Motilal Oswal

Thematic Study | December 2017

22ND ANNUAL WEALTH CREATION STUDY (2012-2017)

CAP & GAP

Power of longevity in Wealth Creation

HIGHLIGHTS

- Longevated high profit growth companies are few. Understanding of Competitive Advantage Period (CAP) and Growth Advantage Period (GAP) improves the chances of finding them.
- Moat without growth will underperform; growth without moat will end soon.
- Longevity and speed of growth are inversely correlated.
- Three characteristics of CAP-cum-GAP companies are – Clear strategy, High growth mindset, and High-growth industry situations.

"The strategy is to find a good business – and one that I can understand why it's good – with a durable competitive advantage, run by able and honest people, and available at a price that makes sense. Because we are not going to sell the business, we don't need something with earnings that go up the next month or the next quarter; we need something that will earn more money 10 and 20 and 30 years from now."

– Warren Buffett, in Forbes Magazine's 100th Anniversary Issue

TOP 10 WEALTH CREATORS (2012-2017)

	THE BIGGEST		THE FASTEST		THE MOST CONSISTENT		
Rank	Company	Wealth Created (INR b)	Company	5-Year Price CAGR (%)	Company	Appeared in WC Study (x)	10-Year Price CAGR (%)
1	TCS	2,499	Ajanta Pharma	96	Asian Paints	10	30
2	HDFC Bank	2,315	KRBL	88	Titan Company	10	27
3	Reliance Industries	1,888	Bajaj Finance	71	HDFC Bank	10	22
4	ITC	1,594	Dalmia Bharat	69	Kotak Mahindra Bank	10	22
5	Maruti Suzuki	1,413	Symphony	68	Bosch	10	21
6	HDFC	1,350	Alembic Pharma	67	Sun Pharma	10	21
7	IOC	1,219	Eicher Motors	67	Dabur India	10	19
8	Hindustan Unilever	1,081	Natco Pharma	64	ITC	10	19
9	Kotak Mahindra Bank	1,050	Vakrangee	64	Cummins India	10	17
10	HCL Technologies	884	Aurobindo Pharma	63	Axis Bank	10	17

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We thank Mr Dhruv Mehta (Dhruv.Mehta@dhruvmehta.in), Investment Consultant, for his invaluable contribution to this report.

Motilal Oswal 22nd Annual Wealth Creation Study

Abbreviations and Terms used in this report

Abbreviation / Term	Description
2007, 2012, 2017, etc	Reference to years for India are financial year ending March, unless otherwise stated
Avg	Average
CAGR	Compound Annual Growth Rate
L to P / P to L	Loss to Profit / Profit to Loss. In such cases, calculation of PAT CAGR is not possible
INR b	Indian Rupees in billion
Price CAGR	In the case of aggregates, Price CAGR refers to Market Cap CAGR
WC	Wealth Created
Wealth Created	Increase in Market Capitalization over the last 5 years, duly adjusted for corporate events such as fresh equity issuance, mergers, demergers, share buybacks, etc.

Note: Capitaline database has been used for this study. Source of all exhibits is MOSL analysis, unless otherwise stated

Wealth Creation Study

Objective, Concept & Methodology

Objective

The foundation of Wealth Creation is to buy businesses at a price substantially lower than their "intrinsic value" or "expected value". The lower the market value compared to the intrinsic value, the higher is the margin of safety. Every year, as in the past 22 years, we endeavor to cull out the characteristics of businesses that create value for their shareholders.

As Phil Fisher says, "*It seems logical that even before thinking of buying any common stock, the first step is to see how money has been most successfully made in the past.*" Our Wealth Creation studies are attempts to study the past as a guide to the future, and gain insights into the various dynamics of stock market investing.

Concept & Methodology

Wealth Creation is the process by which a company enhances the market value of the capital entrusted to it by its shareholders. It is a basic measure of success for any commercial venture. For listed companies, we define Wealth Created as the difference in market capitalization over a period of last five years, after adjusting for equity dilution.

We rank the top 100 companies in descending order of absolute Wealth Created, **subject to the company's stock price at least outperforming the benchmark index (BSE Sensex in our case).** These top 100 Wealth Creators are also ranked according to speed (i.e. price CAGR during the period under study).

Report structure

We present the 2012-2017 Wealth Creation study highlights in pages 2-3. The detailed findings are presented in pages 38-51. Appendix 1 (pages 52-53) ranks the top 100 Wealth Creators by size, and Appendix 2 (pages 54-55) ranks the same 100 Wealth Creators by speed.

This year's theme study titled "**CAP & GAP – Power of longevity in Wealth Creation**" is featured in pages 4-37.

Wealth Creation 2012-2017

Highlights

TCS is the Biggest Wealth Creator for the fifth time in a row

- **TCS** has emerged as the biggest Wealth Creator for the period 2012-17, retaining the top spot it held in the previous four study periods (2011-16, 2010-15, 2009-14 and 2008-13).
- **Reliance Industries** has muscled its way to No.3 after not featuring in the Wealth Creators list in the previous study.

Exhibit 1 **Top 10 Biggest Wealth Creators (2012-17)**

Rank	Company	Wealth Created		CAGR (%)		P/E (x)		RoE (%)	
		INR b	% share	Price	PAT	2017	2012	2017	2012
1	TCS	2,499	6.4	16	20	19	22	30	35
2	HDFC Bank	2,315	5.9	23	24	24	23	17	17
3	Reliance Inds	1,888	4.8	12	10	14	13	11	11
4	ITC	1,594	4.1	13	11	33	29	22	32
5	Maruti Suzuki	1,413	3.6	35	32	31	26	16	10
6	HDFC	1,350	3.5	17	15	22	18	18	23
7	Indian Oil	1,219	3.1	24	13	9	6	20	18
8	Hind. Unilever	1,081	2.8	17	11	45	34	64	71
9	Kotak Mahindra	1,050	2.7	26	22	33	22	13	14
10	HCL Tech	884	2.3	29	29	15	14	26	25
Total of Top 10		**15,292**	**39.3**	**19**	**16**	**20**	**18**	**18**	**17**
Total of Top 100		**38,927**	**100**	**22**	**15**	**22**	**16**	**17**	**18**

Ajanta Pharma is the Fastest Wealth Creator for the third time in a row

- **Ajanta Pharma** has emerged as the Fastest Wealth Creator for the third time in a row, with 2012-17 stock price multiplier of 29x (96% CAGR).
- **Eicher Motors** is among the top 10 Fastest Wealth Creators in the last 6 studies, and **Bajaj Finance** in the last 4.
- 5 of the 10 stocks were trading at single-digit P/E in 2012.

Exhibit 2 **Top 10 Fastest Wealth Creators (2012-17)**

Rank	Company	Price Appn.	CAGR (%)		Mkt Cap (INR b)		P/E (x)	
		(x)	Price	PAT	2017	2012	2017	2012
1	Ajanta Pharma	29	96	45	155	5	31	7
2	KRBL	23	88	34	97	4	24	5
3	Bajaj Finance	15	71	35	646	34	35	8
4	Dalmia Bharat	14	69	13	175	12	62	8
5	Symphony	13	68	23	107	8	70	15
6	Alembic Pharma	13	67	25	118	9	29	7
7	Eicher Motors	13	67	42	695	54	42	19
8	Natco Pharma	12	64	52	148	11	30	19
9	Vakrangee	12	64	50	174	14	34	20
10	Aurobindo Pharma	11	63	65	396	35	17	19

Asian Paints is the Most Consistent Wealth Creator again

- **Asian Paints** is the Most Consistent Wealth Creator for the second time in succession by –
  1. Appearing among top 100 Wealth Creators in each of the last 10 studies; and
  2. Recording the highest Price CAGR of 30% over the 10-year period 2007 to 2017.
- 8 of the top 10 Most Consistent Wealth Creators are consumer-facing companies

Exhibit 3 **Top 10 Most Consistent Wealth Creators (2012-17)**

Rank	Company	Appeared in WC Study (x)	10-yr Price CAGR (%)	10-yr PAT CAGR (%)	P/E (x) 2017	P/E (x) 2007	RoE (%) 2017	RoE (%) 2007
1	Asian Paints	10	30	21	53	26	25	37
2	Titan Company	10	27	22	52	35	19	32
3	HDFC Bank	10	22	30	24	27	17	18
4	Kotak Mahindra	10	22	25	33	30	13	16
5	Bosch	10	21	11	54	25	15	22
6	Sun Pharma	10	21	26	24	29	19	26
7	Dabur India	10	19	16	40	30	25	57
8	ITC	10	19	14	33	21	22	26
9	Cummins India	10	17	11	36	20	19	26
10	Axis Bank	10	17	20	30	21	7	19

Banking & Finance is the biggest Wealth Creating sector

- **Banking & Finance** has emerged as India's biggest Wealth Creating sector over 2012-17 dethroning Consumer/Retail.

Exhibit 4 **Banking & Finance is the top Wealth Creating sector**

Sector (No of companies)	WC (INR b)	Share of WC % 2017	Share of WC % 2012	CAGR 12-17 (%) Price	CAGR 12-17 (%) PAT	P/E (x) 2017	P/E (x) 2012	RoE (%) 2017	RoE (%) 2012
Banking & Fin. (22)	9,346	24	23	27	16	23	14	15	19
Cons. & Retail (21)	6,913	18	21	21	13	41	30	26	31
Auto (13)	4,898	13	10	26	3	28	10	15	27
Oil & Gas (5)	4,397	11	6	17	17	11	11	16	12
Technology (4)	3,757	10	11	20	22	18	19	27	32
Healthcare (13)	3,301	8	7	27	23	26	22	17	14
Cement (5)	1,686	4	3	25	6	33	14	11	15
Capital Goods (5)	1,355	3	4	17	7	28	18	13	16
Metals / Mining (2)	942	2	13	18	11	16	12	19	14
Telecom & Media (3)	734	2	-	27	42	39	67	21	6
Utilities (1)	479	1	1	16	17	14	15	15	14
Others (6)	1,119	3	1	27	20	22	17	20	19
Total	**38,927**	**100**	**100**	**22**	**15**	**22**	**16**	**17**	**18**

Cyclical downturn drives Wealth Destruction

- The total Wealth Destroyed during 2012-17 is INR 6 trillion, and is led by **cyclical downturn**.

Exhibit 5 **Top Wealth Destroying companies**

Company	Wealth Destroyed INR b	Wealth Destroyed % Share	Price CAGR (%)
MMTC	722	12	-40
Jindal Steel	393	7	-26
Coal India	349	6	-3
B H E L	230	4	-9
NMDC	219	4	-4
Reliance Power	193	3	-16
Hindustan Copper	186	3	-24
JP Associates	160	3	-30
Adani Enterprises	143	2	-19
Reliance Comm.	139	2	-15
Total of Above	**2,734**	**46**	
Total Wealth Destroyed	**6,006**	**100**	

Exhibit 6 **Top Wealth Destroying Sectors**

Sector	Wealth Destroyed (INR b)	% Share
Metals/Mining	1,535	26
Trading	923	15
Banking & Finance	890	15
Constn./Real Estate	517	9
Utilities	474	8
Capital Goods	460	8
Telecom	247	4
Textiles	169	3
Technology	110	2
Others	681	11
Total	**6,006**	**100**

For detailed findings, please see pages 38-51.

Theme 2018

CAP & GAP

Power of longevity in Wealth Creation

"If you don't have competitive edge, do not compete." — *Jack Welch*

"My biggest mistake was that I always sold stocks way too early … With great companies the passage of time is a major positive." — *Peter Lynch*

1. Preamble

Why study Longevity

Longevity is defined simply as "duration of anything". For the purposes of this study, Longevity refers to the sustenance of a company's competitive advantage and earnings growth.

Why study Longevity? It is well known that equity as an asset class has the power to deliver very high returns for a very long period of time (Exhibit 1).

Exhibit 1 **Long-term investment returns of select companies**

	Period of investment		Amount	Final	Number	Price	
Stock	From	To	Invested	Amount	of years	Multiple	CAGR
Infosys	Jun 1993	Oct 2017	10,000	29,730,645	**24.0**	2,973	**39%**
Emami	Oct 1995	Oct 2017	10,000	5,228,958	**22.0**	523	**33%**
Eicher Motors	Jan 1990	Oct 2017	10,000	20,179,688	**27.5**	2,018	**32%**
Shree Cement	Jan 1990	Oct 2017	10,000	19,127,722	**27.5**	1,913	**32%**
Sun Pharma	Dec 1994	Oct 2017	10,000	2,610,377	**23.0**	261	**27%**
HDFC Bank	May 1995	Oct 2017	10,000	2,246,957	**22.5**	225	**27%**
HDFC	Jan 1990	Oct 2017	10,000	4,878,143	**28.0**	488	**25%**
Asian Paints	Jan 1988	Oct 2017	10,000	5,903,500	**30.0**	590	**24%**
Britannia Inds	Jan 1988	Oct 2017	10,000	5,683,802	**30.0**	568	**24%**

However, such longevated high-return opportunities are few. For instance, of the 613 companies listed for 20 years from 1997 to 2017, only 87 companies had Price CAGR > 25%. Likewise, only 89 companies managed Profit CAGR > 25% (Exhibit 2).

Exhibit 2 **1997-2017: Distribution of Profit CAGR and Price CAGR**

Price CAGR	No. of cos.	% of total
<= 0%	41	7%
0-15%	292	48%
15-25%	193	31%
25-35%	**70**	**11%**
> 35%	**17**	**3%**
	613	**100%**

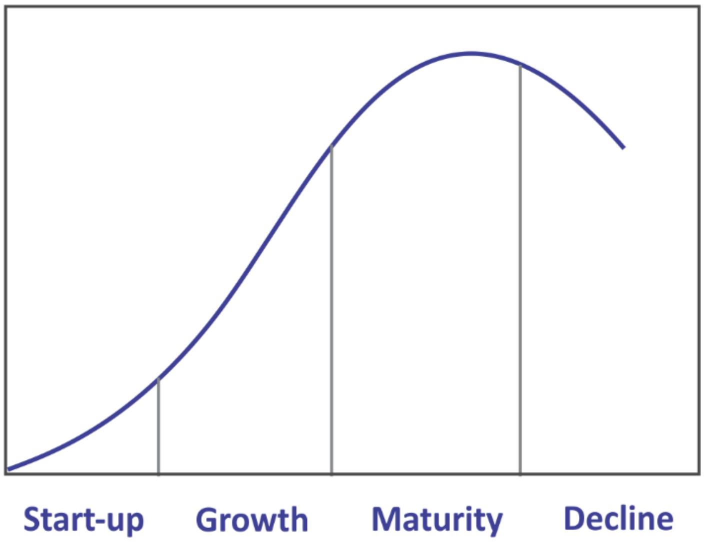
Profit CAGR	No. of cos.	% of total
<= 0%	167	27%
0-15%	243	40%
15-25%	114	19%
25-35%	**32**	**5%**
> 35%	**57**	**9%**
	613	**100%**

Thus, to earn high long-term returns in equities, two key questions need to be answered regarding the companies invested in –

- Whether – and how long – will the company survive? and
- How long will it profitably grow?

Every company has a lifecycle (Exhibit 3). Along this lifecycle, ascertaining a company's high profit-growth phase and its longevity is very important. This is because growth in the company's profits is the most important variable for increasing its value. Stock prices are primarily a reflection of underlying value. So, if we seek multifold increase in stock prices, it is obvious that we need to invest in companies during their phase of multifold increase in profits.

Exhibit 3 **Typical company lifecycle**



Seeking multifold increase in profits is easier said than done. This is because there is no science for accurately predicting profit growth which is complex and multivariate. As a result, stock markets are unable to appropriately value long-term profitable growth. Looking back 10 years, in quite a few stocks, markets could have afforded to pay significantly higher prices and multiples than they actually did (Exhibit 4).

Exhibit 4 **Hindsight stock price and P/E of select stocks**

(INR)	EPS CAGR 2007 to 2017	Stock price in Mar-2017	Stock price in Mar-2007 for return CAGR of 15% *	Actual price in Mar-2007	Price Difference	Hindsight P/E (x)	Actual P/E (x)
Asian Paints	22%	1,074	265	76	248%	97	28
HDFC Bank	24%	1,443	357	191	87%	52	28
Maruti Suzuki	16%	6,016	1,487	820	81%	27	15
Sun Pharma	22%	688	170	106	61%	43	27

* Return CAGR is taken at 15% as this is the long-period return on the benchmark indices.

Given the mystique surrounding growth, any insight into estimating the length of growth, the height of growth and limits of growth is useful. Further, growth is of value only so long as it generates (or leads to) return on capital higher than cost of capital. This is possible only if the company enjoys a distinct competitive advantage over its rivals. Hence, in studying longevity of a company's earnings growth, one also needs to study durability of its competitive advantage.

This study attempts to –

1. Measure longevity of both, competitive advantage and earnings growth; and
2. Combine the learnings to identify characteristics of companies with long-term profit growth.

2. Two dimensions of Longevity

Moat & Growth

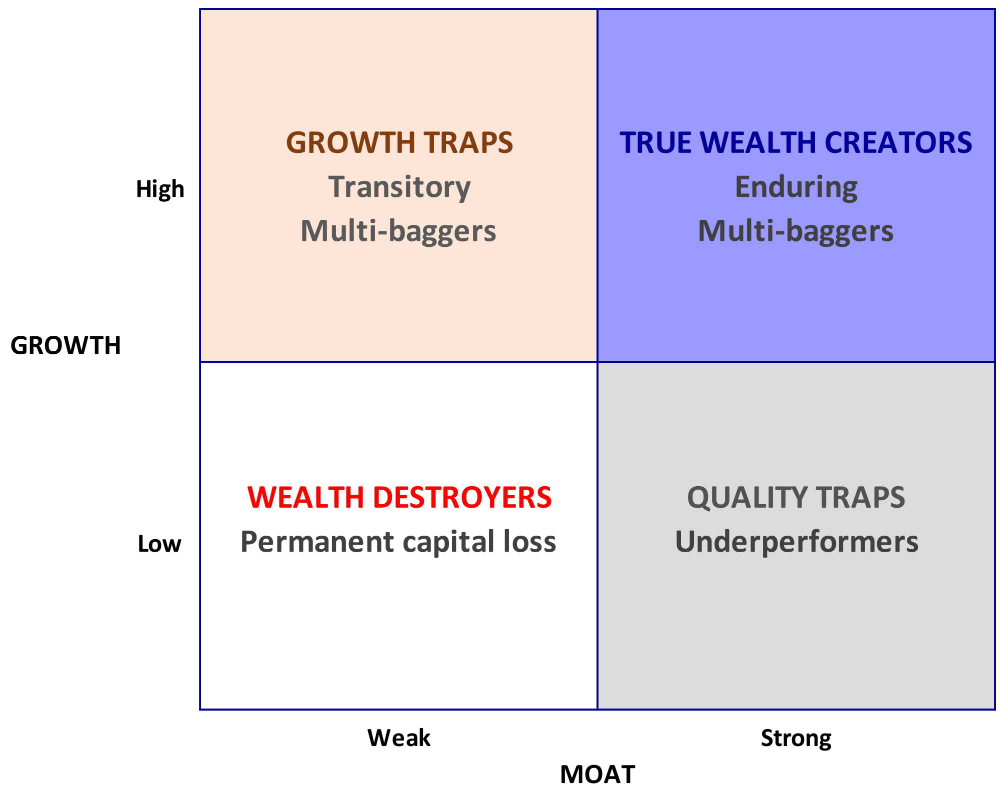
There are two dimensions of a company's Longevity –

1. Longevity of competitive advantage (popularized by Warren Buffett as "Economic Moat" or simply "Moat"); and
2. Longevity of a company's earnings growth.

A moat protects a company's profits and profitability from being attacked by competitors for an extended period. Companies with strong moats enjoy a high quality of business – healthy RoEs and cash flows relative to peers. Even as moats are extremely important ("to finish first, you have to first finish!"), in equity investing, returns are highly correlated to earnings growth.

Exhibit 5 captures the inter-relationship between Moat and Growth. Companies with a strong moat but no growth are "**Quality Traps**" – their stocks are to likely underperform benchmark indices. On the other hand, companies with mere growth but without strong moat are "**Growth Traps**" – their stocks may at best be transitory multi-baggers. Unless sold at the right price levels, these stocks may slip all the way back to where they started off from, or even lower.

Exhibit 5 **The Moat-Growth Matrix**



Having conceptually established that both longevated moat/competitive advantage and longevated earnings growth are important, it would be very useful to attempt to objectively measure them as well. Longevity of Moat can be measured as **CAP (Competitive Advantage Period)**, and longevity of earnings growth can be measured as **GAP (Growth Advantage Period)**.

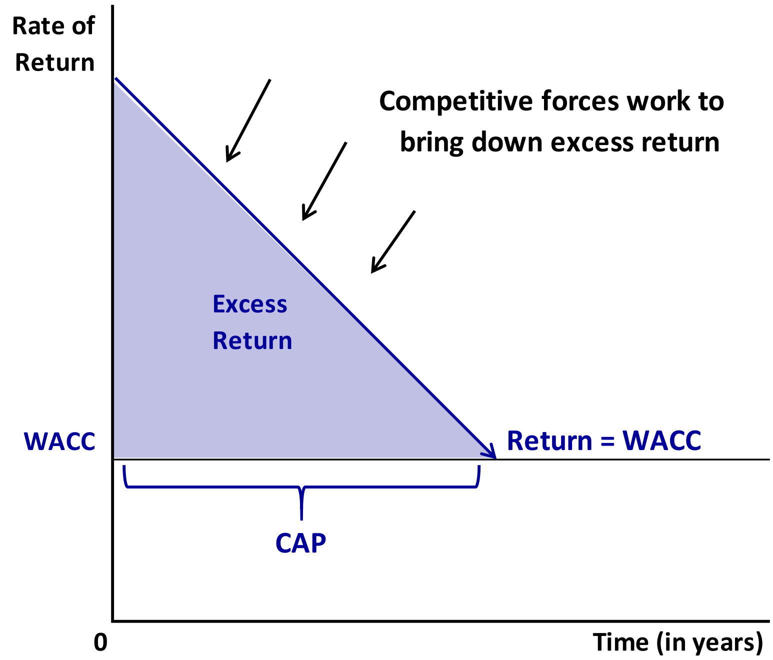
3. Measuring Longevity of Moat

CAP – Competitive Advantage Period

3.1 What is CAP?

Competitive Advantage Period (CAP) is the time during which a company generates returns on investment that exceed its cost of capital. If a company earns above-average return on its invested capital, it will attract competitors who will be willing to operate at lower returns, eventually driving down overall industry returns to economic cost of capital, and sometimes even below it. In effect, CAP is a measure of longevity of a company's Moat.

