalised Banks                       | 1.73 | 1.95 | 2.1  | 2.8  |
| Old Pvt Sector Banks                     | 2.36 | 2.32 | 1.9  | 1.8  |
| New Pvt Sector Banks                     | 3.05 | 2.87 | 2.7  | 2.2  |
| All SCBs                                 | 2.25 | 2.39 | 2.5  | 3.1  |

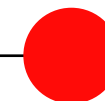
The surge in NPAs across the Indian Banks

# Likely exits (table shows all the names in the Nifty currently; RED indicates exits)



| Probability zones based on free float                               | Stock                   | Ticker         | P75? | Banking/ fin services with structural challenges? | Capital intensive/ government approvals? |
|---------------------------------------------------------------------|-------------------------|----------------|------|---------------------------------------------------|------------------------------------------|
| Low probability of attrition<br>(10% of exits)<br>No of exits: 2    | ITC                     | ITC IN         |      |                                                   |                                          |
|                                                                     | Reliance Inds.          | RIL IN         | •    |                                                   |                                          |
|                                                                     | ICICI Bank              | ICICIB IN      |      | •                                                 |                                          |
|                                                                     | <b>H D F C</b>          | <b>HDFC IN</b> |      | •                                                 |                                          |
|                                                                     | HDFC Bank               | HDFCB IN       |      |                                                   |                                          |
|                                                                     | Infosys                 | INFO IN        |      |                                                   |                                          |
|                                                                     | Larsen & Toubro         | LT IN          | •    |                                                   | •                                        |
| TCS                                                                 | TCS IN                  |                |      |                                                   |                                          |
| <b>St Bk of India</b>                                               | <b>SBIN IN</b>          |                |      | •                                                 |                                          |
| Hind. Unilever                                                      | HUVR IN                 |                |      |                                                   |                                          |
| Medium probability of attrition<br>(25% of exits)<br>No of exits: 5 | <b>O N G C</b>          | <b>ONGC IN</b> |      |                                                   | •                                        |
|                                                                     | Tata Motors             | TTMT IN        |      |                                                   |                                          |
|                                                                     | M & M                   | MM IN          |      |                                                   |                                          |
|                                                                     | Bharti Airtel           | BHARTI IN      | •    |                                                   |                                          |
|                                                                     | <b>Axis Bank</b>        | <b>AXSB IN</b> |      | •                                                 |                                          |
|                                                                     | <b>Tata Steel</b>       | <b>TATA IN</b> |      |                                                   | •                                        |
|                                                                     | Sun Pharma.Inds.        | SUNP IN        |      |                                                   |                                          |
|                                                                     | Bajaj Auto              | BJAUT IN       |      |                                                   |                                          |
|                                                                     | Kotak Mah. Bank         | KMB IN         |      |                                                   |                                          |
|                                                                     | Dr Reddy's Labs         | DRRD IN        |      |                                                   |                                          |
|                                                                     | Coal India              | COAL IN        |      |                                                   | •                                        |
|                                                                     | <b>NTPC</b>             | <b>NTPC IN</b> |      |                                                   | •                                        |
|                                                                     | Grasim Inds             | GRASIM IN      |      |                                                   |                                          |
|                                                                     | Cipla                   | CIPLA IN       |      |                                                   |                                          |
|                                                                     | <b>I D F C</b>          | <b>IDFC IN</b> |      |                                                   | •                                        |
|                                                                     | UltraTech Cem.          | UTCEM IN       |      |                                                   |                                          |
|                                                                     | Maruti Suzuki           | MSIL IN        |      |                                                   |                                          |
| Wipro                                                               | WPRO IN                 |                |      |                                                   |                                          |
| Asian Paints                                                        | APNT IN                 |                |      |                                                   |                                          |
| Hero Motocorp                                                       | HMCL IN                 |                |      |                                                   |                                          |
| High probability of attrition<br>(65% of exits)<br>No of exits: 13  | <b>B H E L</b>          | <b>BHEL IN</b> |      |                                                   | •                                        |
|                                                                     | <b>Tata Power Co.</b>   | <b>TPWR IN</b> |      |                                                   | •                                        |
|                                                                     | Power Grid Corpn        | PWGR IN        |      |                                                   |                                          |
|                                                                     | Ambuja Cem.             | ACEM IN        |      |                                                   |                                          |
|                                                                     | <b>GAIL (India)</b>     | <b>GAIL IN</b> |      |                                                   | •                                        |
|                                                                     | HCL Technologies        | HCLT IN        |      |                                                   |                                          |
|                                                                     | <b>Jindal Steel</b>     | <b>JSP IN</b>  | •    |                                                   | •                                        |
|                                                                     | <b>Hindalco Inds.</b>   | <b>HNDL IN</b> |      |                                                   | •                                        |
|                                                                     | <b>Cairn India</b>      | <b>CAIR IN</b> | •    |                                                   |                                          |
|                                                                     | Lupin                   | LPC IN         |      |                                                   |                                          |
|                                                                     | ACC                     | ACC IN         |      |                                                   |                                          |
|                                                                     | Bank of Baroda          | BOB IN         |      |                                                   |                                          |
|                                                                     | <b>Punjab Natl.Bank</b> | <b>PNB IN</b>  |      | •                                                 |                                          |
|                                                                     | <b>JP Associates</b>    | <b>JPA IN</b>  | •    |                                                   |                                          |
|                                                                     | <b>B P C L</b>          | <b>BPCL IN</b> |      |                                                   | •                                        |
| Ranbaxy Labs.                                                       | RBXY IN                 |                |      |                                                   |                                          |
| <b>DLF</b>                                                          | <b>DLFU IN</b>          | •              |      |                                                   |                                          |
| <b>Sesa Goa</b>                                                     | <b>SESA IN</b>          | •              |      | •                                                 |                                          |
| <b>Reliance Infra.</b>                                              | <b>RELI IN</b>          | •              |      |                                                   |                                          |
| <b>Siemens</b>                                                      | <b>SIEM IN</b>          |                |      | •                                                 |                                          |