Exhibit 6 **Graphical representation of CAP**



In the diagram, WACC stands for Weighted Average Cost of Capital, calculated after considering both debt and equity.

For the purposes of this study, we have used RoE as the proxy for WACC.

Further, we have considered Cost of Equity as 15%, which is the long-period return on the benchmark indices.

Exhibits 7 and 8 present real-life examples of CAP. As the exhibits note, stock returns during the CAP period tend to be meaningfully higher than the non-CAP period.

Exhibit 7 **ACC enjoyed a CAP of 10 years from 2004 to 2013**

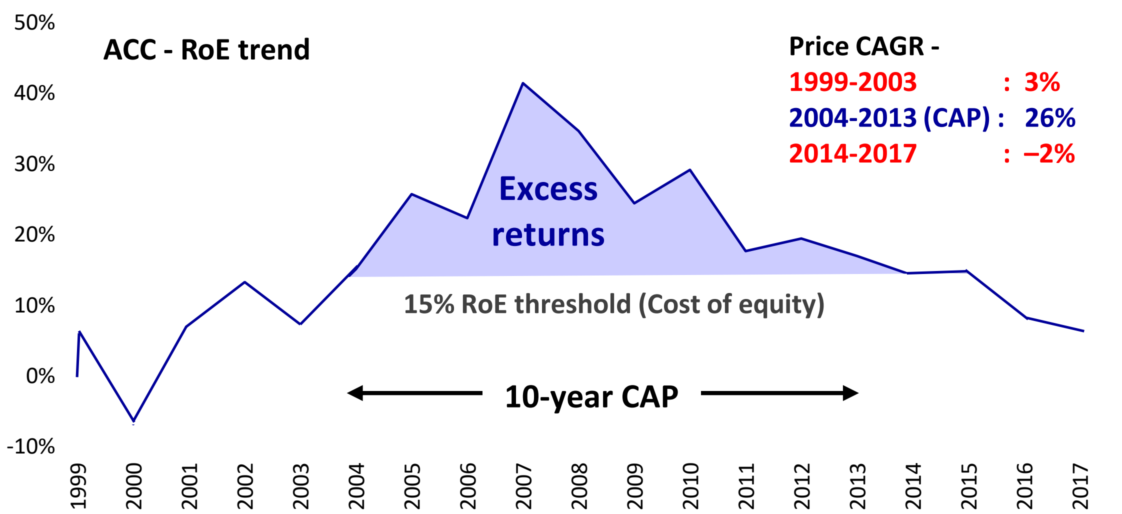
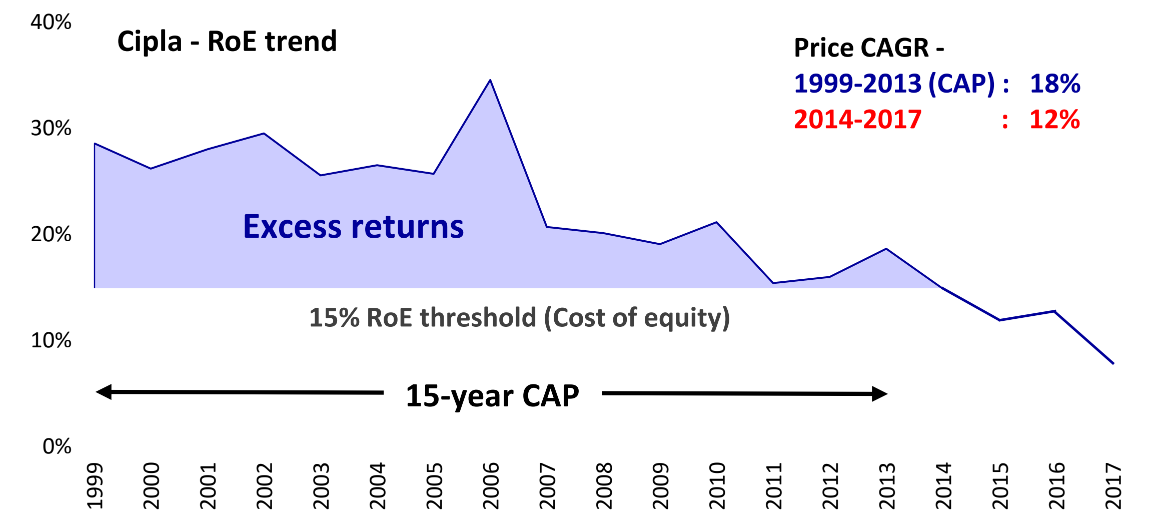


Exhibit 8 **Cipla enjoyed a CAP of 15 years from 1999 to 2013**



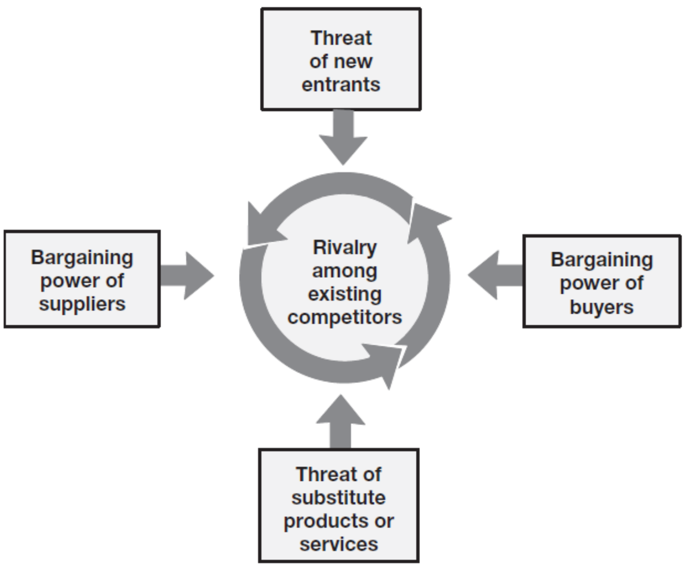
3.2 Factors determining CAP

There are two major factors which determine CAP – (1) Attractiveness of industry structure and (2) Effectiveness of a company's own strategy.

3.2.1 Industry structure

The Five Forces framework of Michael Porter is ideal to assess the attractiveness of industry structure. Exhibit 9 presents the diagrammatic representation of the Five Forces.

Exhibit 9 **Porter's Five Forces framework**



NOTE: In their book *Playing to Win*, authors A G Lafley and Roger Martin highlight that –

(1) The interplay of forces along the vertical axis decides how much value will get created in the industry; and

(2) The interplay of forces along the horizontal axis decides how the industry value will get distributed among the players, the customers and the suppliers.

3.2.1.1 Porter's Five Forces – Implications & Examples

FORCE #1 – Inter-firm rivalry

Implication: This lies at the core of the industry structure analysis. Higher the rivalry among incumbents, lower the industry attractiveness and vice-versa.

Examples: The Indian Wireless Telecom sector is a huge growth opportunity and currently has just 3 major players. Yet the rivalry between them is so intense that the players' profits are on a declining trend (Exhibit 10).
In contrast, the Indian Mortgage sector is also a huge growth opportunity but with a very large number of players. Yet, the benign rivalry between them ensures that sector profit growth remains healthy (Exhibit 11).

Exhibit 10 **Bharti Airtel + Idea profits (INR b)**

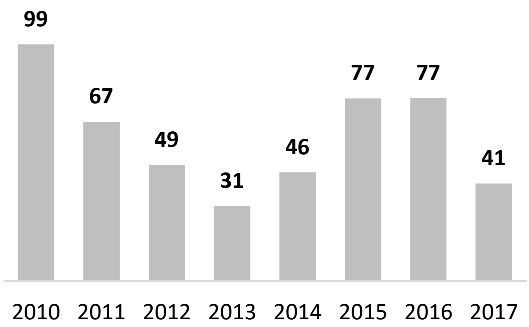
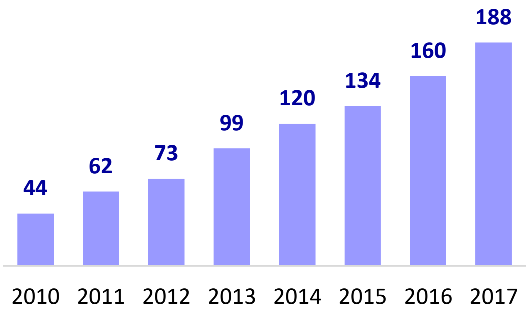


Exhibit 11 **Mortgage sector profits (INR b)**



FORCE #2 – Threat of new entrants

Implication: The threat of new entrants compels incumbents to operate at low profitability as a strategy to ward them off.

Examples: The Realty sector is constantly under threat of new entrants, hurting profits of incumbents (Exhibit 12).
In contrast, distribution-intensive sectors like Paints are unlikely to see new entrants, implying steady growth in sector profits (Exhibit 13).

Exhibit 12 **Realty sector profits (INR b)**

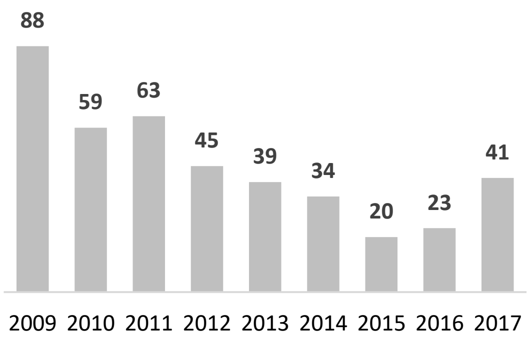
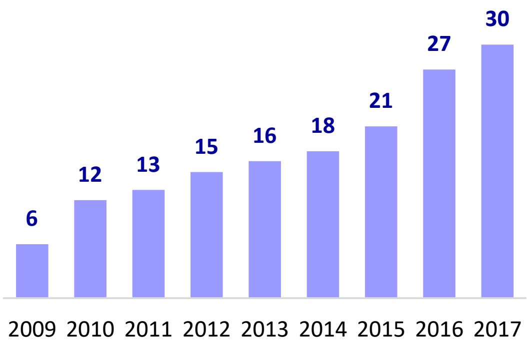


Exhibit 13 **Paints sector profits (INR b)**

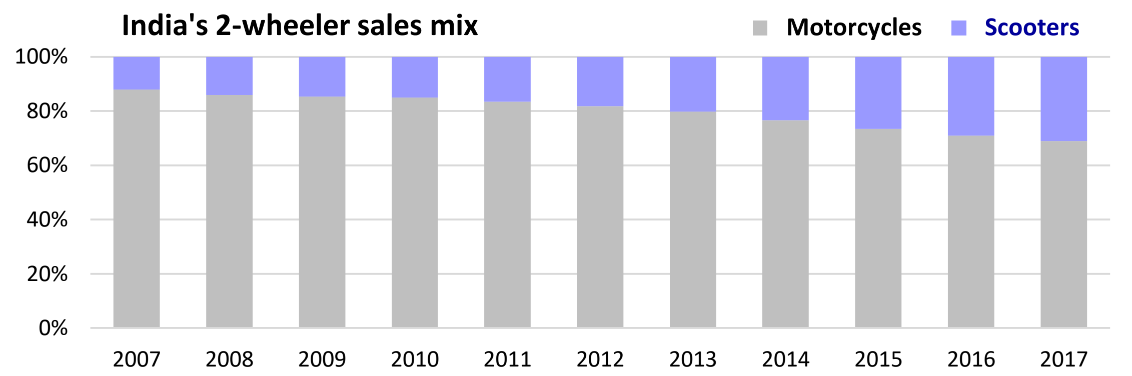


FORCE #3 – Threat of substitute products or services

Implication: Like the threat of new entrants, the threat of substitutes also compels incumbents to operate at low profitability. However, this is relatively rare.

Examples: Print media and TV sectors are being substituted by the internet. Likewise, within two-wheelers, scooters are substituting motorcycles in India (Exhibit 14).

Exhibit 14 **Scooters market share up from 12% in 2007 to 31% in 2017**



FORCE #4 – Bargaining power of customers

Implication: Higher the bargaining power of customers, lower the sector attractiveness and vice versa. If the customers are large and concentrated, their bargaining power tends to be high, whereas fragmented customers tend to have lower bargaining power. High brand pull and high switching costs also imply lower bargaining power of customers.

Examples: Auto ancillaries supply to large OEMs and have low profit margins (Exhibit 15).
In contrast, the Cars sector supplies branded products to a large number of retail customers, and hence enjoys superior margins (Exhibit 16).

Exhibit 15 **Auto ancillary sector PAT margin trend**

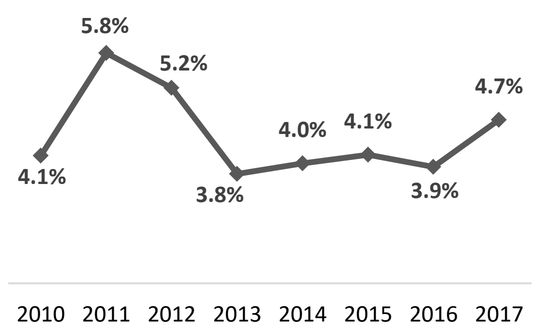
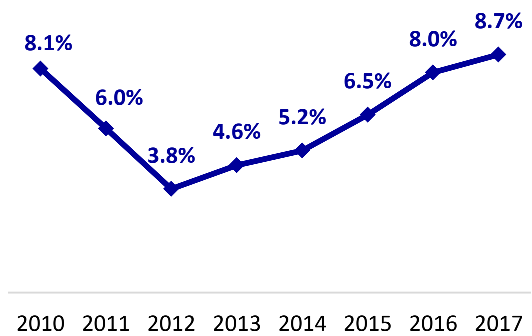


Exhibit 16 **Cars sector PAT margin trend**



FORCE #5 – Bargaining power of suppliers

Implication: Higher the bargaining power of suppliers, lower the sector attractiveness and vice versa. If the suppliers are large and concentrated, their bargaining power tends to be high, whereas fragmented suppliers tend to have lower bargaining power.

Examples: The packaging sector buys its raw materials from large suppliers e.g. polymer and aluminum manufacturers. Hence, sector profit margins are low (Exhibit 17).
In contrast, the Cigarettes sector buys tobacco from a large number of growers who have low bargaining power. Hence profit margins are high (Exhibit 18).

Exhibit 17 **Packaging sector PAT margin trend**

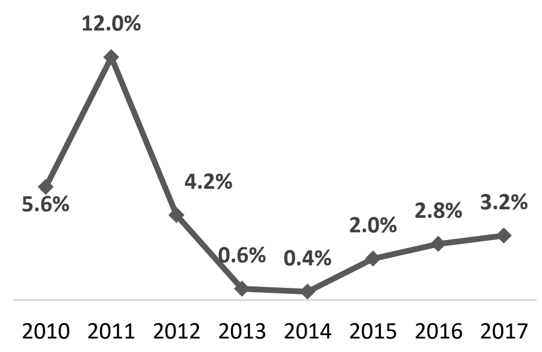
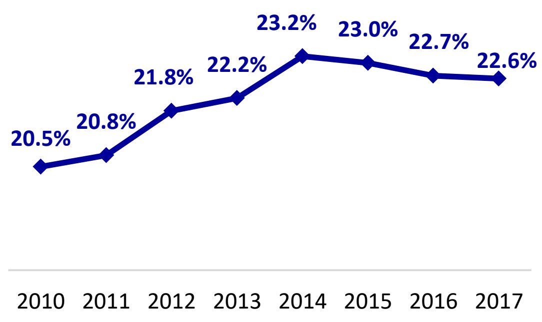


Exhibit 18 **Cigarettes sector PAT margin trend**



3.2.2 Corporate Strategy

Corporate Strategy is the second determinant of CAP. Strategy is all about maintaining or improving the company's competitive advantage vis-à-vis rivals. Companies with a sound strategy are likely to enjoy extended CAP and vice versa. According to Michael Porter, there are 3 broad strategies – (1) Differentiation, (2) Low cost, and (3) Focus.

3.2.2.1 Differentiation

A differentiated strategy is all about offering customers a unique value proposition which is not easy to replicate by competition. This leads to customer loyalty, ensuring sales and profits.

Example: Most consumer-facing companies follow a strategy of differentiation. Be it products like toothpaste, cola and biscuits, or even services like restaurants, banks and airlines, companies aspire to offer a unique product/service/experience to customers to retain their loyalty.

3.2.2.2 Low cost

In sectors where customers are unable to differentiate between products/services offered by the various players, having the lowest cost compared to peers is the only way to sustain competitive advantage.

Example: Commodity products like steel, cement and paper are undifferentiated in the eyes of the customer. Hence, companies in these sectors will need to aspire to be the lowest cost producer in order to maintain or gain market share.

3.2.2.3 Focus

This is a special case of companies focused on just one segment of product, customers or geography i.e. a niche.

Example: Companies like Symphony, which is focused only on air-coolers or Jammu & Kashmir Bank, which is focused only in the state of Jammu & Kashmir.

3.2.2.4 Stuck-in-the-middle

Porter uses "Stuck-in-the-middle" to describe companies which do not seem to have adopted any of the above strategies.

Example: Many state-owned companies fall into this category – they are neither differentiated, nor have low cost nor focus.

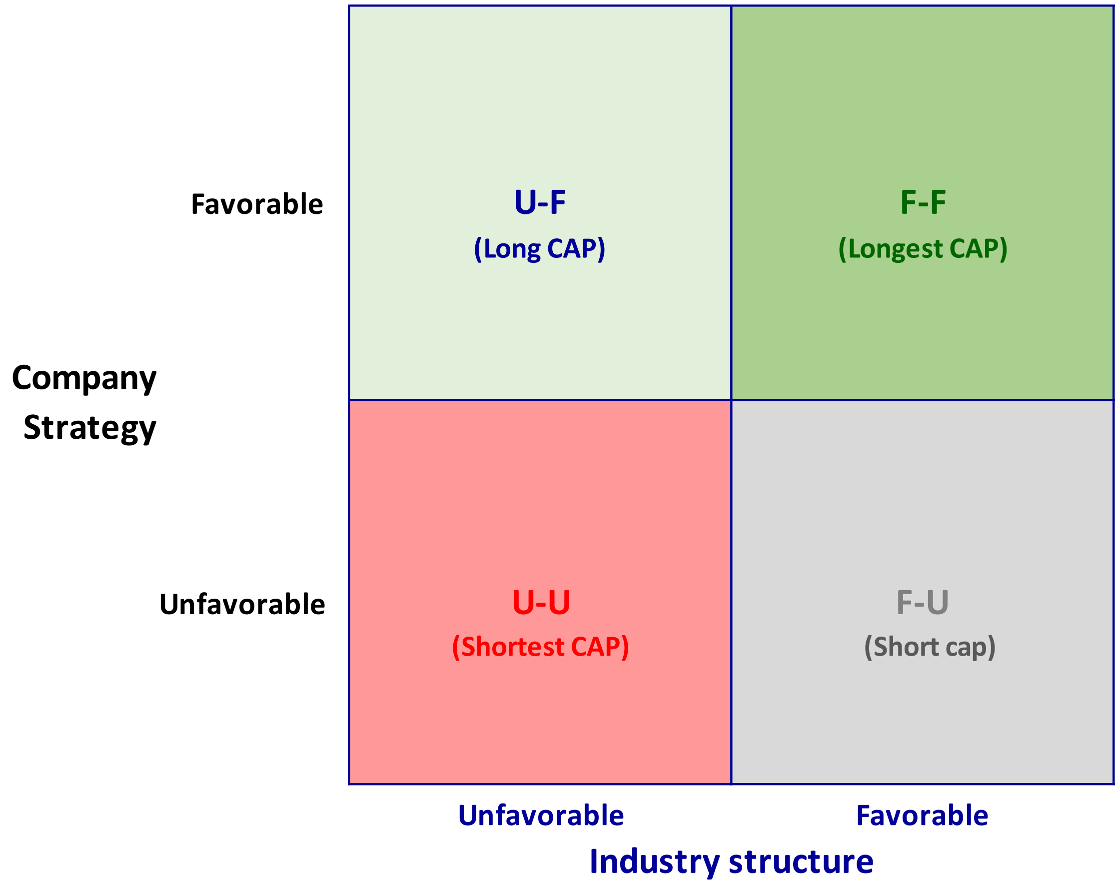
3.3 The CAP Matrix

We have combined Industry Structure with Company Strategy to arrive at the CAP Matrix (Exhibit 19). Industry structure can be Favorable (F) or Unfavorable (U). Further, Company Strategy can also be Favorable (F) or Unfavorable (U). This gives rise to 4 quadrants with associated CAPs –

- **F-F** – Longest CAP
- **U-F** – Long CAP
- **F-U** – Short CAP
- **U-U** – Shortest CAP.

The Indian experience of these 4 quadrants is covered in Section 4.

Exhibit 19 **The CAP Matrix**



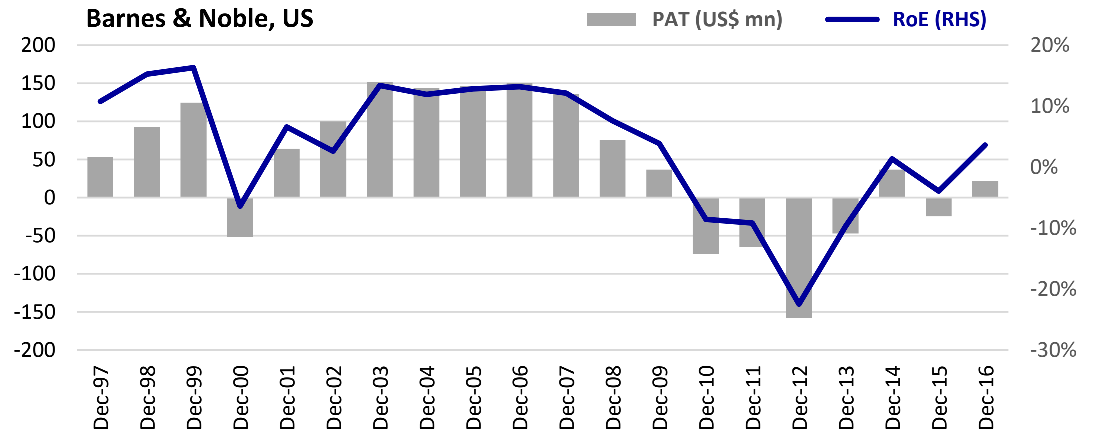
3.4 Why CAP may end

CAP tends to be sticky, especially in secular, consumer-facing businesses. However, the factors which could adversely affect CAP are: (1) Disruptive competition, (2) Business downcycles, (3) Regulatory shocks, and (4) Capital misallocation.

3.4.1 Disruptive competition

The entry of Amazon was initially disruptive for America's largest book chain Barnes & Noble (Exhibit 20). Amazon is now affecting even well-established general retailers like Wal-Mart. Back home, the entry of Reliance Jio offering free voice calls is disrupting the Indian wireless sector, and is likely to hurt the potential CAP of incumbents.

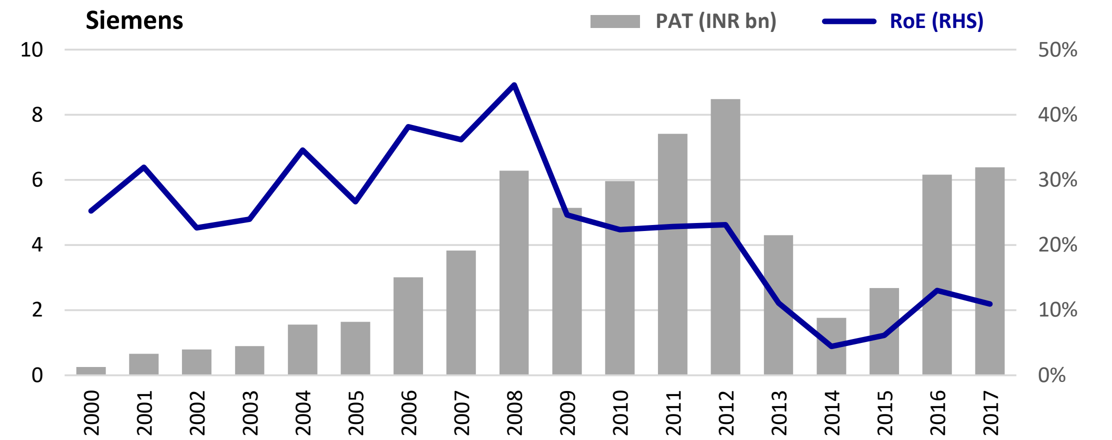
Exhibit 20 **Barnes & Noble's PAT & RoE trend: Disrupted by Amazon**



3.4.2 Business downcycles

Business downcycles tend to drag down CAP. For instance, Siemens RoE stayed well above 15% from 2000 to 2012, after which it was hit by a business downcycle (Exhibit 21).

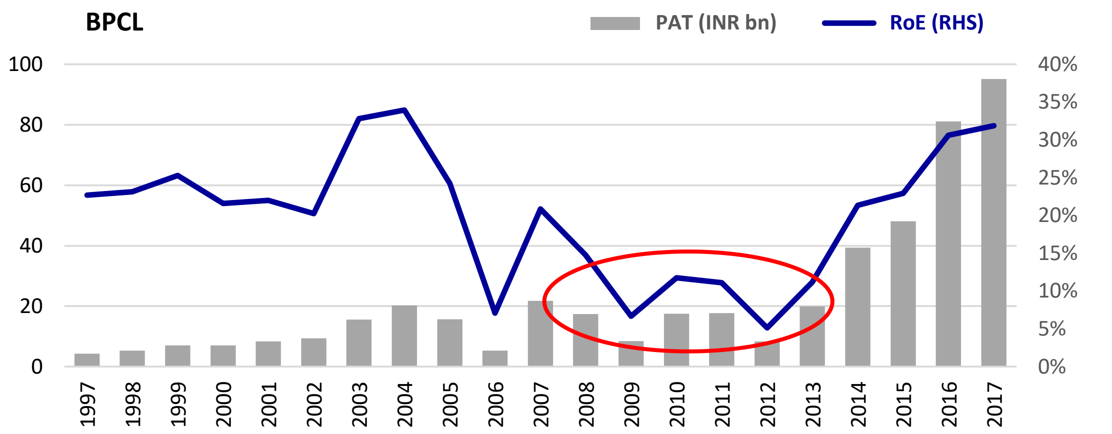
Exhibit 21 **Siemens' PAT & RoE trend: Hit by business downcycles**



3.4.3 Regulatory shocks

Regulatory shocks can adversely affect CAP. Oil marketing companies like BPCL were adversely affected during the product price control regime (2008 to 2013), before prices were deregulated.

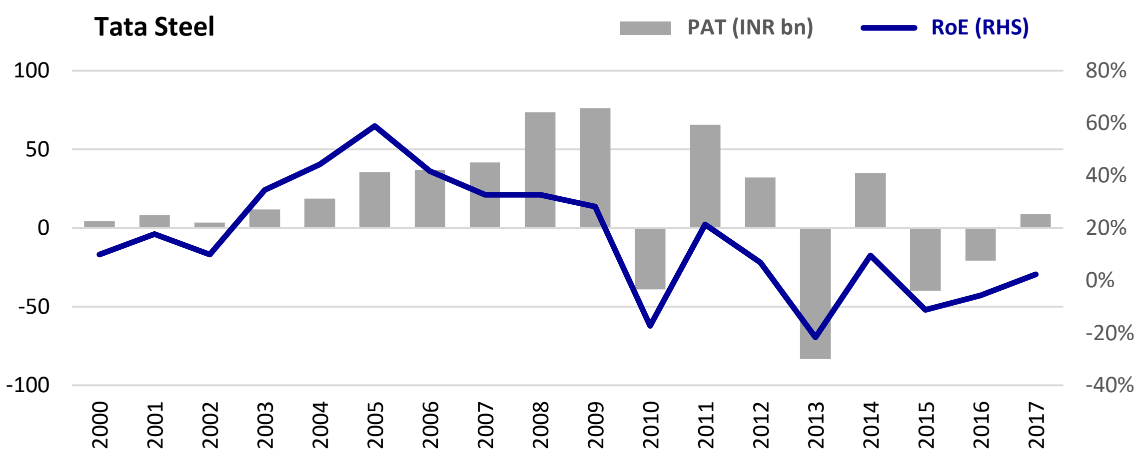
Exhibit 22 **BPCL's PAT & RoE trend: Adversely affected by pricing control during 2008-13**



3.4.4 Capital misallocation

All the above CAP-enders are external to the company. Capital misallocation is the only internal factor that can end CAP. For instance, Tata Steel's RoE was steadily rising from 2002 to 2006. In late 2006, it acquired Corus in the UK for over US$ 8 billion. Since then, its PAT and RoE have slipped significantly (Exhibit 23).

Exhibit 23 **Tata Steel's PAT & RoE trend: Hurt by mega US$ 8 billion acquisition of Corus**



4. CAP – The Indian context

Our research methodology and findings

4.1 Our shortlisting methodology

We applied the CAP concept to India Inc. Our shortlisting methodology –

- **Starting database:** We started with 20-year data (1997-2017) for about 2,700 companies.
- **Shortlisting:** For a meaningful number of companies to study, we shortlisted 223 companies which have achieved PAT of at least INR 5 billion over the 20-year period.
- **CAP definition:** We deem Cost of Equity in India to be about 15% i.e. the long-period return of benchmark indices, Sensex and Nifty. Given this, **we defined CAP as the successive number of years for which companies have clocked RoE higher than 15%**.
- **CAP study list:** Of the 223, companies, 171 had a CAP of 5 years or higher. We further shortlisted this to 116 companies which were listed before the start of their CAP.

4.2 CAP companies – Key findings

As noted earlier, the key determinants of CAP are Industry Structure and Corporate Strategy. So, we analyzed our 116 CAP shortlisted companies on both these criteria.

- First, we rated all industries based on Porter's Five Forces to arrive at Industry Structure Score (Exhibit 24). Industries with rating higher than 2.5 were rated Favorable (F) and those with rating of 2.5 or lower were rated Unfavorable (U).
- We classified all 116 companies into relevant industries and assigned the Industry Score.
- We then assessed the strategy of each company – whether Differentiated, Low-cost or Stuck-in-the-middle. Those companies with strategy were rated Favorable (F) and those without an apparent strategy were rated Unfavorable (U).
- With the above methodology, the CAP Matrix got populated as shown in Exhibit 25.

SCORING METHODOLOGY: Each of the Five Forces is rated 0 or 1 with a middle score of 0.5.

As an illustration, for an industry, if Bargaining Power of Customers is high, that industry gets 0 for that Force. Conversely, if Bargaining Power of Customers is low, the industry gets 1. If Bargaining Power is balanced, the industry gets 0.5.

Every Force is rated this way, and the sum total of all Five Forces is the Industry Structure Score.

Exhibit 24 **Industry Structure Score for major industries based on Porter's Five Forces**

	Bargaining Power of		Threat of		Inter-firm	TOTAL
Sector	**Customers**	**Suppliers**	**Entrants**	**Substitutes**	**Rivalry**	**SCORE**
Agri & related	1	1	0	0.5	0	**2.5**
Alcoholic Beverages	0.5	1	1	1	0.5	**4.0**
Auto Ancillaries	0	0	1	1	0.5	**2.5**
Automobiles - 2-wheelers	1	1	0.5	1	0.5	**4.0**
Automobiles - Cars/UVs	0.5	1	0.5	1	0	**3.0**
Automobiles - LCVs/HCVs	0.5	1	0	1	0	**2.5**
Automobiles - Tractors	0.5	1	1	1	0	**3.5**
Aviation	1	0	0.5	1	0	**2.5**
Banks - Private Sector	0.5	1	0.5	1	0	**3.0**
Banks - Public Sector	0.5	1	0.5	1	0	**3.0**
Cables	0	0	0.5	0.5	0	**1.0**
Capital Goods	0	1	0	1	0	**2.0**
Cement	1	1	0	1	0	**3.0**
Ceramic Products	0.5	0.5	0.5	1	0	**2.5**
Chemicals	0	1	0	1	0	**2.0**
Cigarettes	1	1	1	1	1	**5.0**
Construction	0	0.5	0	1	0	**1.5**
Consumer - FMCG	1	1	1	1	0.5	**4.5**
Consumer Durables	0.5	1	0	1	0	**2.5**
Engineering	0	1	0	1	0	**2.0**
Fertilizers	1	0	1	1	0	**3.0**
Gas Distribution	1	0	1	0.5	1	**3.5**
Gems & Jewelry	0.5	0.5	0	1	0	**2.0**
Hospitals/Diagnostics	0.5	0.5	0	1	0.5	**2.5**
Hotels & Restaurants	0	1	0.5	1	0	**2.5**
IT - Software	0	1	1	0	1	**3.0**
Logistics	0	0.5	0	1	0	**1.5**
Media - Print/TV	0	1	0.5	0.5	0	**2.0**
Mining & Mineral products	0.5	0.5	0.5	1	0.5	**3.0**
NBFC	0.5	0.5	0	1	0	**2.0**
NBFC - Housing	1	0.5	0	1	0	**2.5**
NBFC - Insurance	0.5	1	0.5	1	0	**3.0**
Non Ferrous Metals	1	0.5	0	0.5	0.5	**2.5**
Oil & Gas - Downstream	1	0.5	1	0.5	1	**4.0**
Oil & Gas - Upstream	1	0	0.5	1	0.5	**3.0**
Packaging	0	0	0.5	0.5	0	**1.0**
Paints	1	1	1	1	1	**5.0**
Paper	0	0.5	1	1	0	**2.5**
Pharmaceuticals	1	1	0	0.5	0.5	**3.0**
Plastic Products	0.5	0	0.5	1	0	**2.0**
Ports & related	0.5	1	1	1	0.5	**4.0**
Power	1	0.5	0	0	0	**1.5**
Realty	0	1	0	1	0	**2.0**
Retail	0	0.5	0.5	0.5	0.5	**2.0**
Shipping	0	0.5	0.5	0.5	0	**1.5**
Steel	0.5	1	0	0.5	0	**2.0**
Sugar	0	0	0	1	0	**1.0**
Telecom	0.5	0.5	1	1	0	**3.0**
Textiles	0	0	0	1	0	**1.0**
Travel	0	0.5	0.5	1	0	**2.0**
Tyres	0	0	0.5	1	0.5	**2.0**

Exhibit 25 **The CAP Matrix in the Indian context**

Company Strategy	Industry structure: Unfavorable	Industry structure: Favorable
Favorable	**U-F** (Long CAP) No. of cos. 38 **Median CAP 9**	**F-F** (Longest CAP) No. of cos. 45 **Median CAP 11**
Unfavorable	**U-U** (Shortest CAP) No. of cos. 16 **Median CAP 6**	**F-U** (Short cap) No. of cos. 17 **Median CAP 7**

A granular reading of the CAP distribution is even more interesting (Exhibit 26) –

- Beyond 8 years, most of the CAP companies are in the F-F or U-F quadrant i.e. with strong corporate strategy.
- Further, all the 16 companies with a full 20-year CAP are in the F-F quadrant i.e. Favorable Industry Structure **and** Favorable Corporate Strategy.

Exhibit 26 **Year-wise analysis of CAP companies**

Quadrant	**No. of cos.**	**CAP in years**													
		5	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**20**
F-F	45		7	4	4	2	4	**2**	**1**		**1**	**2**	**1**	**1**	**16**
U-F	38	2	5	5	6	3	3	**3**	**2**	**2**	**3**	**2**	**1**	**1**	
F-U	17	4	2	5	3	1	1				**1**				
U-U	16	8	3	3	2										
Total cos.	**116**	**14**	**17**	**17**	**15**	**6**	**8**	**5**	**3**	**2**	**5**	**4**	**2**	**2**	**16**

Exhibit 27 profiles the 16 companies with a full 20-year CAP. Taken as a 16-company portfolio, it handsomely beat the benchmark over the 20-year period, both in terms of earnings growth as well as returns.

Exhibit 27 **Brief profile of 16 companies with full 20-year CAP**

	1997-2017 CAGR		RoE		P/E (x)		Market Cap (INR b)	
Company	**PAT**	**Price**	**1997**	**2017**	**1997**	**2017**	**1997**	**2017**
Infosys	35%	32%	39%	22%	21	16	7	2,345
HDFC Bank	35%	29%	17%	18%	23	24	9	3,696
Sun Pharma	28%	33%	33%	23%	8	24	4	1,650
Wipro	28%	31%	29%	17%	9	15	6	1,253
Hero MotoCorp	24%	26%	43%	37%	12	18	6	644
Pidilite Inds	22%	29%	21%	28%	13	42	2	358
Britannia Inds	22%	26%	18%	37%	25	46	4	406
Marico	20%	26%	30%	37%	16	50	3	380
Asian Paints	19%	25%	26%	28%	19	53	11	1,027
ITC	18%	19%	30%	24%	25	33	88	3,407
Dabur India	18%	24%	24%	28%	16	40	7	488
Torrent Pharma	18%	29%	23%	24%	5	30	2	262
Nestle India	16%	18%	22%	32%	38	61	20	581
Hind. Unilever	12%	13%	43%	67%	28	45	118	1,969
Colgate-Palmolive	10%	10%	32%	50%	47	47	37	272
Castrol India	10%	10%	35%	115%	27	28	26	188
MEDIAN	**19%**	**26%**	**29%**	**28%**	**20**	**37**	**7**	**613**
Sensex	**8%**	**11%**						

In a backtesting exercise, we did the CAP analysis of the top 200 market cap companies in 2007, and examined the 2007-17 performance of stocks in the 4 groups (F-F, U-F, F-U and U-U). As Exhibit 28 suggests –

- The F-F group had the longest cap and U-U the shortest.
- Further, the 2007-17 PAT CAGR and Price CAGR also stacked up perfectly.
- In fact, the F-F portfolio of 54 stocks outperformed the Sensex both in terms of PAT CAGR and Price CAGR.

Exhibit 28 **CAP analysis of top 200 market cap stocks as on March 2007**

	No. of		2007-17 Median		
Quadrant	**cos.**	**%**	**CAP**	**PAT CAGR**	**Price CAGR**
F-F	54	27%	**8**	**14%**	**16%**
U-F	59	30%	4	8%	8%
F-U	23	12%	3	1%	4%
U-U	64	32%	2	-4%	-1%
	200	**100%**	**Sensex**	**6%**	**9%**

4.3 CAP companies – Key takeaways

- Companies with a sharp strategy in a favorable industry structure are likely to enjoy a longevated CAP (i.e. sustain RoEs higher than Cost of Equity for a long time).
- A portfolio of such long-CAP companies has the potential to meaningfully outperform benchmark indices.

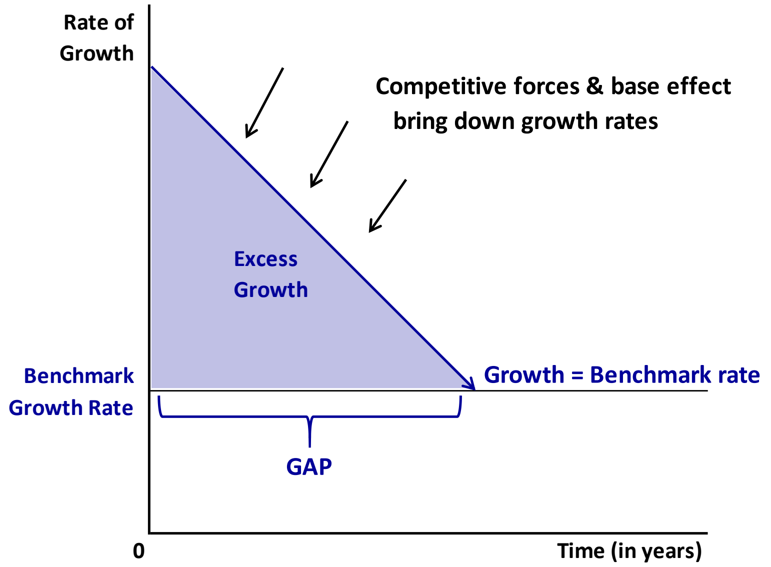
5. Measuring Longevity of Growth

GAP – Growth Advantage Period

5.1 What is GAP?

Growth Advantage Period (GAP) is the time during which a company grows its profits at a faster rate than that of the benchmark indices. Pace of earnings growth in a company is typically highest during its GAP. As stock returns are correlated with earnings growth, it is logical that stocks outperform the benchmark during their GAP.

Exhibit 29 **Graphical representation of GAP**



For the purposes of this study, we have used long-period benchmark PAT growth rate of 15%. This is the same as Cost of Equity.

Thus, CAP and GAP are both closely linked to Cost of Equity –

- CAP is RoE > Cost of Equity
- GAP is Earnings Growth > Cost of Equity.

Exhibits 30 and 31 present real-life examples of GAP. As noted therein, the stock returns during GAP are significantly higher than during the non-GAP.

Exhibit 30 **Infosys' enjoyed 11-year GAP from 1999 to 2009, a period of superior returns**

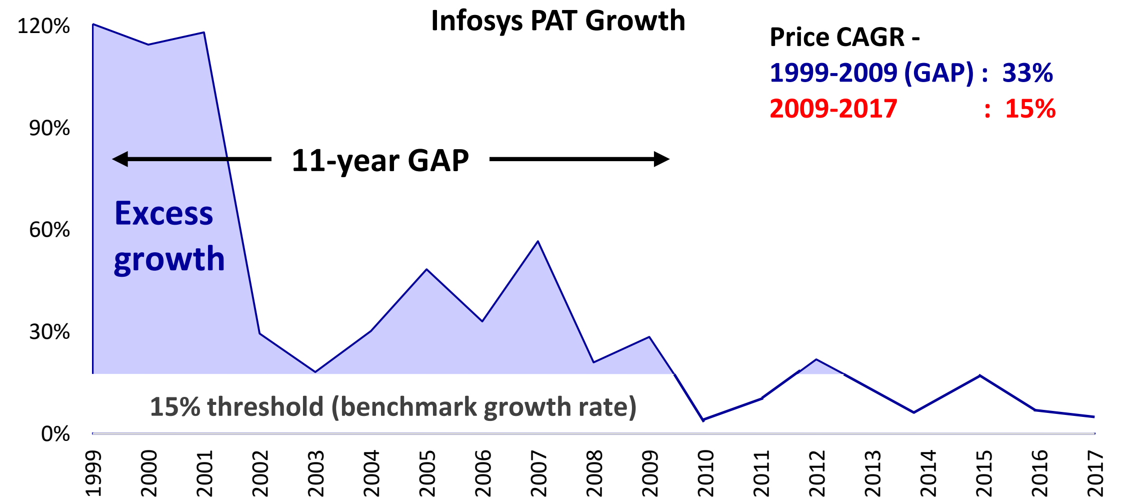
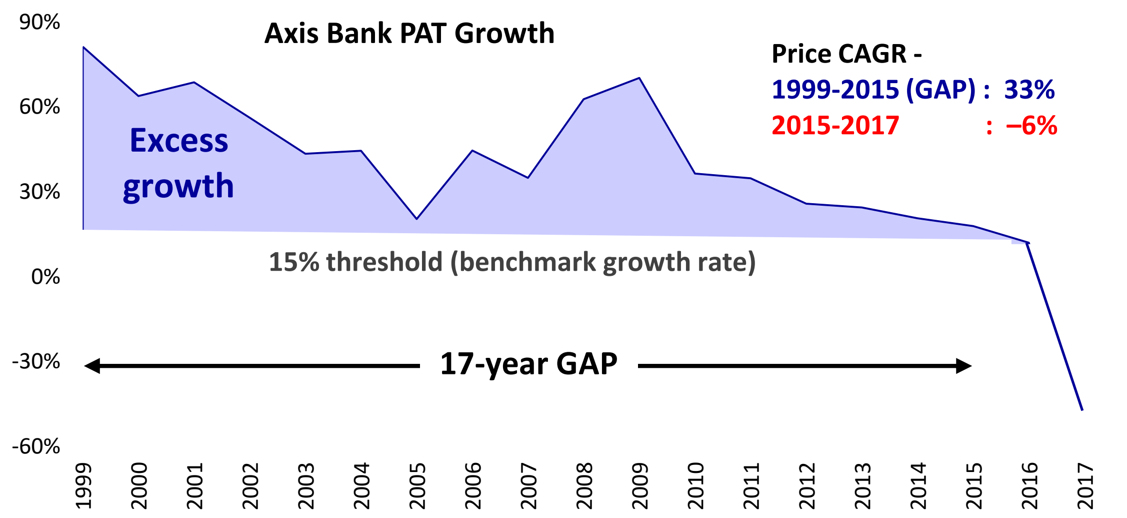


Exhibit 31 **Axis Bank enjoyed a 17-year GAP from 1999 to 2015, a period of superior returns**



5.2 Factors determining GAP

The 3 major factors determining GAP are: (1) CAP, (2) Industry growth, and (3) Company growth mindset.