# Likely entrants (table shows biggest non-Nifty names; shading indicates entrants)



|  | Stock            | Sector                                 | Ticker    | Clears "Greatness" cutoff? | Clears "Accounting" filter? # |
|--|------------------|----------------------------------------|-----------|----------------------------|-------------------------------|
|  | Nestle India     | FMCG                                   | NEST IN   | ●                          | ●                             |
|  | Sterlite Inds.   | Non Ferrous Metals                     | STLT IN   |                            |                               |
|  | Titan Inds.      | Diamond, Gems and Jewellery            | TTAN IN   | ●                          | ●                             |
|  | IndusInd Bank    | Banks                                  | IIB IN    | ^                          | ^                             |
|  | United Spirits   | Alcoholic Beverages                    | UNSP IN   |                            |                               |
|  | Zee Entertainmen | Entertainment                          | Z IN      | ●                          |                               |
|  | Yes Bank         | Banks                                  | YES IN    |                            |                               |
|  | Colgate-Palm.    | FMCG                                   | CLGT IN   | ●                          | ●                             |
|  | Glaxosmit Pharma | Pharmaceuticals                        | GLXO IN   | ●                          | ●                             |
|  | JSW Steel        | Steel                                  | JSTL IN   |                            |                               |
|  | Bosch            | Auto Ancillaries                       | BOS IN    | ●                          | ●                             |
|  | Godrej Consumer  | FMCG                                   | GCPL IN   | ●                          |                               |
|  | Federal Bank     | Banks                                  | FB IN     | ^                          | ^                             |
|  | Dabur India      | FMCG                                   | DABUR IN  | ●                          | ●                             |
|  | Divi's Lab.      | Pharmaceuticals                        | DIVI IN   |                            |                               |
|  | Shriram Trans.   | Finance                                | SHTF IN   |                            |                               |
|  | GlaxoSmith C H L | FMCG                                   | SKB IN    | ●                          | ●                             |
|  | LIC Housing Fin. | Finance                                | LICHF IN  |                            |                               |
|  | Rural Elec.Corp. | Finance                                | RECL IN   |                            |                               |
|  | Power Fin.Corpn. | Finance                                | POWF IN   |                            |                               |
|  | Idea Cellular    | Telecomm-Service                       | IDEA IN   |                            |                               |
|  | NMDC             | Mining & Mineral products              | NMDC IN   | ●                          | ●                             |
|  | Cummins India    | Capital Goods-Non Electrical Equipment | KKC IN    | ●                          | ●                             |
|  | Canara Bank      | Banks                                  | CBK IN    |                            |                               |
|  | Adani Ports      | Infrastructure Developers & Operators  | ADSEZ IN  | ●                          |                               |
|  | Exide Inds.      | Auto Ancillaries                       | EXID IN   | ●                          | ●                             |
|  | Tata Global      | Plantation & Plantation Products       | TGBL IN   |                            |                               |
|  | Glenmark Pharma. | Pharmaceuticals                        | GNP IN    |                            |                               |
|  | I O C L          | Refineries                             | IOCL IN   |                            |                               |
|  | United Breweries | Alcoholic Beverages                    | UBBL IN   | ●                          | *                             |
|  | Adani Enterp.    | Trading                                | ADE IN    | ●                          |                               |
|  | Apollo Hospitals | Healthcare                             | APHS IN   | ●                          |                               |
|  | Bank of India    | Banks                                  | BOI IN    |                            |                               |
|  | Hind.Zinc        | Non Ferrous Metals                     | HZ IN     |                            |                               |
|  | Union Bank (I)   | Banks                                  | UNBK IN   |                            |                               |
|  | Tata Chemicals   | Fertilizers                            | TTCH IN   |                            |                               |
|  | Reliance Power   | Power Generation & Distribution        | RPWR IN   | ●                          |                               |
|  | Wockhardt        | Pharmaceuticals                        | WPL IN    |                            |                               |
|  | Bajaj Finserv    | Finance                                | BJFIN IN  |                            |                               |
|  | Bajaj Holdings   | Finance                                | BJHI IN   |                            |                               |
|  | Marico           | FMCG                                   | MRCO IN   | ●                          |                               |
|  | Aditya Bir. Nuv. | Textiles                               | ABNL IN   |                            |                               |
|  | Container Corpn. | Logistics                              | CCRI IN   |                            |                               |
|  | H P C L          | Refineries                             | HPCL IN   |                            |                               |
|  | Cadila Health.   | Pharmaceuticals                        | CDH IN    | ●                          | ●                             |
|  | S A I L          | Steel                                  | SAIL IN   |                            |                               |
|  | Reliance Capital | Finance                                | RCAPT IN  |                            |                               |
|  | Indiabulls Fin.  | Stock/ Commodity Brokers               | IBULL IN  |                            |                               |
|  | Oracle Fin.Serv. | IT - Software                          | OFSS IN   | ●                          | ●                             |
|  | Castrol India    | Chemicals                              | CSTRL IN  | ●                          | ●                             |
|  | M & M Financial  | Finance                                | MMFS IN   | ^                          | ^                             |
|  | CRISIL           | Miscellaneous                          | CRISIL IN | ●                          | ●                             |
|  | Torrent Power    | Power Generation & Distribution        | TPW IN    | ●                          | ●                             |
|  | Bata India       | Leather                                | BATA IN   | ●                          | **                            |