5.2.1 CAP (Competitive Advantage Period)

In most cases, CAP is the foundation for sustained GAP. Further, a random portfolio of CAP companies in the F-F quadrant (from Exhibit 28) itself ensures a certain level of growth in profits. Beyond that, if factors (2) and (3) fall in place, earnings growth can be much higher for an extended period.

5.2.2 Industry growth

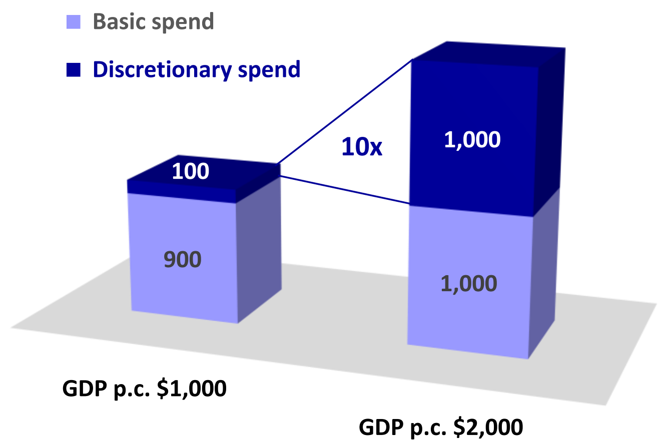
Industry growth is a key driver of GAP. Industry growth, in turn, is determined by various growth situations. The most important ones of these are:

1. Global and/or domestic economic growth
2. Value Migration
3. Low market penetration
4. New industry or industry segment
5. Change in any of the Five Forces of industry structure
6. Regulatory changes.

5.2.2.1 Global and/or domestic economic growth

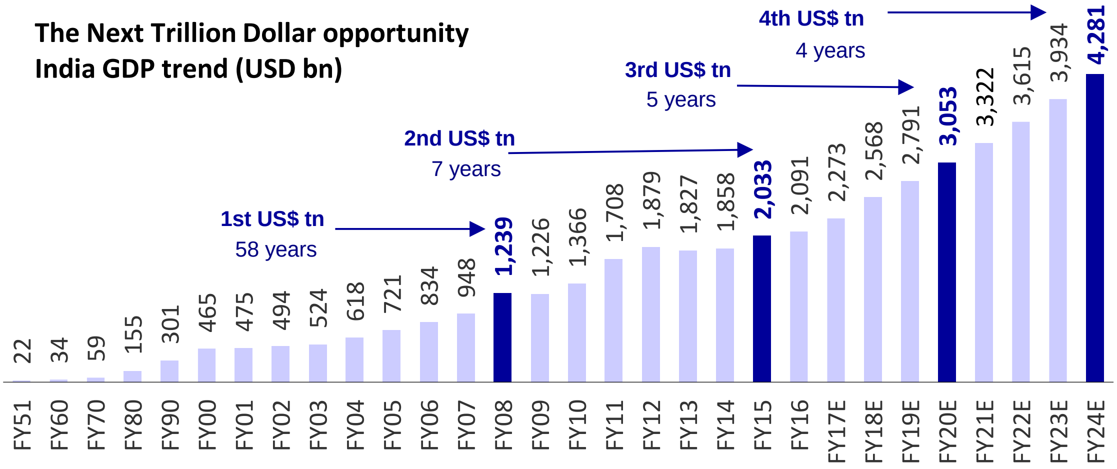
This is the most fundamental driver of growth for most industries. Domestically, rising per capita incomes lead to exponentially higher spend on discretionary goods and services (Exhibit 32). Further, a healthy rate of savings and investment leads to higher derived demand for capital goods, construction, engineering, etc.

Exhibit 32 **Linear growth in per capita income leads to exponential growth for discretionaries**



India, for instance, took almost 60 years for its first trillion dollars of GDP in fiscal 2008. Ever since, it is adding / expected to add the next trillion dollars of GDP in successively shorter periods of time (Exhibit 33). This implies huge potential demand for a wide range of goods and services.

Exhibit 33 **India is adding the next trillion dollars of GDP in successively shorter periods of time**



5.2.2.2 Value Migration

In his book ***Value Migration***, author Adrian J Slywotzky says, "Value migrates from outmoded business designs to new ones that are better able to satisfy customers' most important priorities." Value Migration results in a gradual yet major shift in how the current and future profit pool in an industry is shared.

Value Migration is one of the most potent drivers of GAP, as it creates a sizable and sustained business opportunity for its beneficiaries. It has two broad varieties –

1. **Global Value Migration** e.g. value in IT and healthcare sectors migrating to India, global manufacturing value migrating to China, etc.
2. **Local Value Migration** e.g. value in telephony migrating from wired networks to wireless networks; value in Indian banking migrating from state-owned banks to private banks.

Exhibit 34 **Examples of Value Migration**

Sector/Company	Value migration from	Value migration to
IT Services	Developed world	Low labor-cost countries
Pharmaceuticals	Developed world	Low-cost chemistry countries
Banking	State-owned banks	Private banks
Telecom	Fixed line networks	Wireless networks
e-tailing	Brick-and-mortar retailing	Online retailing
Gems & Jewelry	Unorganized jewelry market	Organized jewelry retailing
Aviation	Full service airlines and railways	Low cost airlines

5.2.2.3 Low market penetration

Industries whose products have a low penetration enjoy high level of growth for a prolonged period. For instance, penetration of products like cars and air-conditioners in India is very low compared to peer countries like China. Companies in such industries will have a favorable GAP.

5.2.2.4 New industry or industry segment

Completely new industries or industry segments will have a huge run of growth till they reach the maturity phase. Companies in such industries will enjoy a high level of GAP. Examples are launch of IPod in the US and air-coolers in India.

5.2.2.5 Change in industry structure

Any change in industry structure will have a favorable or unfavorable impact on GAP as the case may be. For instance, Nestle's pullout of its malted drink *Milo* from India was highly positive for GlaxoSmithKline Consumer's competing brand *Horlicks*. In contrast, entry of Patanjali into several consumer segments will have an adverse impact on GAP of incumbents like Colgate, Unilever and Dabur.

5.2.2.6 Regulatory changes

Favorable or unfavorable changes in business regulations have a corresponding impact on GAP. For instance, price deregulation of petroleum products in India is a huge boost to oil marketing companies like IOC, BPCL and HPCL. In contrast, persistent price control on essential drugs is hurting growth of domestic-facing pharma companies like GlaxoSmithKline Pharma.

Having covered factors driving industry growth (external to the company), we now examine "Company Growth Mindset", which is completely internal.

5.2.3 Company Growth Mindset

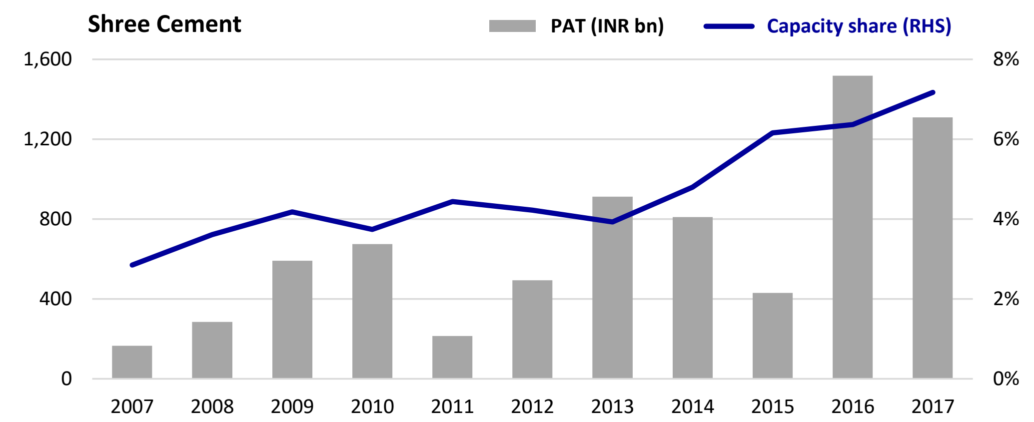
External factors apart, a company's growth mindset has a significant influence on its GAP. What is growth mindset? Psychologists talk of two kinds of mindset: (1) Fixed mindset and (2) Growth mindset. At the personal level, a fixed mindset assumes that our character, intelligence, and creative ability are static givens which we cannot change in any meaningful way. Such a mindset views success as an affirmation of that inherent intelligence. Hence, all efforts are towards avoiding failure at any cost. A "growth mindset," on the other hand, thrives on challenge and sees failure not as evidence of unintelligence but as an opportunity for growth and for stretching existing abilities. Hence, companies with growth mindset are likely to be more entrepreneurial and risk-taking than companies with fixed mindset.

A company's growth mindset may take several forms, mainly, (1) Aggressive capacity expansion, (2) Active inorganic growth strategy, and (3) Operating/financial leverage.

5.2.3.1 Aggressive capacity expansion

Companies with growth mindset may resort to aggressive capacity expansion to gain market share, sometimes even ahead of time to be prepared for future growth in demand. For example, Shree Cement's cement capacity share has consistently risen, driving profit growth even as industry profit growth remains muted.

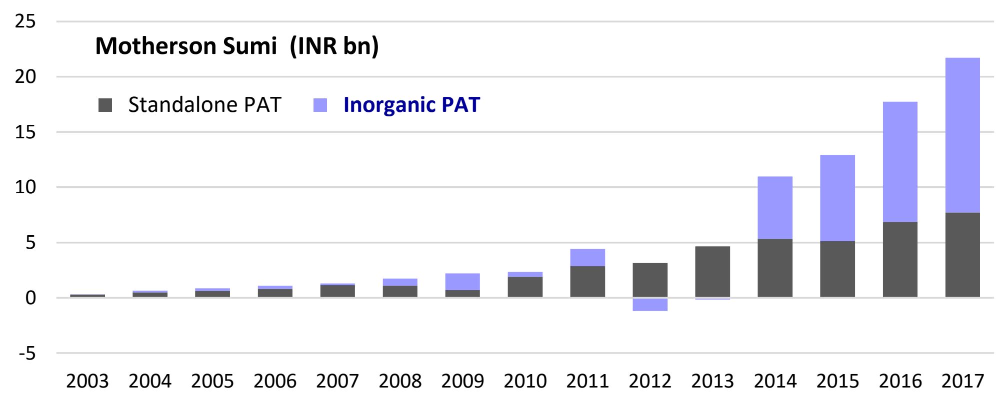
Exhibit 35 **Shree Cement: Rising capacity share drives profit trajectory**



5.2.3.2 Active inorganic growth strategy

Companies with growth mindset may practice an active inorganic growth strategy to grow their profits at a fast pace, irrespective of the industry growth rate. For instance, judicious overseas acquisitions are integral to Motherson Sumi's growth strategy.

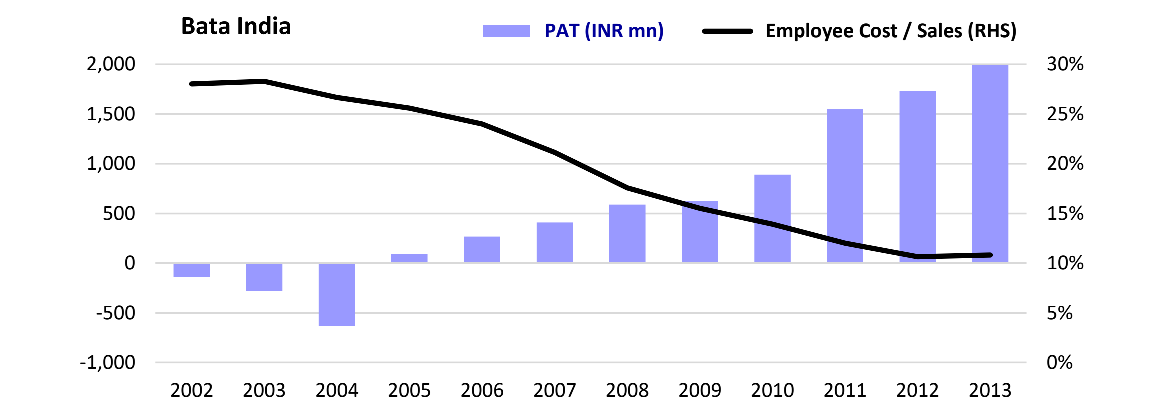
Exhibit 36 **Motherson Sumi: Inorganic growth strategy boosts profits**



5.2.3.3 Operating & Financial leverage

Operating and financial leverage is usually the happy outcome of pursuing an aggressive growth strategy. However, some companies actively engineer such leverage by way of stringent cost control and planned debt reduction. For instance, Bata India slashed employee costs from 28% of sales in 2003 to 11% of sales in 2013, in the bargain moving from loss to huge profit.

Exhibit 37 **Bata India: Operating leverage at work**



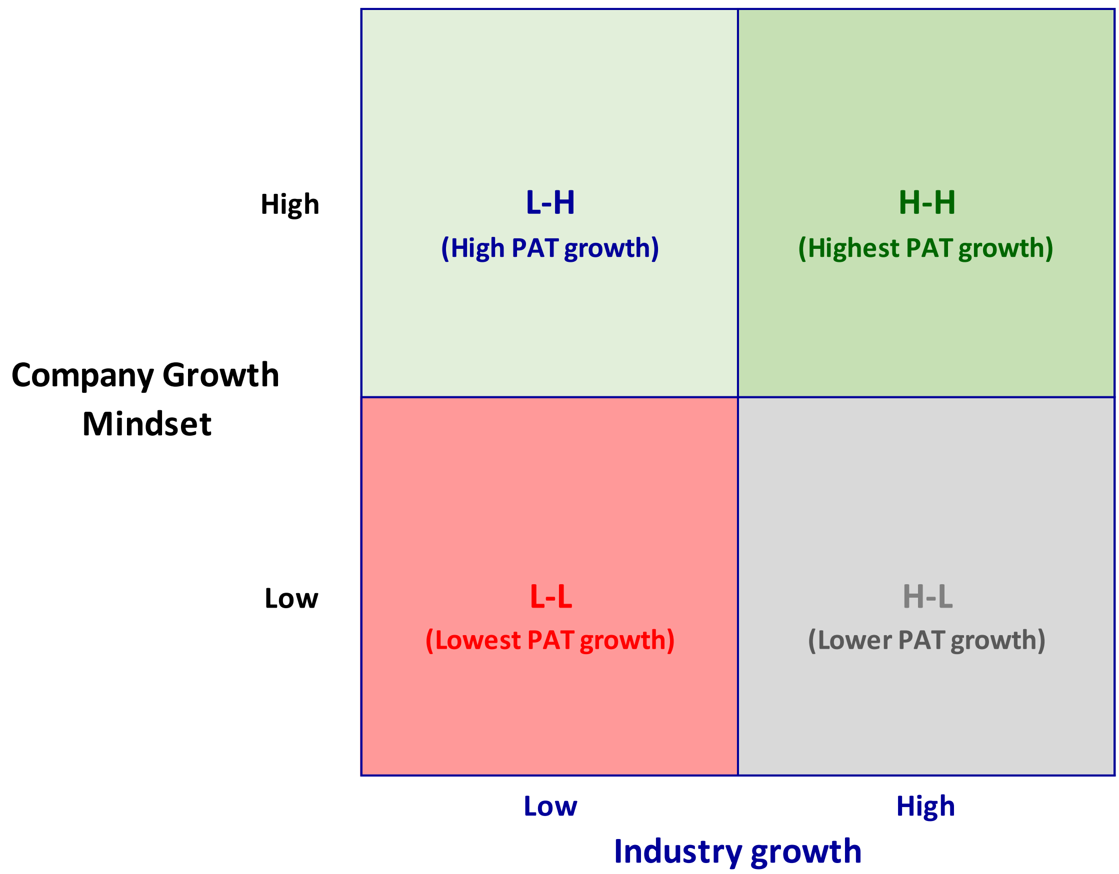
5.3 Two dimensions of GAP – Length and Height

There are two dimensions of GAP – Length (i.e. duration of growth) and Height (i.e. magnitude of growth). Our findings suggest that supernormal high growth rates tend to sustain only for short period of time (5-6 years), predominantly for cyclical companies and even for secular companies but in their early stages, when the base is low. In both cases, length and height of GAP are inversely correlated.

5.4 The GAP Matrix

We have combined Industry growth with Company Growth Mindset to arrive at the GAP Matrix (Exhibit 38). The Indian experience of this is covered in Section 6.

Exhibit 38 **The GAP Matrix**



5.5 Why GAP may end

The three major reasons for GAP to end are (1) End of CAP, (2) Maturity of industry, and (3) High-base effect.

5.5.1 End of CAP

End of CAP is a certain cause for end of GAP. End of CAP implies RoE slipping below of Cost of Equity which necessarily signals low or negative profit growth. Hence, all factors which lead to end of CAP (discussed in Section 3.4, page 13) also lead to end of GAP.

5.5.2 Maturity of industry

Industries moving from growth phase to maturity phase can slow down growth for players, thus ending their GAP. Consumer segments like salt, toothpaste, soaps & detergents and tea fall into this category.

5.5.3 High-base effect

Even if an industry has not reached maturity, large companies in it can start to slow down because of their high base. The classic example is that of the Indian IT sector. Here, the opportunity remains global and large, but all the leading companies (TCS, Infosys, Wipro, HCL Tech) are seeing significant growth slowdown.

6. GAP – The Indian context

Our research methodology and findings

6.1 Our shortlisting methodology

We applied the GAP concepts to India Inc. Our shortlisting methodology –

- **Starting database:** We started with 20-year data (1997-2017) for about 2,700 companies.
- **Shortlisting:** For a meaningful number of companies to study, we shortlisted 223 companies which have achieved PAT of at least INR 5 billion over the 20-year period.
- **GAP definition:** The long-period earnings growth rate of Indian benchmark indices is about 15%. Hence, we defined GAP as the successive number of years for which companies had a rolling 5-year PAT CAGR of 15%, with no year's PAT lower than the previous year.
- **GAP study list:** The above GAP definition led to a shortlist of 145 companies with GAP of 5 years or higher. Of the 145 companies, 112 were listed at the start of their GAP period. We focused our analysis on these 112 companies.

6.2 GAP companies – Key findings

As noted earlier, the key determinants of GAP are (1) Industry growth and (2) Company Growth Mindset. For our 112 GAP Universe, we computed growth in Industry PAT during their respective GAP. Growth rates over 15% were rated High (H) and less than 15% were rated Low (L). We also assessed the Company Growth Mindset as High (H) or Low (L).

Exhibit 39 shows their plot on the GAP Matrix.

Exhibit 39 **The GAP Matrix in the Indian context**

Company Growth Mindset	Industry growth: Low	Industry growth: High
High	**L-H** (High PAT growth) No. of cos. 15 Median PAT CAGR during GAP 37%	**H-H** (Highest PAT growth) No. of cos. 56 Median PAT CAGR during GAP 39%
Low	**L-L** (Lowest PAT growth) No. of cos. 6 Median PAT CAGR during GAP 25%	**H-L** (Lower PAT growth) No. of cos. 35 Median PAT CAGR during GAP 31%

A granular reading of the above matrix highlights the importance of Company Growth Mindset (Exhibit 40) –

- Sustaining 15% CAGR beyond 9 years is challenging. Of the 112 companies, only 30 (27%) enjoyed GAP of over 9 years.
- Further, of these 30 companies, 20 (67%) were in the H-H quadrant and another 4 in the L-H quadrant i.e. 80% companies with GAP over 9 years were those with high Growth Mindset.
- Of the 41 companies with low Growth Mindset (H-L and L-L), 26 companies (63%) could not sustain GAP beyond 7 years. Further, of these 26 companies, 23 (~90%) could make it only because they enjoyed high industry growth.
- The two outlier companies in the L-L quadrant which enjoyed GAP of 11 years are Colgate and GlaxoSmithKline Consumer.

Exhibit 40 **Year-wise analysis of GAP companies**

	No. of	GAP in years														
Quadrant	**cos.**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**20**
H-H	56	9	9	3	9	6	3	7	5				1	1	1	2
L-H	15	3	3	2	1	2				1	2	1				
H-L	35	12	6	5	4	4	2	1		1						
L-L	6		3			1		2								
Total cos.	**112**	**24**	**21**	**10**	**14**	**13**	**5**	**10**	**5**	**2**	**2**	**1**	**1**	**1**	**1**	**2**

We further classified the 112 GAP companies into Secular or Cyclical businesses (Exhibits 41 and 42). The key takeaways –

- This data re-confirms that sustaining GAP beyond 9 years is challenging, whether for cyclical or secular companies.
- Of the 30 companies which did sustain growth beyond 9 years, 24 (i.e. 80%) were secular.

- The outlier cyclical companies which enjoyed GAP beyond 9 years are – NMDC and Bhushan Steel (10 years), UPL and Bharat Electronics (11 years), and Container Corporation and L&T (12 years).
- In terms of GAP height (i.e. PAT CAGR), cyclicals tend to grow faster than seculars in short bursts, presumably at the start of a business upcycle. However, longer the period, higher is the growth of the seculars.

Exhibit 41 **Length analysis of GAP companies by business cycle**

	No. of	GAP in years														
	cos.	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20
Cyclical	43	14	6	5	6	6	2	2	2							
Secular	69	10	15	5	8	7	3	8	3	2	2	1	1	1	1	2
Total cos.	**112**	**24**	**21**	**10**	**14**	**13**	**5**	**10**	**5**	**2**	**2**	**1**	**1**	**1**	**1**	**2**

Exhibit 42 **Height analysis (PAT CAGR) of GAP companies by business cycle**

PAT	GAP in years														
CAGR	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	Overall
Cyclical	42%	44%	55%	53%	36%	40%	26%	23%								**38%**
Secular	39%	28%	27%	32%	38%	44%	31%	35%	27%	22%	26%	42%	31%	20%	28%	**33%**
Overall	**39%**	**32%**	**41%**	**36%**	**36%**	**41%**	**27%**	**27%**	**27%**	**22%**	**26%**	**42%**	**31%**	**20%**	**28%**	**35%**

Exhibit 43 profiles the top 15 companies with the longest GAP, and Exhibit 44 profiles the top 15 companies with the highest GAP. The takeaways are very clear –

- Long GAP companies are typically those with secular businesses, and will deliver reasonably high profit growth over an extended period.
- High GAP companies are predominantly those with cyclical businesses, and will deliver super-normal profit growth but in a very short burst.
- 13 of the top 15 high GAP companies had starting PAT of less than INR 1 billion, and 10 had starting market cap of under INR 10 billion. Thus, identifying the right companies at their early stage or in depressed earnings situation is favorable for height of GAP.

Exhibit 43 **Brief profile of top 15 companies with longest GAP**

	GAP	GAP	Over the Growth Advantage Period					
Company	**(years)**	**during**	**PAT CAGR**	**Price CAGR**	**Start RoE**	**End RoE**	**Start MC**	**End MC**
HDFC Bank	**20**	1998-17	35%	29%	17%	18%	9	3,696
H D F C	**20**	1998-17	21%	22%	16%	16%	33	2,387
ITC	**18**	1998-15	20%	20%	30%	33%	88	2,609
Dewan Housing	**17**	2001-17	31%	22%	18%	22%	1	115
Infosys	**16**	1998-13	42%	39%	39%	27%	7	1,659
Godrej Consumer	**15**	2003-17	26%	30%	158%	27%	4	569
Dabur India	**14**	2003-16	24%	27%	17%	33%	16	438
Marico	**14**	2004-17	21%	37%	30%	37%	4	380
Emami	**13**	2003-15	31%	52%	44%	51%	1	228
Cipla	**13**	1998-10	23%	27%	31%	21%	12	271
Shriram Transport	**12**	2002-13	46%	49%	25%	22%	0.2	158
Sun Pharma	**12**	1998-09	35%	39%	33%	30%	4	230
Larsen & Toubro	**12**	2002-13	27%	31%	7%	14%	55	840
TCS	**12**	2006-17	23%	17%	N.M.*	34%	688	4,790
Container Corpn.	**12**	1998-09	19%	11%	43%	23%	28	93
MEDIAN	**14**		**26%**	**29%**	**30%**	**27%**	**9**	**438**

Note: MC stands for Market Cap in INR billion; * Not Meaningful

Exhibit 44 **Brief profile of top 15 companies with highest GAP**

Company	GAP (years)	GAP during	PAT CAGR	Price CAGR	Start PAT	End PAT	Start MC	End MC
			Over the Growth Advantage Period					
Unitech	5	2004-08	155%	284%	0.2	16	1	448
Hindustan Zinc	5	2003-07	130%	73%	0.7	44	15	238
Manappuram Fin.	5	2008-12	123%	70%	0.1	6	0.5	26
H P C L	5	2013-17	114%	39%	1.8	82	103	534
Ramco Cement	5	2004-08	98%	58%	0.1	4	4	40
Vedanta	8	2004-11	91%	93%	0.2	42	1	252
Jindal Poly Film	5	2007-11	76%	24%	0.4	6	8	19
ACC	5	2004-08	74%	49%	0.8	13	24	192
Coromandel Inter.	6	2004-09	67%	39%	0.3	6	1	13
Aurobindo Pharma	5	2013-17	65%	63%	1.9	23	35	396
Uflex	6	2006-11	65%	22%	0.3	7	2	10
Bajaj Finance	9	2009-17	65%	49%	0.2	18	12	646
Adani Enterprises	8	2004-11	62%	79%	0.5	25	3	727
Dena Bank	7	2007-13	61%	14%	0.3	8	10	31
JBF Inds	6	2004-09	61%	22%	0.1	2	0.3	2
MEDIAN	**5**		**74%**	**49%**	**0.3**	**13**	**4**	**192**

Note: MC stands for Market Cap; PAT and Market Cap figures in INR billion

7. Putting it all together

The CAP-GAP confluence

In this section, we combine the learnings of CAP and GAP to –

1. Determine the key characteristics of CAP-cum-GAP companies; and
2. Apply the same to Nifty stocks to suggest likely **earnings growth** outperformers among them.

7.1 1. Determining the key characteristics of CAP-cum-GAP companies

Of our list of 112 GAP companies, 103 of them also had CAP. We plotted these 103 companies on the CAP-GAP confluence matrix (Exhibit 45).

Exhibit 45 **The CAP-GAP confluence – No. of companies**

		GAP Quadrants				
		H-H	L-H	H-L	L-L	Total cos.
CAP Quadrants	F-F	21	9	16	5	51
	U-F	23	1	6	0	30
	F-U	4	0	8	0	12
	U-U	4	4	2	0	10
	Total cos.	52	14	32	5	103

How to read this table – Illustrative example

Of the 52 companies with High Industry Growth and High Company Growth Mindset (GAP Quadrant H-H):

- 21 have Favorable Industry Structure and Favorable Company Strategy (CAP Quadrant F-F).
- 23 have Unfavorable Industry Structure but Favorable Company Strategy (CAP Quadrant U-F).
- 4 have Favorable Industry Structure but Unfavorable Strategy (CAP Quadrant F-U) and
- 4 have Unfavorable Industry Structure and Unfavorable Strategy (CAP Quadrant U-U).

The maximum number of observations lie in the two shaded cells. Hence, they determine the characteristics to identify companies with CAP-cum-GAP –

- Look for high-growth situations in Industries (first H).
- In such high-growth situations, look for companies with high Growth Mindset (second H).
- Look for companies with a Favorable Strategy (second F).
- In short, the three key characteristics of CAP-cum-GAP companies are –
  Clear strategy, High growth mindset, and High-growth industry situations.

Two of the three characteristics above – Strategy and Growth Mindset – relate to the company management. Hence, a very high level of understanding and assessment of the company management is a non-negotiable aspect of investing success. As Phil Fisher says in his book, *Path To Wealth Through Common Stocks*, "**in evaluating a common stock, the management is 90%, industry is 9% and all other factors are 1%.**"

Exhibit 46 lists the 44 H-H + F-F/U-F companies. Their median PAT CAGR is a healthy 39% and Price CAGR 36%. It may be argued that 44 is a very small number of companies over 20 years, and that finding such companies is akin to finding a needle in a haystack. However, it must be remembered that these 44 companies appeared from a significantly curtailed list of 223 companies which had earned profit of at least INR 5 billion during 1997-2017. By relaxing this criteria, there is a strong possibility of several more CAP-GAP confluence companies emerging.

Exhibit 46 **The CAP-GAP confluence list**

Company	CAP (years)	GAP (years)	GAP Period CAGR PAT	GAP Period CAGR Price
HDFC Bank	20	20	35%	29%
ITC	20	18	20%	20%
Infosys	20	16	42%	39%
Sun Pharma	20	12	35%	39%
Torrent Pharma	20	11	39%	34%
Hero MotoCorp	20	9	38%	46%
Wipro	20	8	26%	19%
Asian Paints	20	6	25%	33%
Dewan Housing	17	17	31%	22%
Lupin	17	10	39%	43%
Divi's Labs	17	6	22%	19%
Container Corpn.	16	12	19%	11%
GSK Pharma	15	8	32%	12%
Opto Circuits	15	8	60%	65%
Cadila Healthcare	15	6	33%	31%
Balkrishna Inds	15	5	39%	105%
Shriram Transport	14	12	46%	49%
Motherson Sumi	14	9	41%	56%
Hindustan Zinc	14	5	130%	73%
TCS	13	12	23%	17%
Cummins India	13	6	32%	24%
Titan Company	12	10	44%	43%
LIC Housing Finance	12	6	37%	30%
H D F C	11	20	21%	22%
Coromandel Inter	11	6	67%	39%
Manappuram Finance	11	5	123%	70%
Yes Bank	10	11	45%	28%
B H E L	10	9	33%	31%
Larsen & Toubro	9	12	27%	31%
Vedanta	9	8	91%	93%
UPL	8	11	23%	23%
Bhushan Steel	8	10	38%	63%
CG Power	8	8	57%	69%
Eicher Motors	7	11	39%	50%
Reliance Inds	7	11	25%	32%
Adani Enterprises	7	8	62%	79%
Tata Steel	7	7	55%	20%
Aurobindo Pharma	7	5	65%	63%
IndusInd Bank	6	9	50%	38%
Sintex Inds	6	9	42%	58%
Bharat Forge	6	6	56%	53%
Piramal Enterprises	6	5	39%	12%
Ashok Leyland	5	8	25%	23%
Unitech	5	5	155%	284%
MEDIAN	**12**	**9**	**39%**	**36%**

7.2 Applying the CAP-cum-GAP learnings to Nifty stocks

We applied the CAP-cum-GAP learnings to Nifty stocks as follows –

Determining GAP Quadrants

- We assigned an Industry to each of the Nifty constituent companies.
- For every industry, we calculated the base PAT growth rate over 20 years (1997 to 2017).
- All PAT growth rates above 15% were rated High (H) and rates less than 15% Low (L).
- We then rated all companies on Growth Mindset as High (H) or Low (L).
- This gave us the GAP Quadrants – H-H, L-H, H-L and L-L.

Exhibit 47 **High base-rate sectors**

Sector	PAT CAGR 1997-17	Sector	PAT CAGR 1997-17
Aviation	54%	Leather	18%
IT - Software	31%	Cigarettes	18%
Consumer Durables	29%	Mining & Mineral products	18%
Ports & related	27%	Gems & Jewelry	18%
Banks - Private Sector	27%	Sugar	17%
Media - Print/TV	25%	Refractories	17%
Automobiles - 2-wheelers	24%	Paints	17%
Tyres	24%	Plastic products	17%
NBFC - Rating	23%	Cement	16%
Agri & related	23%	Oil & Gas - Downstream	16%
Realty	23%	NBFC	15%
NBFC - Housing	22%	Automobiles - Tractors	15%
Retail	22%	Hospitals/Diagnostics	L to P
Pharmaceuticals	21%	Glass & Glass Products	L to P

Exhibit 48 **Low base-rate sectors**

Sector	PAT CAGR 1997-17	Sector	PAT CAGR 1997-17
Non Ferrous Metals	14%	Rubber	9%
Auto Ancillaries	14%	Capital Goods	9%
Consumer - FMCG	14%	Diversified	9%
Automobiles - Cars/UVs	13%	Entertainment	8%
Logistics	13%	Education	8%
Gas Distribution	13%	Trading	7%
Travel	13%	Textiles	6%
Engineering	12%	Fertilizers	4%
Oil & Gas - Upstream	12%	Shipping	2%
Automobiles - LCVs/HCVs	12%	Hotels & Restaurants	-5%
Power	12%	Construction	P to L
Chemicals	12%	IT - Hardware	P to L
Ceramic Products	11%	Telecom	P to L
Packaging	11%	Banks - Public Sector	P to L
Cables	10%	Steel	P to L
Alcoholic Beverages	10%	Paper	P to L

Note: L to P is Loss to Profit and P to L is Profit to Loss

Determining CAP Quadrants

- We assigned the Industry Score to each company based on Exhibit 24.
- We rated all scores above 2.5 as Favorable (F) and equal or below 2.5 as Unfavorable (U).

- We then rated all companies on strategy – Differentiation or Low cost or Stuck-in-the-middle. Companies with a clear strategy were rated Favorable (F) and others Unfavorable (U).
- This gave us the CAP Quadrants – F-F, U-F, F-U and U-U.

Putting GAP & CAP together

- Of the 50, we first selected only H-H companies (30).
- Of these, we selected F-F or U-F companies (29).
- Of these, we unselected 8 companies where we believe the future growth rate is evidently going to be slower than the base rate – IT (5 companies), two-wheelers (2 companies) and Reliance (given uncertainty over its telecom venture).
- We also added Maruti Suzuki back to the list, as we believe future growth is evidently going to be faster than the industry base rate.
- That left us with 22 companies which we believe will grow earnings faster over the long term than the 28 excluded companies.

We list both the sets of companies below.

Exhibit 49 **Nifty 50:**

Likely earnings growth outperformers …

Company	2012-17 PAT CAGR	TTM PAT YoY	TTM P/E (x)
Adani Ports	28%	8%	21
Ambuja Cements	-4%	34%	31
Asian Paints	15%	0%	54
Aurobindo Pharma	65%	5%	16
Bajaj Finance	35%	39%	54
Dr Reddy's Labs	-2%	3%	31
Eicher Motors	42%	31%	43
H D F C	15%	3%	23
HDFC Bank	24%	18%	31
ICICI Bank	6%	-22%	20
Indiabulls Housing	63%	25%	15
IndusInd Bank	29%	25%	35
ITC	11%	8%	35
Kotak Mahindra	22%	31%	39
Lupin	24%	-35%	20
Maruti Suzuki	32%	14%	44
Sun Pharma	23%	-45%	28
UltraTech Cement	4%	-4%	43
UPL	26%	91%	19
Vedanta	16%	-17%	8
Yes Bank	28%	29%	21
Zee Entertainment	17%	54%	38
MEDIAN	**23%**	**11%**	**31**

… and underperformers

Company	2012-17 PAT CAGR	TTM PAT YoY	TTM P/E (x)
Axis Bank	-1%	-43%	32
B P C L	63%	-5%	13
Bajaj Auto	5%	-9%	24
Bharti Airtel	2%	-66%	91
Bharti Infratel	19%	-8%	28
Bosch	4%	-29%	47
Cipla	-5%	34%	41
Coal India	-9%	-29%	20
GAIL (India)	-6%	13%	24
H P C L	114%	16%	8
HCL Technologies	29%	13%	13
Hero MotoCorp	10%	-3%	23
Hind. Unilever	11%	8%	75
Hindalco Inds	-12%	58%	29
I O C L	13%	-1%	10
Infosys	11%	2%	15
Larsen & Toubro	5%	46%	23
M & M	2%	7%	26
NTPC	2%	-1%	14
O N G C	-5%	2%	11
Power Grid Corpn	17%	17%	15
Reliance Inds	10%	12%	18
State Bank of India	-67%	P to L	148
Tata Motors	-14%	-25%	14
Tata Steel	-22%	L to P	15
TCS	20%	2%	19
Tech Mahindra	20%	0%	15
Wipro	8%	0%	16
MEDIAN	**5%**	**1%**	**20**

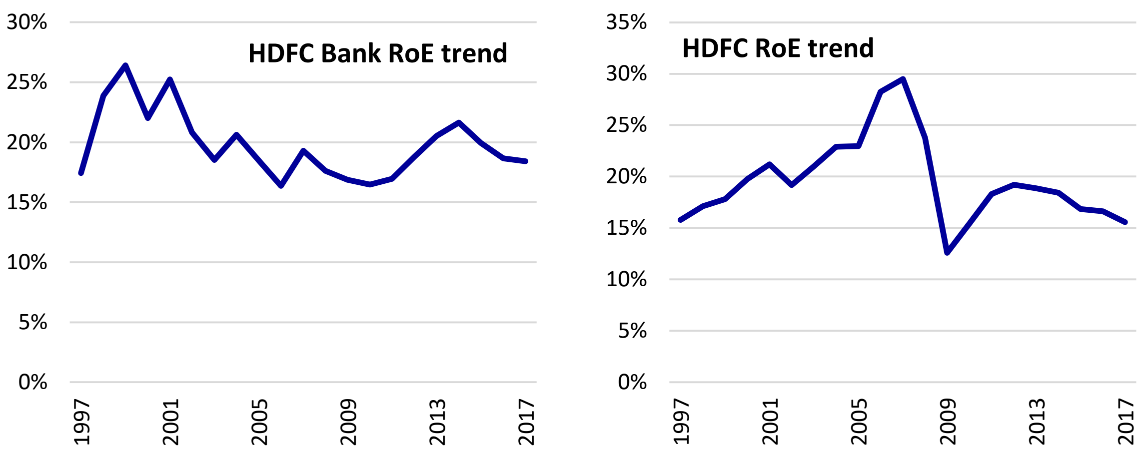
8. Case study: HDFC Group

The financial powerhouse

The HDFC Group's performance on the CAP and GAP front is worth highlighting.

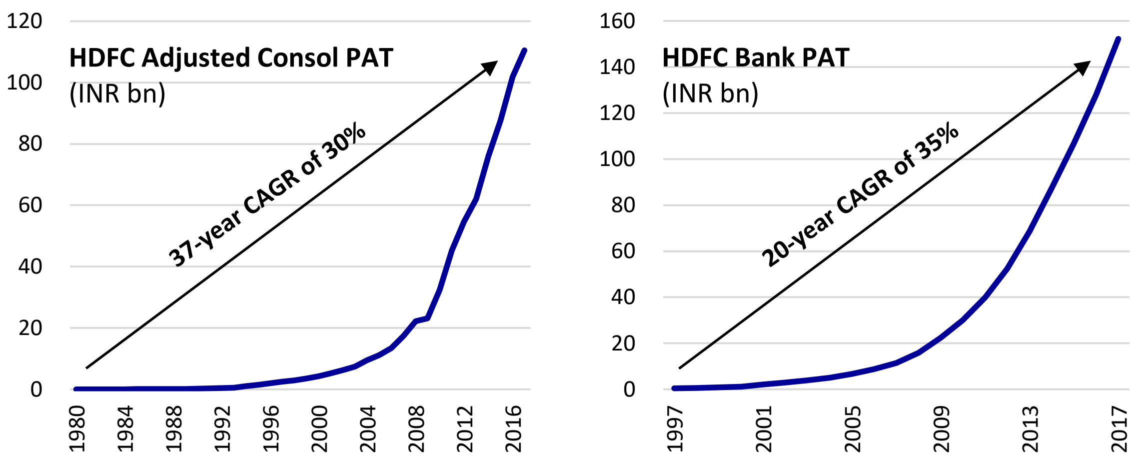
- **HDFC Bank** is in the list of full 20-year CAP companies i.e. RoE > 15% for every single year from 1998 to 2017. (**HDFC** missed figuring on the list by a whisker, as its 2009 RoE dipped marginally below 15% given fund-raising in 2008.)

Exhibit 50 **HDFC Bank has a 20-year CAP, HDFC misses it due to a 2009 aberration**



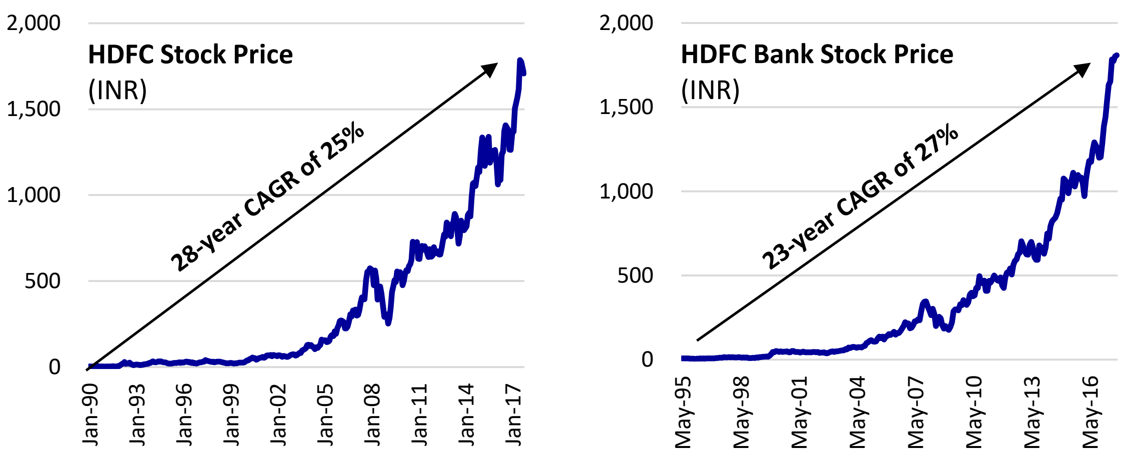
- Both **HDFC** and **HDFC Bank** are the only two companies with a full 20-year GAP i.e. rolling 5-year PAT CAGR > 15% for every year through 1997 to 2017. In fact, **HDFC's** GAP period starts as far back as 1980. Its 37-year PAT CAGR is a robust 30%, and **HDFC Bank's** 20-year PAT CAGR is a handsome 35%.