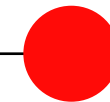
Next 50 on free float  
High probability of inclusion  
(80% or 16 of the 20  
entrants come from these  
50 stocks)

# Accounting check only for those firms that do well on Greatness

^ Banks and Financial Services firms not covered by our models- hence based on BFSI team's inputs

\* While United Breweries wasn't included in our last forensic accounting exercise, the over 34% holding by Scottish & Newcastle (Heineken) makes us generally comfortable with the firm

\*\* While Bata doesn't do very well on contingent liabilities and audit fee CAGR fields on our accounting model, its good scores on cash flow conversion along with a 52% foreign promoter stake make us generally comfortable with the firm



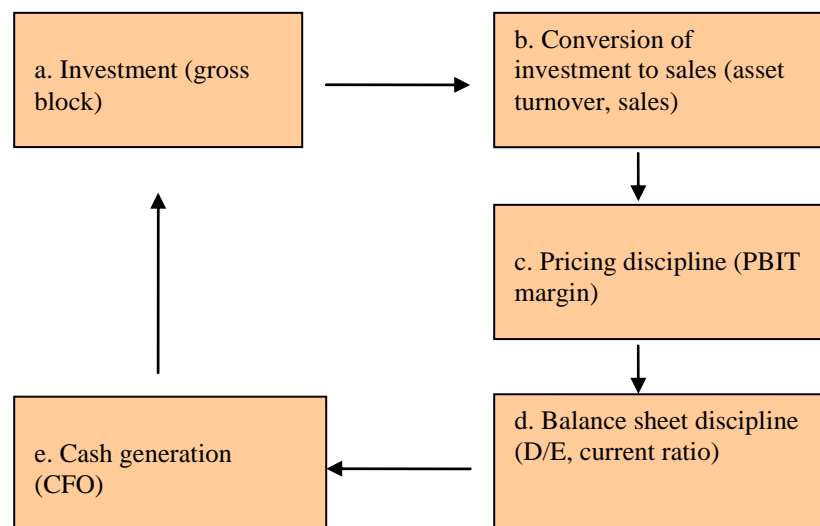
- In our 19<sup>th</sup> January note "Tomorrow's ten baggers", we had unveiled the "greatness" framework to study a firm's structural strengths- the framework essentially hinges on using publicly available historical data to assess which firms have over a sustained period of time (FY07-12) been able 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 cashflow; and f) Invest free cashflows again.

- We rank the BSE500 universe of firms (excluding Financial Services firms and excluding firms with insufficient data) on our "greatness" score which is comprised of six equally weighted headings: Investments, Conversion to sales, Pricing discipline, Balance Sheet discipline, Cash generation & EPS improvement and Return ratio improvement.

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

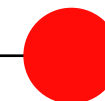
- **Percentage improvements in performance** in FY10-12 versus FY07-09; and
- **Consistency in performance** i.e. improvements adjusted for standard deviations.



The framework



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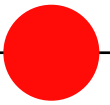
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