Exhibit 51 **HDFC's 37-year PAT CAGR at 30%; HDFC Bank's 20-year PAT CAGR at 35%**



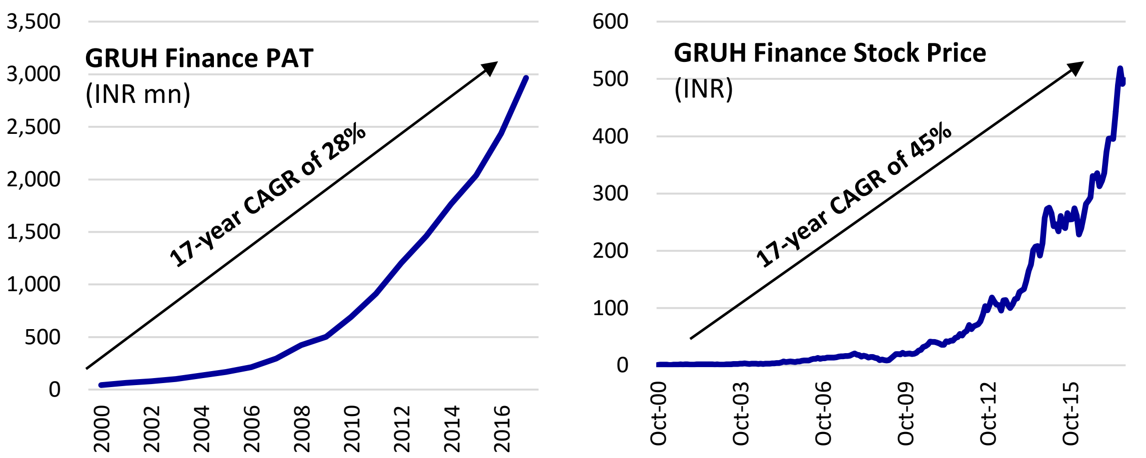
- Given **HDFC** and **HDFC Bank**'s superior performance on both fronts (RoE and PAT growth), it is little wonder that their stock market performance is commendable. **HDFC**'s stock has delivered long-period return CAGR of 25% and **HDFC Bank**'s 27%.

Exhibit 52 **HDFC and HDFC Bank's stocks have delivered handsome long-period returns**



- The above performance is not restricted to just the flagship companies. **GRUH Finance** (58% subsidiary of HDFC) has an equally blazing track record (it did not make it to our CAP and GAP study because it has not yet clocked PAT of INR 5 billion, our cut-off level.)

Exhibit 53 **GRUH Finance following the high standards of its illustrious group companies**



- There's significantly more to follow from the HDFC financial powerhouse. Already **HDFC Standard Life** has had a successful IPO and listing. Next in line to go public will be **HDFC Asset Management Company.** It FY17 PAT is already a healthy INR 5.5 billion, and it has clocked 10-year PAT CAGR of 23%. At a later date even **HDFC Ergo General Insurance** may be a candidate to be listed.

8.1 What is the secret sauce behind HDFC Group's exceptional track record?

We list out some key industry- and company-level factors which may well serve as a checklist to evaluate the long-term prospects of all companies in general.

8.1.1 Huge profitable business opportunity

Financial services is a hugely profitable and growing business opportunity not only in India but also worldwide. There indeed are many players in the sector, but the opportunity is so vast that players do not need to engage in zero-sum competition.

Implication for investing: A high-growth industry with a favorable competitive structure gives companies – both old and new – enough headroom for sustained high and profitable growth.

8.1.2 Consumer-facing business

HDFC Group has carefully ensured that most of its businesses are consumer-facing.

Implication for investing: As a thumb rule, consumer-facing businesses tend to more secular in nature. Also, if companies offer a unique value proposition, it creates customer loyalty and potential for repeat and word-of-mouth business.

8.1.3 Strong leader

The legacy of HDFC founder Mr H T Parekh is well perpetuated by current group chairman Mr Deepak Parekh. Further, individual group companies have dynamic leaders – Mr Keki Mistry in HDFC, Mr Aditya Puri in HDFC Bank, Mr Amitabh Chaudhry in HDFC Standard Life, and so on.

Implication for investing: A strong leader with an entrepreneurial mindset is a singular common feature across most high CAP and GAP companies.

8.1.4 Clear understanding of 90% rule

Every business has a "90% rule" i.e. that one factor which holds the key to success. In most financial services businesses, that 90% rule is "Underwrite well". Nobody understands this rule better than HDFC Group.

Implication for investing: It is advisable that investors know the 90% rule for businesses that they wish to invest in, and ensure that the management has a deep understanding of the same.

8.1.5 Judicious capital allocation

HDFC Group is highly judicious with its capital allocation. Starting with housing finance, it has focused all its capital allocation to fortify itself as a financial powerhouse – banking, life insurance, general insurance, asset management, education financing, etc.

Implication for investing: As mentioned earlier, capital misallocation is one of the key factors which leads to break down of CAP, and in turn, GAP. Investors are best advised to avoid bad capital allocating companies, and also exit companies on the first signs of capital misallocation.

8.1.6 Corporate culture

HDFC is celebrating its 40th anniversary in 2017. Chairman Deepak Parekh writes in the FY07 Annual Report, "What differentiates HDFC is perhaps not our products or strategy. It is our culture … Our culture is our binding force. Our only ask of our employees is integrity, transparency and honesty in all dealings. These attributes are our non-negotiables … Culture is the invisible force that lends consistency and endurance. The assurance I offer investors is that as long as our culture remains sacred, HDFC will keep creating shareholder value for the years to come."

Implication for investing: Investors should thoroughly examine investee companies for culture, especially, one of integrity and transparency. Even if all other factors are in place, lack of integrity will come to haunt the stock prospects, sooner rather than later.

8.2 HDFC Case Study: In sum

Just four listed companies give the HDFC Group a combined market cap of INR 8.3 trillion (US$ 128 billion), making it one of India's largest conglomerate. Companies and business groups are well-advised to imbibe most of its key success factors. Investors are well-advised to look for as many of these factors as possible in their investee companies.

9. Summary & Conclusions

CAP & GAP help harness the power of longevity in Wealth Creation

In closing, we highlight the key takeaways from our study –

- Longevated high profit growth companies are few. Understanding of CAP and GAP improves the chances of finding them, and helps harness the power of longevity in Wealth Creation.
- Moat without growth will underperform; growth without moat will end soon.
- CAP (Competition Advantage Period) is the time during which a company's Return on Equity remains higher than Cost of Equity. Favorable industry structure coupled with clear company strategy ensures longevated CAP.
- GAP (Growth Advantage Period) is the time during which a company's earnings growth remains higher than that of the benchmark indices. High industry growth situation coupled with high Company Growth Mindset ensures longevated GAP.
- There are two dimensions to GAP: (1) Length (i.e. longevity) and (2) Height (i.e. speed). Longevity and speed of growth are inversely correlated.
- The three key characteristics of CAP-cum-GAP companies are –
  Clear strategy, High growth mindset, and High-growth industry situations.
- Two of the three characteristics above relate to company management. Hence, a thorough assessment of the management holds the key to successful investing. As Phil Fisher has said, "In evaluating a common stock, the management is 90%, industry is 9%, and all other factors are 1%."

Annexure: Full list of 171 CAP and 145 GAP companies

- Companies with at least 5 successive years of RoE > 15% are deemed to be CAP companies
- Companies with at least 5 year run of rolling PAT CAGR > 15% with no year's PAT lower than the previous year are deemed to be GAP companies

Company	CAP	From	GAP	From
HDFC Bank	20	1998-17	20	1998-17
ITC	20	1998-17	18	1998-15
Infosys	20	1998-17	16	1998-13
Dabur India	20	1998-17	14	2003-16
Marico	20	1998-17	14	2004-17
Emami	20	1998-17	13	2003-15
Sun Pharma.	20	1998-17	12	1998-09
City Union Bank	20	1998-17	11	2006-16
Colgate-Palmolive	20	1998-17	11	2000-10
Torrent Pharma	20	1998-17	11	2006-16
Hero MotoCorp	20	1998-17	9	1998-06
Nestle India	20	1998-17	9	2006-14
Wipro	20	1998-17	8	2004-11
Asian Paints	20	1998-17	6	2003-08
Britannia Inds	20	1998-17	6	2012-17
Hindustan Unilever	20	1998-17	6	1998-03
Pidilite Inds	20	1998-17	6	2012-17
Castrol India	20	1998-17	–	–
Rural Elec. Corp.	19	1999-17	11	2007-17
Oracle Financial	19	1999-17	10	2000-09
Axis Bank	18	1999-16	19	1998-16
NMDC	18	1998-15	10	2000-09
Dewan Housing	17	1998-14	17	2001-17
Lupin	17	2001-17	10	2006-15
GAIL (India)	17	1998-14	7	2001-07
Divi's Labs	17	2001-17	6	2011-16
Sun TV Network	17	2001-17	6	2006-11
Godrej Consumer	16	2002-17	15	2003-17
Cipla	16	1998-13	13	1998-10
Punjab Natl. Bank	16	1998-13	13	2000-12
Container Corpn	16	1998-13	12	1998-09
Shriram City Union	15	2001-15	11	2005-15
Andhra Bank	15	1999-13	8	1998-05
GSK Pharma	15	2003-17	8	2002-09
Opto Circuits	15	1999-13	8	2005-12
Cadila Healthcare	15	2003-17	6	2006-11
Indraprastha Gas	15	2003-17	6	2010-15
Syndicate Bank	15	1999-13	6	2000-05
Balkrishna Inds	15	2003-17	5	2004-08
Exide Inds	15	2003-17	–	–
Jindal Steel	14	1999-12	13	2000-12
M & M Financial	14	2002-15	12	2003-14
Shriram Transport	14	2001-14	12	2002-13
HCL Technologies	14	2004-17	9	2009-17
Motherson Sumi	14	1998-11	9	2003-11
O N G C	14	2001-14	6	1998-03

Company	CAP	From	GAP	From
Tech Mahindra	14	1998-11	6	1998-03
Hindustan Zinc	14	2004-17	5	2003-07
TCS	13	2005-17	12	2006-17
Bharat Electronics	13	2000-12	11	1998-08
L & T Infotech	13	2005-17	10	2005-14
Siemens	13	2000-12	8	2001-08
Cummins India	13	2005-17	6	2004-09
Oil India	13	2001-13	5	2008-12
GSK Consumer	12	2006-17	11	2006-16
Titan Company	12	2006-17	10	2006-15
LIC Housing Finance	12	2006-17	6	2006-11
Alkem Labs	12	2003-14	–	–
H D F C	11	1998-08	20	1998-17
PNB Housing	11	2006-16	12	2006-17
I O C L	11	1998-08	7	1998-04
Canara Bank	11	2002-12	6	2006-11
Coromandel Inter.	11	2005-15	6	2004-09
Biocon	11	2002-12	5	2007-11
Manappuram Fin.	11	2002-12	5	2008-12
Suzlon Energy	11	1998-08	5	2004-08
Bosch	11	2003-13	–	–
Glenmark Pharma	11	1998-08	–	–
MOIL	11	2004-14	–	–
Yes Bank	10	2008-17	11	2007-17
MphasiS	10	2005-14	10	2002-11
B H E L	10	2004-13	9	2004-12
Grasim Inds	10	2003-12	9	2000-08
Muthoot Finance	10	2005-14	8	2006-13
ACC	10	2004-13	5	2004-08
Union Bank	10	2002-11	5	2007-11
Bajaj Auto	10	2008-17	–	–
Havells India	10	1999-08	–	–
Petronet LNG	10	2006-15	–	–
Rajesh Exports	10	2004-13	–	–
Adani Ports	9	2009-17	12	2006-17
Larsen & Toubro	9	2004-12	12	2002-13
A B B	9	2002-10	9	2001-09
I O B	9	2001-09	9	2001-09
Jubilant Life	9	2002-10	8	2001-08
Vedanta	9	2004-12	8	2004-11
Wockhardt	9	2001-09	5	2002-06
Shree Renuka Sugar	9	2003-11	–	–
Zee Entertainment	9	2009-17	–	–
UPL	8	2004-11	11	2005-15
Bhushan Steel	8	2004-11	10	2003-12
CG Power	8	2004-11	8	2004-11

Annexure: Full list of 171 CAP and 145 GAP companies (continued)

Company	CAP	From	GAP	From
Karur Vysya Bank	8	2006-13	8	2006-13
Tata Chemicals	8	2005-12	8	2002-09
B P C L	8	1998-05	7	1998-04
M & M	8	2004-11	5	2010-14
SRF	8	2005-12	5	2003-07
State Bank of India	8	2002-09	5	2006-10
Apollo Tyres	8	2010-17	–	–
Bajaj Finserv	8	2010-17	–	–
Birla Corp	8	2004-11	–	–
Coal India	8	2010-17	–	–
Interglobe Aviation	8	2010-17	–	–
M R P L	8	2004-11	–	–
MRF	8	2010-17	–	–
UltraTech Cement	8	2006-13	–	–
Eicher Motors	7	1999-05	11	2007-17
Power Finance Corp.	7	2010-16	11	2006-16
Reliance Inds	7	2003-09	11	1998-08
Bajaj Finance	7	2011-17	9	2009-17
Indian Bank	7	2007-13	9	2003-11
J & K Bank	7	1998-04	9	2006-14
Adani Enterprises	7	2005-11	8	2004-11
South Indian Bank	7	2008-14	8	2007-14
Corporation Bank	7	1998-04	7	2006-12
Dena Bank	7	2007-13	7	2007-13
Tata Steel	7	2003-09	7	2003-09
Dr Reddy's Labs	7	2010-16	6	2010-15
Rolta India	7	2005-11	6	2004-09
Alembic Pharma	7	2011-17	5	2012-16
Aurobindo Pharma	7	1998-04	5	2013-17
Engineers India	7	2008-14	5	2008-12
Ambuja Cements	7	2007-13	–	–
G M D C	7	2008-14	–	–
Rain Industries	7	2007-13	–	–
S A I L	7	2004-10	–	–
Tata Motors	7	2010-16	–	–
IndusInd Bank	6	2010-15	9	2009-17
Sintex Inds.	6	2006-11	9	2003-11
TI Financial	6	2011-16	9	1999-07
Amtek Auto	6	2003-08	7	2002-08
Bank of Baroda	6	2008-13	7	2006-12
Indiabulls Housing	6	2012-17	7	2011-17
Vakrangee	6	2012-17	7	2011-17
Bharat Forge	6	2003-08	6	2003-08
Bharti Airtel	6	2005-10	6	2005-10
Sundaram Finance	6	2010-15	6	2010-15
Mindtree	6	2012-17	5	2012-16
Natl. Aluminium	6	2003-08	5	2003-07
Piramal Enterprises	6	2000-05	5	2000-04
Ramco Cement	6	2005-10	5	2004-08

Company	CAP	From	GAP	From
C P C L	6	2003-08	–	–
G S F C	6	2004-09	–	–
GE Shipping Co	6	2004-09	–	–
ICICI Pru Life	6	2012-17	–	–
Jindal Saw	6	2003-08	–	–
Oberoi Realty	6	2006-11	–	–
Pun. & Sind Bank	6	2006-11	–	–
S C I	6	2004-09	–	–
I D F C	5	2004-08	10	2004-13
Allahabad Bank	5	2004-08	8	2001-08
Ashok Leyland	5	2004-08	8	2001-08
Cholamandalam Inv	5	2013-17	7	2011-17
Vijaya Bank	5	2001-05	7	1998-04
Bajaj Holdings	5	2003-07	6	2002-07
JBF Inds	5	2007-11	6	2004-09
Maruti Suzuki	5	2004-08	6	2003-08
Edelweiss Financial	5	2004-08	5	2013-17
IIFL Holdings	5	2004-08	5	2013-17
JP Associates	5	2004-08	5	2004-08
Unitech	5	2005-09	5	2004-08
H D I L	5	2005-09	–	–
Hindalco Inds	5	1998-02	–	–
IFCI	5	2008-12	–	–
JSW Energy	5	2007-11	–	–
JSW Steel	5	2004-08	–	–
Nava Bharat Vent.	5	2007-11	–	–
NLC India	5	2001-05	–	–
Oriental Bank	5	2002-06	–	–
Tata Comm	5	1998-02	–	–
UCO Bank	5	2008-12	–	–
ICICI Bank	–	–	18	1998-15
Power Grid Corpn	–	–	14	2004-17
Bharti Infratel	–	–	8	2009-16
Kotak Mahindra	–	–	8	2010-17
Reliance Infra	–	–	8	2004-11
L&T Fin. Holdings	–	–	7	2011-17
Guj. State Petronet	–	–	6	2006-11
IRB Infra	–	–	6	2008-13
Tata Power	–	–	6	2006-11
Torrent Power	–	–	6	2007-12
Uflex	–	–	6	2006-11
H P C L	–	–	5	2013-17
IDBI Bank	–	–	5	2008-12
Jindal Poly Film	–	–	5	2007-11
NTPC	–	–	5	2004-08
Vardhman Textiles	–	–	5	2003-07
Welspun India	–	–	5	2003-07
MEDIAN	**9**		**8**	

2012-17 Wealth Creation Study: Detailed findings

#1 Trend in Wealth Creation

INR 38.9 trillion Wealth Created during 2012-17

- The top 100 Wealth Creators created INR 38.9 trillion of wealth during 2012-17.
- This is the highest ever quantum of Wealth Created.
- Pace of Wealth Creation is also robust at 22% CAGR whereas the benchmark Sensex CAGR is only 11%.

Exhibit 1 **2012-17 Wealth Created at INR 38.9 trillion is the highest ever**

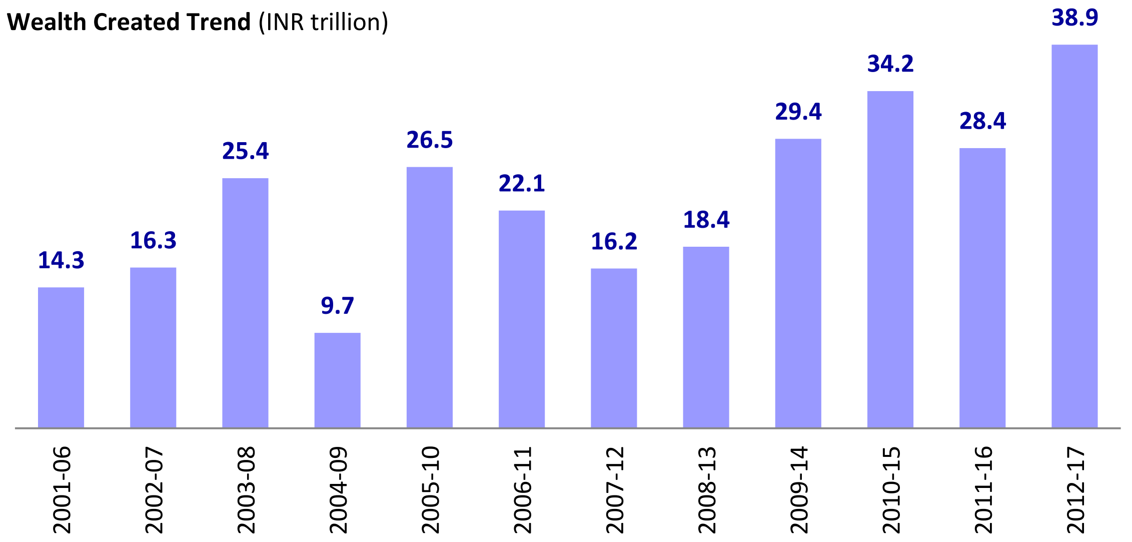
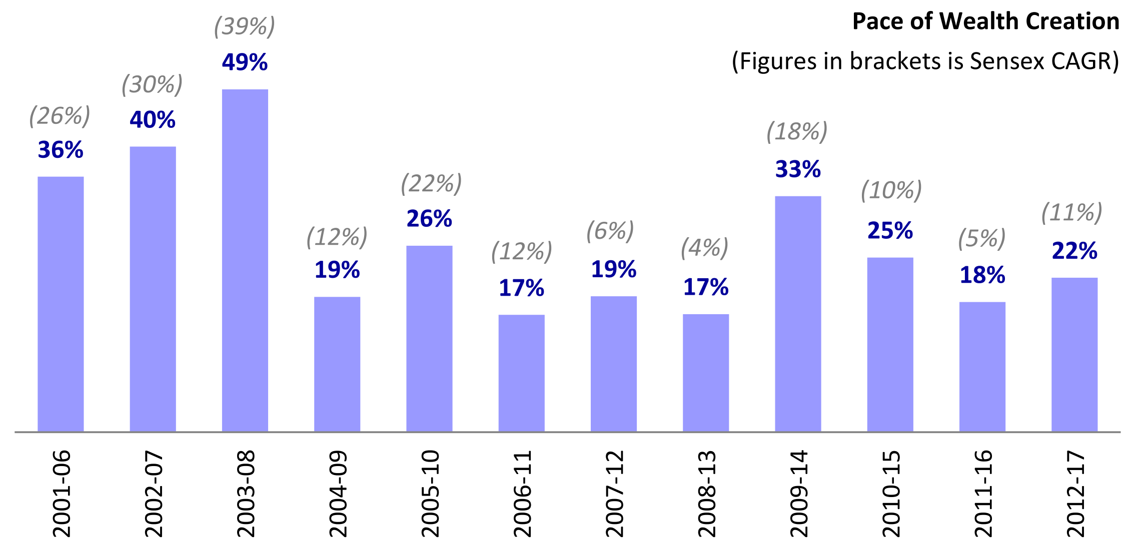


Exhibit 2 **2012-17 pace of Wealth Creation is healthy at 22% CAGR vis-à-vis benchmark's 11% CAGR**



Key Takeaway

Forget markets, think stocks

Wealth Creating stocks can be found in all kinds of market conditions. So, it is advisable that investors focus in identifying such stocks to invest in, rather than timing the markets.

#2 The Biggest Wealth Creators

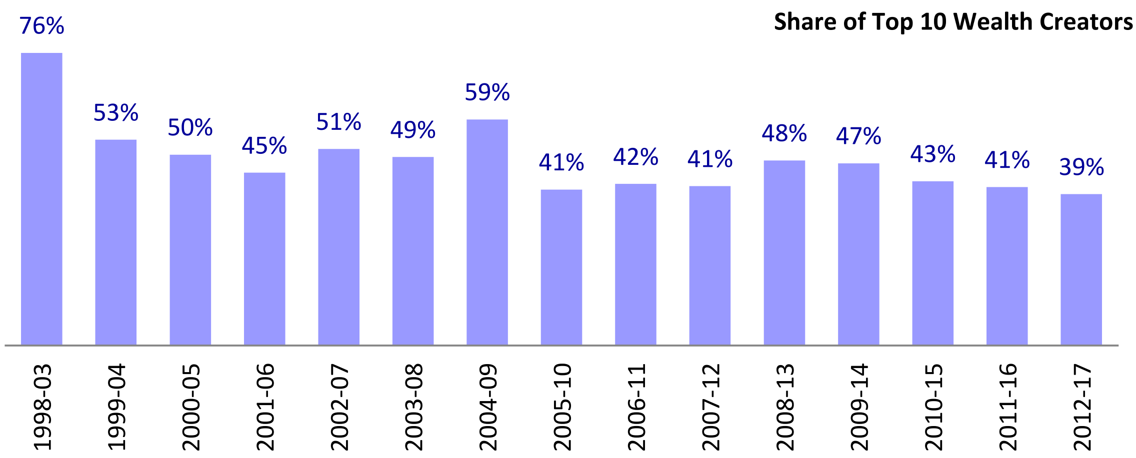
TCS is the Biggest Wealth Creator for the fifth time in a row

- **TCS** has emerged as the biggest Wealth Creator for the period 2012-17, retaining the top spot it held in the previous four study periods (2011-16, 2010-15, 2009-14 and 2008-13).
- **Reliance Industries** has muscled its way to No.3 after not featuring in the Wealth Creators list in the previous study.
- **Share of Top 10 Wealth Creators in the overall Wealth Creation is continuously declining** (Exhibit 4). This suggests rising democratization of Wealth Creation.

Exhibit 3 **Top 10 Biggest Wealth Creators (2012-17)**

Rank	Company	Wealth Created		CAGR (%)		P/E (x)		RoE (%)	
		INR b	% share	Price	PAT	2017	2012	2017	2012
1	TCS	2,499	6.4	16	20	19	22	30	35
2	HDFC Bank	2,315	5.9	23	24	24	23	17	17
3	Reliance Inds	1,888	4.8	12	10	14	13	11	11
4	ITC	1,594	4.1	13	11	33	29	22	32
5	Maruti Suzuki	1,413	3.6	35	32	31	26	16	10
6	H D F C	1,350	3.5	17	15	22	18	18	23
7	Indian Oil	1,219	3.1	24	13	9	6	20	18
8	Hind. Unilever	1,081	2.8	17	11	45	34	64	71
9	Kotak Mahindra	1,050	2.7	26	22	33	22	13	14
10	HCL Tech	884	2.3	29	29	15	14	26	25
Total of Top 10		**15,292**	**39.3**	**19**	**16**	**20**	**18**	**18**	**17**
Total of Top 100		**38,927**	**100**	**22**	**15**	**22**	**16**	**17**	**18**

Exhibit 4 **Share of top 10 Wealth Creators is continuously declining**



Key Takeaway

Will the next study see a new Wealth Creation leader?

Five years is the longest run of the top Wealth Creator – **Reliance** from 2007 to 2011 and **TCS** from 2013 to 2017. **HDFC Bank** is within striking distance of the top spot in this study itself. Given the ongoing slowdown in IT even as private banking continues to grow, the next study may well see a new Wealth Creation leader.

#3 The Fastest Wealth Creators

Ajanta Pharma is the Fastest Wealth Creator for the third time in a row

- **Ajanta Pharma** has emerged as the Fastest Wealth Creator for the third time in a row, with 2012-17 stock price multiplier of 29x (96% CAGR).
- **Eicher Motors** is among the top 10 Fastest Wealth Creators in the last 6 studies, and **Bajaj Finance** in the last 4.
- 4 of the top 10 Fastest Wealth Creators are pharma companies.
- The base 2012 market cap of 7 stocks was less than INR 20 billion.
- 5 of the 10 stocks were trading at single-digit P/E in 2012.
- INR 100 invested equally in these 10 stocks would have expanded to INR 1,550 delivering a return CAGR of 73%. Over the same period, INR 100 invested in the Sensex would have expanded to only INR 169 (11% return CAGR).

Exhibit 5 **Top 10 Fastest Wealth Creators (2012-17)**

Rank	Company	Price Appn.	CAGR (%)		Mkt Cap (INR b)		P/E (x)	
		(x)	Price	PAT	2017	2012	2017	2012
1	Ajanta Pharma	29	96	45	155	5	31	7
2	KRBL	23	88	34	97	4	24	5
3	Bajaj Finance	15	71	35	646	34	35	8
4	Dalmia Bharat	14	69	13	175	12	62	8
5	Symphony	13	68	23	107	8	70	15
6	Alembic Pharma	13	67	25	118	9	29	7
7	Eicher Motors	13	67	42	695	54	42	19
8	Natco Pharma	12	64	52	148	11	30	19
9	Vakrangee	12	64	50	174	14	34	20
10	Aurobindo Pharma	11	63	65	396	35	17	19

Exhibit 6 **History of Fastest Wealth Creators**

Year	Company	Price Multiple (x)	CAGR
1996	Dr Reddy's Labs	30	97%
1997	Cipla	7	48%
1998	Satyam Computers	23	87%
1999	Satyam Computers	75	137%
2000	SSI	223	195%
2001	Infosys	66	131%
2002	Wipro	69	133%
2003	e-Serve	50	119%
2004	Matrix Labs	75	137%
2005	Matrix Labs	136	167%
2006	Matrix Labs	182	183%

Year	Company	Price Multiple (x)	CAGR
2007	B F Utilities	665	267%
2008	Unitech	837	284%
2009	Unitech	54	122%
2010	Unitech	28	95%
2011	Sanwaria Agro	50	119%
2012	TTK Prestige	24	89%
2013	TTK Prestige	28	95%
2014	Eicher Motors	27	94%
2015	Ajanta Pharma	50	119%
2016	Ajanta Pharma	53	121%
2017	Ajanta Pharma	29	96%

Key Takeaway

Small size + Scalability + Sound management = Superior Wealth Creation

All the Top 10 Fastest Wealth Creators were small in the base year (2012) and operating either in a large sector (pharma, finance, autos, IT) or scalable niche (air-coolers, branded rice). Under a sound management, such companies are able to clock a scorching pace of earnings growth. This in turn also drives up valuations, leading to superior Wealth Creation.

#4 The Most Consistent Wealth Creators

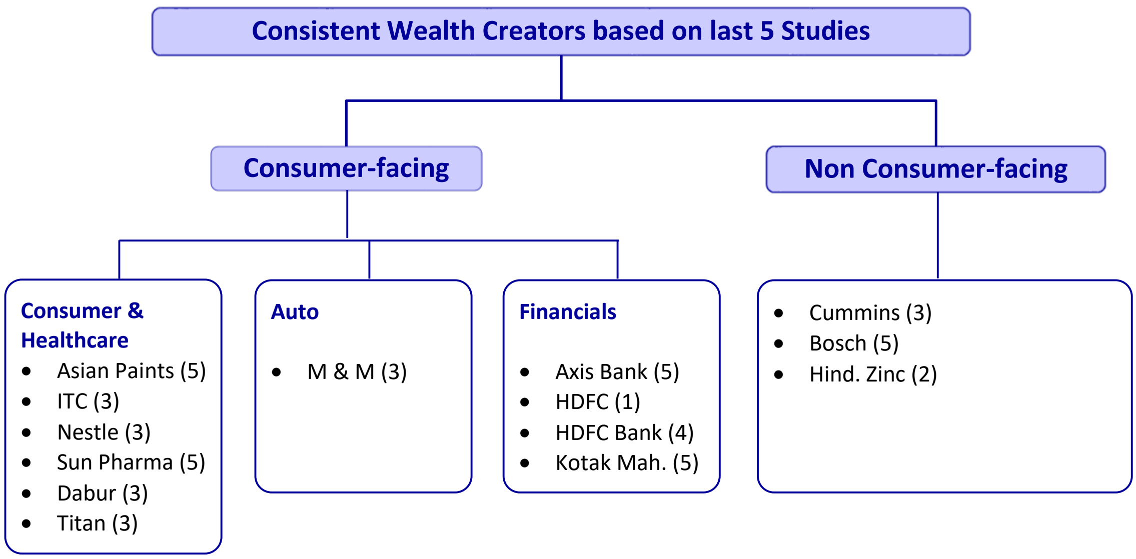
Asian Paints is the Most Consistent Wealth Creator again

- **Asian Paints** is the Most Consistent Wealth Creator for the second time in succession by virtue of –
  1. Appearing among top 100 Wealth Creators in each of the last 10 studies; and
  2. Recording the highest Price CAGR of 30% over the 10-year period 2007 to 2017.
- 8 of the top 10 Most Consistent Wealth Creators are consumer-facing companies, with **Bosch** and **Cummins India** the only exceptions.

Exhibit 7 **Top 10 Most Consistent Wealth Creators (2012-17)**

Rank	Company	Appeared in WC Study (x)	10-yr Price CAGR (%)	10-yr PAT CAGR (%)	P/E (x) 2017	P/E (x) 2007	RoE (%) 2017	RoE (%) 2007
1	Asian Paints	10	30	21	53	26	25	37
2	Titan Company	10	27	22	52	35	19	32
3	HDFC Bank	10	22	30	24	27	17	18
4	Kotak Mahindra	10	22	25	33	30	13	16
5	Bosch	10	21	11	54	25	15	22
6	Sun Pharma	10	21	26	24	29	19	26
7	Dabur India	10	19	16	40	30	25	57
8	ITC	10	19	14	33	21	22	26
9	Cummins India	10	17	11	36	20	19	26
10	Axis Bank	10	17	20	30	21	7	19

Exhibit 8 **Consumer-facing companies more likely to be Consistent Wealth Creators**



NOTE: Bracket indicates number of times appeared within top 10 in last 5 Wealth Creation Studies

Key Takeaway

Strong discretionary brand = Consistent Wealth Creation

Strong brands in basic goods (e.g. Colgate) fail to feature among Consistent Wealth Creators given the missing element of growth. In contrast, discretionary brands (e.g. Asian Paints) enjoy steady growth, translating to Consistent Wealth Creation.

#5 Wealth Creators Index (Wealthex) v/s BSE Sensex

Superior earnings and price performance over benchmark

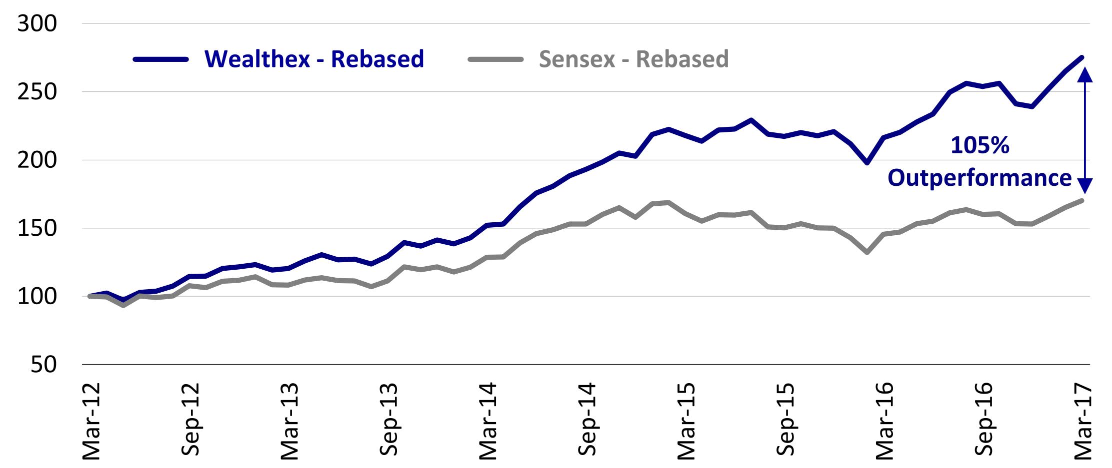
We compare Wealthex (top 100 Wealth Creators Market Cap index) with the BSE Sensex on 3 parameters - (1) market performance, (2) earnings growth and (3) valuation.

- **Market performance:** Over 2012-17, Wealth Creating companies have delivered return CAGR of 22% v/s 11% for the BSE Sensex. March 2017 over March 2012, Wealthex is up 175% whereas the Sensex is up 70% i.e. 105% outperformance over 5 years.
- **Earnings growth:** Wealthex clocked 5-year earnings CAGR of 16% v/s 4% for BSE Sensex. Further, YoY earnings growth for Wealthex is higher every year 2012 through 2017.
- **Valuation:** Wealthex and Sensex P/E trajectory is almost the same. Thus, the 11pp outperformance of Wealthex is explained largely by the 12pp higher earnings CAGR.

Exhibit 9 **Wealthex v/s Sensex: Superior market performance on the back of higher earnings growth**

	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17	5 Year CAGR (%)
BSE Sensex	17,404	18,836	22,386	27,957	25,342	29,621	**11**
YoY (%)		8	19	25	-9	17	
Wealthex - based to Sensex	**17,404**	**20,945**	**26,462**	**37,957**	**37,656**	**47,880**	**22**
YoY (%)		20	26	43	-1	27	
Sensex EPS (INR)	1,111	1,180	1,330	1,351	1,331	1,346	**4**
YoY (%)		6	13	2	-1	1	
Wealthex EPS (INR)	**1,062**	**1,264**	**1,450**	**1,636**	**1,943**	**2,251**	**16**
YoY (%)		19	15	13	19	16	
Sensex PE (x)	16	16	17	21	19	22	**7**
Wealthex PE (x)	**16**	**17**	**18**	**23**	**19**	**21**	**5**

Exhibit 10 **Wealthex invariably outperforms benchmark indices handsomely**



Key Takeaway

Sensex – a weak earnings machine; hence easy to outperform

Ever since the Lehman crisis of 2008, Sensex has been a weak earnings machine with single digit earnings growth in most years. Investors with even modest stock-picking skills should find it easy to outperform the Sensex.

#6 Wealth Creation: Sector analysis

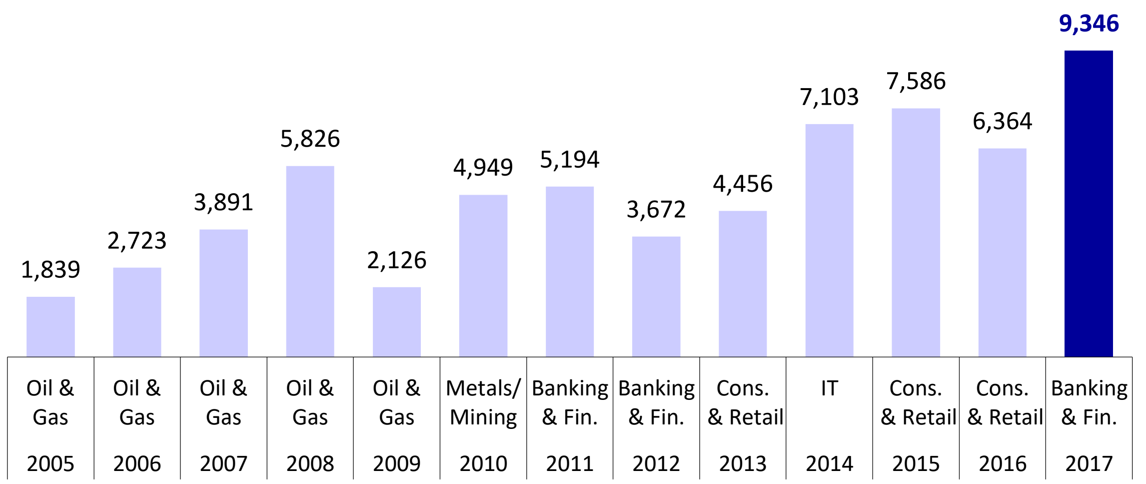
Banking & Finance is the biggest Wealth Creating sector

- **Banking & Finance** has emerged as India's biggest Wealth Creating sector over 2012-17 dethroning Consumer/Retail. The surge in Wealth Creation in the sector has been led by private banks and NBFCs.
- In terms of share of Wealth Created, **Metals/Mining** is the biggest loser over the last 5 years. **Oil & Gas** is the biggest gainer led by refining & marketing companies.
- **Wealth Creation was highly concentrated** – top 5 sectors accounted for a high 76% of total Wealth Created.

Exhibit 11 **Banking & Finance is the top Wealth Creating sector**

Sector	WC	Share of WC %		CAGR 12-17 (%)		P/E (x)		RoE (%)	
(No of companies)	(INR b)	2017	2012	Price	PAT	2017	2012	2017	2012
Banking & Fin. (22)	9,346	24	23	27	16	23	14	15	19
Cons. & Retail (21)	6,913	18	21	21	13	41	30	26	31
Auto (13)	4,898	13	10	26	3	28	10	15	27
Oil & Gas (5)	4,397	11	6	17	17	11	11	16	12
Technology (4)	3,757	10	11	20	22	18	19	27	32
Healthcare (13)	3,301	8	7	27	23	26	22	17	14
Cement (5)	1,686	4	3	25	6	33	14	11	15
Capital Goods (5)	1,355	3	4	17	7	28	18	13	16
Metals / Mining (2)	942	2	13	18	11	16	12	19	14
Telecom & Media (3)	734	2	-	27	42	39	67	21	6
Utilities (1)	479	1	1	16	17	14	15	15	14
Others (6)	1,119	3	1	27	20	22	17	20	19
Total	**38,927**	**100**	**100**	**22**	**15**	**22**	**16**	**17**	**18**

Exhibit 12 **Banking & Finance back on top after a 4-year gap**



Key Takeaway

State-owned banks are big losers

Even as Banking & Finance emerged the biggest Wealth Creating sector, not a single state-owned bank features in the list of Wealth Creators. **LIC Housing Finance** and **Rural Electrification Corporation** are the only face-savers in the NBFC space.

#7 Wealth Creation: Ownership – Private v/s PSU

PSUs remain insignificant in Wealth Creation, but there are signs of bottoming out

- Though PSUs' (public sector undertakings) Wealth Creation performance during 2012-17 continues to be weak, there are signs of the same bottoming out:
  - The number of PSUs in the top 100 Wealth Creators is 9, up from 5 two years ago
  - Wealth Created by these 9 PSUs is 10%, again higher than the previous two studies
  - Finally, unlike in the past, PSUs' 2012-17 PAT CAGR at 22% is significantly higher than private sector's 13%. This has led to PSUs matching private sector's price CAGR at 22%.
- The 9 Wealth Creating PSUs are **IOC, BPCL**, **HPCL**, **Petronet LNG**, **Concor, LIC Housing, Rural Electrification Corporation, Bharat Electronics** and **Power Grid Corporation**.

Exhibit 13 **PSUs remain insignificant in Wealth Creation**

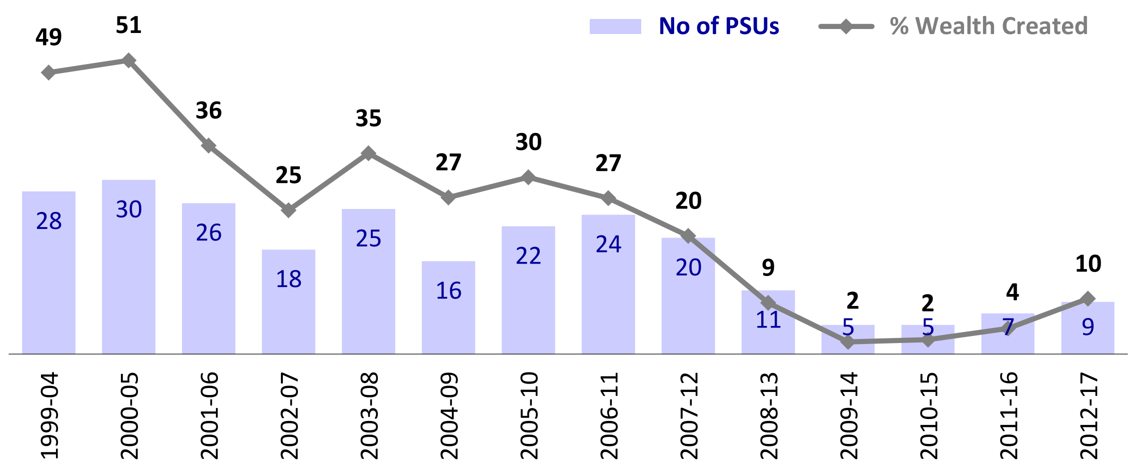
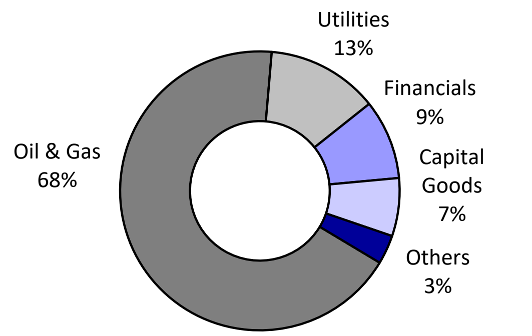


Exhibit 14 **Robust PAT CAGR of 20% is the key driver of Wealth Creation for the 7 PSUs**

	2012-2017	
	PSU	**Private**
No. of Wealth Creators in Top 100	9	91
Share of Wealth Created (%)	10	90
5-year Sales CAGR (%)	-1	12
5-year PAT CAGR (%)	22	13
5-year Price CAGR (%)	22	22
P/E - 2012 (x)	10	17
P/E - 2017 (x)	10	25
RoE - 2012 (%)	14	19
RoE - 2017 (%)	21	16

Exhibit 15 **4 of the 9 PSU Wealth Creators are in Oil & Gas (IOC, BPCL, HPCL, Petronet LNG)**



Key Takeaway

Is government focus driving PSU turnaround?

Fortunes of many PSUs hinge on performance of the economy, especially the industrial sector – Coal India, BHEL, SBI, SAIL, etc. Measures to boost industrial recovery – "Make in India", high capex in roads and railways, bank recapitalization, etc – bode well for PSUs. All this coupled with low valuations, hold the potential to trigger mean reversion in Wealth Creation by PSUs.

#8 Wealth Creation: Market Cap Rank Analysis

In our 2015 Wealth Creation Study, we called large, mid and small cap stocks as **Mega**, **Mid** and **Mini**, defined as under:

- **Mega** – Top 100 stocks by market cap rank for any given year
- **Mid** – Next 200 stocks by market cap rank
- **Mini** – All stocks below the top 300 ranks.

Market cap ranks of companies change constantly. Over time, companies also cross over from one category to another. For the period 2012-17, the market cap crossover matrix stands as under –

Exhibit 16 **2012-17: Market cap crossovers: No. of companies and average returns**

TO (in 2017) \ FROM (in 2012)	Mini	Mid	Mega	New	TOTAL
Mega	0	**18**	76	6	**100**
Avg Return		***40%***	*13%*		
Mid	**49**	107	22	22	**200**
Avg Return	***54%***	*18%*	*-6%*		
Mini	2,533	74	2	593	**3,202**
Avg Return	*12%*	*-7%*	*-32%*		
Merger/ Delisting	148	1	0	-149	–
TOTAL	**2,730**	**200**	**100**	**472**	**3,502**

How to read the table

- In 2012, there were 2,730 Mini companies (i.e. ranked beyond 300). Of these, 49 moved to Mid category by 2017, delivering an average 54% return CAGR in the process. Next, 2,533 companies stayed as Mini and 148 got merged or delisted.
- Likewise, of the 200 Mid companies in 2012, 18 moved to Mega by 2017, delivering an average 40% return CAGR in the process. 107 Mid companies stayed as Mid and 74 slipped to the Mini category.
- Finally, of the 100 Mega companies in 2012, 76 stayed as Mega, 22 slipped to Mid, and 2 slipped to the Mini category.

We specifically analyzed the 3 positive crossovers –

1. Mini-to-Mega
2. Mini-to-Mid and
3. Mid-to-Mega.

8.1 Mini-to-Mega: No companies

- During 2012-17, there was no company which moved from Mini to Mega.

8.2 Mini-to-Mid: 49 companies, 54% average Price CAGR

- During 2012-17, 49 companies crossed over from Mini to Mid category, generating an average return CAGR of 54%, v/s 11% for the Sensex.
- Of these 49 Mini-to-Mid stocks, 10 feature in our list of 100 Biggest Wealth Creators.
- 7 of the top 10 fastest Wealth Creators are featured in the list.

Exhibit 17 **Mini-to-Mid (2012-17): 10 of 49 Mini-to-Mid stocks feature among top 100 Wealth Creators**

	Mkt Cap Rank		WC Rank *		Price	PAT	P/E (x)	
	2017	2012	Biggest	Fastest	CAGR %	CAGR %	2017	2012
Ajanta Pharma	135	546	66	1	96	45	31	7
KRBL	199	599	100	2	88	34	24	5
Dalmia Bharat	124	399	63	4	69	13	62	8
Symphony	189	468	97	5	68	23	70	15
Alembic Pharma	175	437	89	6	67	25	29	7
Natco Pharma	146	409	73	8	64	52	30	19
Vakrangee	125	372	62	9	64	50	34	20
TVS Motor	111	307	54	11	60	28	45	15
P I Inds	178	378	95	12	51	41	25	16
IIFL Holdings	165	310	92	20	43	38	18	14
AVERAGE					**67**	**35**	**37**	**13**

* 2012-17 Wealth Creation Rank

8.3 Mid-to-Mega: 18 companies, 40% average Price CAGR

- During 2012-17, 18 companies crossed over from Mid to Mega (listed on next page).
- All the 18 made it to this year's list of 100 Biggest Wealth Creators.
- The Mid-to-Mega portfolio delivered average return CAGR of 40% over 2012-17 v/s 11% for Sensex.

Key Takeaway

Mid category: A good place to hunt for Wealth Creators

All the 18 Mid-to-Mega stocks have made it the list of top 100 Wealth Creators. Their portfolio handsomely outperformed the benchmark. The strike rate is reasonable at 9% (18 of 200), making the Mid category a good focused starting point to hunt for Wealth Creators.

Exhibit 18 **Mid-to-Mega (2012-17): 18 companies, 40% average Price CAGR v/s 11% for Sensex**

	Mkt Cap Rank		WC Rank *		Price	PAT	P/E (x)	
	2017	2012	Biggest	Fastest	CAGR %	CAGR %	2017	2012
Bajaj Finance	38	212	20	3	71	35	35	8
Eicher Motors	34	158	17	7	67	42	42	19
Aurobindo Pharma	67	205	34	10	63	65	17	19
Bajaj Finserv	37	112	21	13	47	11	29	7
Motherson Sumi	47	134	29	14	47	44	33	28
MRF	93	182	49	18	44	34	17	12
Britannia Inds	63	136	35	22	42	37	46	39
UPL	71	151	44	23	41	26	21	11
HPCL	46	102	27	29	39	114	6	56
Torrent Pharma	92	159	50	30	38	22	30	16
Havells India	84	135	46	42	33	8	52	19
Piramal Enterprises	76	124	42	43	32	74	26	102
Pidilite Inds	72	109	40	45	32	22	42	29
United Spirits	79	127	48	51	29	7	116	42
P & G Hygiene	98	133	59	55	27	19	56	40
Bharat Forge	99	130	60	57	27	8	40	18
Glenmark Pharma	100	119	67	65	23	20	21	18
Tech Mahindra	57	107	47	74	21	20	16	8
AVERAGE					**40**	**34**	**36**	**27**

* 2012-17 Wealth Creation Rank

#9 Wealth Creation: Valuation parameters analysis

Payback ratio < 1 offers distinctly superior returns

- During 2012-17, some valuation norms did not hold true e.g. companies in the Price/Book range of 3-4x delivered much higher return than <1x and 2-3x range.
- Every study invariably suggests that the highest return is generated when payback ratio is less than 1x.

  (Payback is a proprietary ratio of Motilal Oswal, defined as current market cap divided by estimated profits over the next five years. For 2012, we calculate this ratio based on the actual profits reported over the next five years).

Exhibit 19 **Payback ratio less than 1x remains a sure shot formula for multi-baggers**

Range	No. of	WC	% Share	CAGR (%)		RoE (%)	
in 2012	Cos.	(INR b)	of WC	Price	PAT	2017	2012
P/E							
<10	19	4,905	13	**27**	**7**	17	24
10-15	23	7,777	20	**19**	**11**	13	14
15-20	23	7,351	19	**25**	**16**	16	17
20-25	14	9,235	24	**22**	**20**	20	23
25-30	8	4,946	13	**22**	**18**	20	22
>30	13	4,713	12	**24**	**33**	31	12
Total	**100**	**38,927**	**100**	**22**	**15**	**17**	**18**
Price / Book							
<2	29	9,162	24	**23**	**18**	16	12
2-3	23	7,416	19	**21**	**6**	14	20
3-4	14	5,826	15	**31**	**19**	17	19
4-5	11	5,939	15	**25**	**20**	18	20
5-6	7	2,263	6	**25**	**20**	20	23
>6	16	8,320	21	**18**	**16**	28	36
Total	**100**	**38,927**	**100**	**22**	**15**	**17**	**18**
Price / Sales							
<1	28	9,458	24	**22**	**13**	16	15
1-2	24	7,021	18	**29**	**17**	16	17
2-3	18	4,811	12	**26**	**11**	13	18
3-4	13	6,302	16	**21**	**13**	18	22
4-5	10	7,940	20	**21**	**18**	20	21
> 5	7	3,393	9	**17**	**15**	21	26
Total	**100**	**38,927**	**100**	**22**	**15**	**17**	**18**
Payback ratio							
< 1	15	4,190	11	**38**	33	23	13
1-2	38	13,887	36	23	10	14	17
2-3	28	13,126	34	23	19	20	21
> 3	19	7,724	20	18	10	19	23
Total	**100**	**38,927**	**100**	**22**	**15**	**17**	**18**

#10 Those who missed the list

The big who didn't beat the market

- During 2012-17, the Sensex return CAGR was 11.2%.
- 13 companies (Exhibit 20 below) created enough wealth to qualify among the 100 biggest, but failed to make it to the final list as their stock return CAGR was lower than the Sensex.
- They made way for 13 others to join the list (Exhibit 21 below).

Exhibit 20 **Those who missed the list ...**

	WC * (INR b)	Price CAGR (%)	Potential Size Rank **
Infosys	708	**7.3**	13
SBI	657	**6.9**	18
ICICI Bank	582	**9.3**	23
Bajaj Auto	327	**10.8**	39
Hero Moto.	233	**9.4**	48
Wipro	229	**3.3**	51
Nestle	200	**7.7**	58
Siemens	179	**10.7**	62
Dr Reddy's	168	**8.4**	69
NHPC Ltd	163	**10.3**	71
GAIL (India)	157	**6.0**	74
Power Fin.	155	**9.7**	75
Hindalco	135	**8.6**	84

Exhibit 21 **... and those who made it**

	WC * (INR b)	Price CAGR (%)	Size Rank
Shriram Transport	109	12	88
Alembic Pharma	108	67	89
Edelweiss Financial	108	42	90
Shriram City Union	107	29	91
IIFL Holdings	105	43	92
GSK Consumer	101	13	93
M & M Financial	101	19	94
P I Inds	100	51	95
Voltas	99	30	96
Symphony	99	68	97
Muthoot Finance	96	24	98
Jubilant Life	95	32	99
KRBL	93	88	100

* - Wealth Created; ** Size rank had the stock outperformed the benchmark

The fast who didn't make it big

- The 100th biggest Wealth Creator created Wealth of INR 93 billion. Over 470 more companies beat the benchmark return CAGR 11.2% but did not make it to the list as they created absolute wealth less than INR 93 billion.
- The table below lists the top 20 among them.

Exhibit 22 **The fast who didn't make it big**

	Price CAGR (%)	Price Mult. (x)	WC (INR b)		Price CAGR (%)	Price Mult. (x)	WC (INR b)
CCL Products	**91**	25	44	K P R Mill	**73**	15	47
La Opala RG	**90**	25	28	Heritage Foods	**73**	15	23
Sundaram Clayton	**88**	24	68	Wim Plast	**72**	15	17
Can Fin Homes	**83**	20	51	CEAT	**72**	15	46
Welspun India	**81**	19	84	Srikalahasti Pipes	**71**	15	14
Somany Ceramics	**79**	18	26	Johnson Controls	**71**	15	46
Granules India	**76**	17	28	Garware-Wall	**71**	15	15
Finolex Cables	**75**	17	74	Excel Crop Care	**70**	14	18
Relaxo Footwear	**75**	16	63	Astral Poly	**70**	14	58
Bodal Chemicals	**73**	16	16	Technocraft Inds	**68**	13	13

Note: In choosing these companies, the conditions are:
(1) Base 2012 market cap of at least INR 1 billion and
(2) Wealth created of at least INR 1 billion.

#11 Wealth Destruction: Companies & Sectors

The cyclical downturn continues

- The total Wealth Destroyed during 2012-17 is INR 6 trillion, 15% of the total Wealth Created by top 100 companies. Thanks to buoyant markets, both the quantum and the percentage of Wealth Destroyed are much lower than in the previous two studies (Exhibit 23).
- The broader theme of Wealth Destruction is **cyclical downturn** (Exhibits 24 and 25).
- Metals/Mining is the biggest Wealth Destroying sector as was the case last two studies. Trading sector is led by MMTC, whereas Banking & Finance mainly includes state-owned banks at the wrong end of the NPA cycle. Capital Goods and Construction/Real Estate further corroborate the cyclical downturn theme.

Exhibit 23 **Level of Wealth Destruction sharply down**

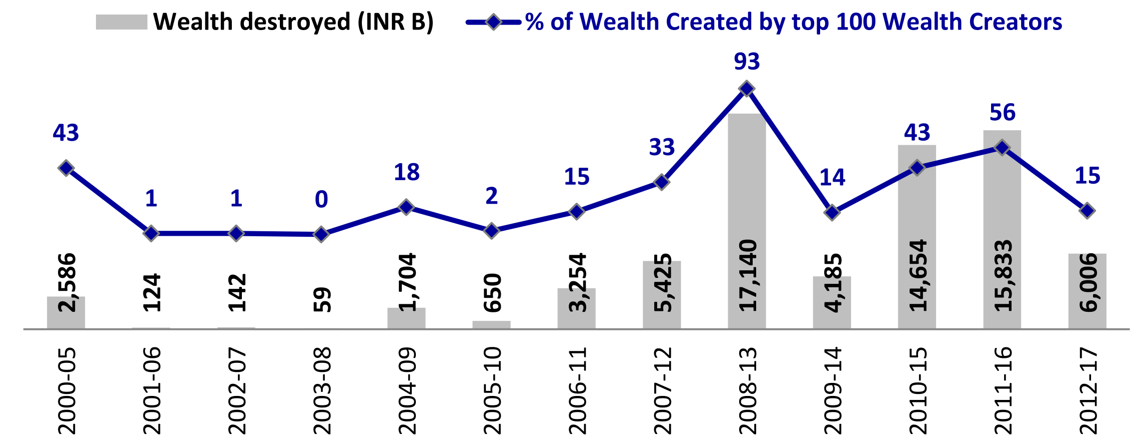


Exhibit 24
Cyclicals top Wealth Destroyers list

Company	Wealth Destroyed		Price
	INR b	% Share	CAGR (%)
MMTC	722	12	-40
Jindal Steel	393	7	-26
Coal India	349	6	-3
B H E L	230	4	-9
NMDC	219	4	-4
Reliance Power	193	3	-16
Hindustan Copper	186	3	-24
JP Associates	160	3	-30
Adani Enterprises	143	2	-19
Reliance Comm.	139	2	-15
Total of Above	**2,734**	**46**	
Total Wealth Destroyed	**6,006**	**100**	

Exhibit 25
The usual suspects at the sector level too

Sector	Wealth Destroyed (INR b)	% Share
Metals/Mining	1,535	26
Trading	923	15
Banking & Finance	890	15
Constn./Real Estate	517	9
Utilities	474	8
Capital Goods	460	8
Telecom	247	4
Textiles	169	3
Technology	110	2
Others	681	11
Total	**6,006**	**100**

Key Takeaway

Cyclicals – Early signals of turnaround

Favorable global commodity cycle coupled with aggressive domestic capex (mainly by the Indian government) are likely to herald at least near-term upturn for cyclicals. However, predicting the next downturn is challenging. Thus, the only safe way to play cyclicals is to buy them cheap during the downcycles.

Appendix 1: MOSL 100: Biggest Wealth Creators (2012-2017)

Rank	Company	Wealth Created		CAGR (2012-17, %)			RoE (%)		P/E (x)	
		INR b	Share (%)	Price	PAT	Sales	2017	2012	2017	2012
1	TCS	2,499	6.4	16	20	19	30	35	19	22
2	HDFC Bank	2,315	5.9	23	24	21	17	17	24	23
3	Reliance Industries	1,888	4.8	12	10	-3	11	11	14	13
4	ITC	1,594	4.1	13	11	10	22	32	33	29
5	Maruti Suzuki	1,413	3.6	35	32	14	16	10	31	26
6	HDFC	1,350	3.5	17	15	15	18	23	22	18
7	IOC	1,219	3.1	24	13	-3	20	18	9	6
8	Hind. Unilever	1,081	2.8	17	11	7	64	71	45	34
9	Kotak Mahindra Bank	1,050	2.7	26	22	21	13	14	33	22
10	HCL Technologies	884	2.3	29	29	18	26	25	15	14
11	Sun Pharma	728	1.9	19	23	32	19	20	24	24
12	Asian Paints	717	1.8	27	15	12	25	35	53	32
13	UltraTech Cement	682	1.8	21	4	6	11	17	41	19
14	BPCL	677	1.7	30	63	-1	31	5	10	30
15	Hindustan Zinc	662	1.7	17	6	9	22	19	18	11
16	Larsen & Toubro	660	1.7	13	5	11	12	15	25	18
17	Eicher Motors	642	1.6	67	42	4	31	19	42	19
18	IndusInd Bank	620	1.6	34	29	22	14	18	29	19
19	Axis Bank	618	1.6	16	-1	15	7	19	30	11
20	Bajaj Finance	585	1.5	71	35	36	19	20	35	8
21	Bajaj Finserv	553	1.4	47	11	55	14	26	29	7
22	Tata Motors	523	1.3	11	-14	10	11	43	20	5
23	Yes Bank	496	1.3	33	28	21	15	21	21	13
24	Shree Cement	482	1.2	40	16	8	17	23	45	18
25	Power Grid Corpn.	479	1.2	13	17	20	15	14	14	15
26	Bosch	456	1.2	23	4	5	15	23	54	24
27	HPCL	438	1.1	39	114	0	39	1	6	56
28	Adani Ports	438	1.1	21	28	26	22	23	18	23
29	Motherson Sumi	426	1.1	47	44	24	19	14	33	28
30	Lupin	414	1.1	22	24	20	19	22	25	27
31	Godrej Consumer	406	1.0	28	18	14	24	20	44	29
32	Zee Entertainment	401	1.0	33	17	16	19	17	40	20
33	M & M	368	0.9	13	2	7	11	18	23	14
34	Aurobindo Pharma	361	0.9	63	65	26	25	8	17	19
35	Britannia Industries	335	0.9	42	37	11	33	44	46	39
36	Dabur India	301	0.8	21	14	8	25	37	40	29
37	Cadila Healthcare	298	0.8	24	18	12	21	25	30	24
38	JSW Steel	281	0.7	21	26	10	16	7	13	14
39	Marico	271	0.7	28	19	8	33	28	50	34
40	Pidilite Industries	268	0.7	32	22	12	25	24	42	29
41	Bharat Electronics	249	0.6	25	12	8	20	14	23	14
42	Piramal Enterprises	247	0.6	32	74	32	8	1	26	102
43	Grasim Industries	243	0.6	15	3	7	9	14	18	10
44	UPL	232	0.6	41	26	16	24	13	21	11
45	Cipla	231	0.6	14	-5	16	7	15	53	21
46	Havells India	221	0.6	33	8	-2	17	39	52	19
47	Tech Mahindra	216	0.6	21	20	40	17	28	16	8
48	United Spirits	216	0.6	29	7	-1	15	4	116	42
49	MRF	215	0.6	44	34	7	17	15	17	12
50	Torrent Pharma	209	0.5	38	22	17	20	27	30	16

Rank Company Wealth Created CAGR (2012-17, %) RoE (%) P/E (x)
INR b Share (%) Price PAT Sales 2017 2012 2017 2012

Appendix 1: MOSL 100: Biggest Wealth Creators (2012-2017) … continued

Rank	Company	Wealth Created		CAGR (2012-17, %)			RoE (%)		P/E (x)	
		INR b	Share (%)	Price	PAT	Sales	2017	2012	2017	2012
51	Titan Company	206	0.5	15	6	8	19	41	52	34
52	Berger Paints	198	0.5	45	19	9	22	23	55	20
53	Sun TV Network	192	0.5	21	8	7	25	28	31	18
54	TVS Motor Company	186	0.5	60	28	11	20	18	45	15
55	Biocon	179	0.5	37	12	13	13	15	37	14
56	Emami	179	0.5	31	8	11	22	36	62	24
57	LIC Housing Finance	178	0.5	19	16	18	17	16	16	14
58	Petronet LNG	176	0.5	19	10	2	20	30	18	12
59	P & G Hygiene	171	0.4	27	19	12	82	26	56	40
60	Bharat Forge	168	0.4	27	8	0	15	19	40	18
61	Rural Elec. Corpn.	164	0.4	12	17	19	19	19	6	7
62	Vakrangee	158	0.4	64	50	24	25	17	34	20
63	Dalmia Bharat	157	0.4	69	13	25	6	5	62	8
64	Kansai Nerolac	155	0.4	33	17	10	16	20	44	23
65	Bajaj Holdings	151	0.4	22	8	23	14	20	10	5
66	Ajanta Pharma	149	0.4	96	45	24	32	26	31	7
67	Glenmark Pharma	149	0.4	23	20	18	26	19	21	18
68	Ashok Leyland	148	0.4	23	22	12	24	19	16	14
69	Sundaram Finance	142	0.4	37	8	13	14	21	26	8
70	Tata Communication	142	0.4	26	L to P	4	20	-36	64	-
71	Rajesh Exports	140	0.4	36	25	57	22	21	14	9
72	Page Industries	134	0.3	40	24	25	40	54	61	33
73	Natco Pharma	132	0.3	64	52	31	29	13	30	19
74	L&T Finance	131	0.3	21	18	23	13	10	21	18
75	Whirlpool India	130	0.3	44	20	9	21	26	50	20
76	Amara Raja Batteries	127	0.3	43	17	18	18	26	32	12
77	Max Financial	127	0.3	28	-5	12	17	21	39	9
78	Cummins India	125	0.3	14	6	4	19	26	36	26
79	Container Corpn.	125	0.3	15	0	8	10	16	29	14
80	The Ramco Cement	123	0.3	34	11	4	17	19	24	9
81	GRUH Finance	122	0.3	44	20	24	27	31	49	19
82	Colgate-Palmolive	120	0.3	12	5	8	45	102	47	34
83	Cholamandalam Inv.	118	0.3	39	37	21	17	11	21	16
84	AIA Engineering	115	0.3	34	18	10	15	15	37	19
85	Supreme Industries	112	0.3	39	12	9	25	35	32	11
86	Bayer Crop Sciences	112	0.3	36	10	4	14	22	46	18
87	Balkrishna Industries	110	0.3	40	21	4	20	24	19	9
88	Shriram Transport	109	0.3	12	-1	12	11	22	19	10
89	Alembic Pharma	108	0.3	67	25	16	21	33	29	7
90	Edelweiss Financial	108	0.3	42	37	32	14	5	22	16
91	Shriram City Union	107	0.3	29	11	18	11	20	26	10
92	IIFL Holdings	105	0.3	43	38	21	16	8	18	14
93	GSK Consumer	101	0.3	13	13	8	21	31	33	33
94	M & M Financial	101	0.3	19	-4	20	7	21	35	11
95	P I Industries	100	0.3	51	41	19	28	25	25	16
96	Voltas	99	0.3	30	15	3	13	15	32	17
97	Symphony	99	0.3	68	23	20	33	32	70	15
98	Muthoot Finance	96	0.2	24	6	5	18	30	12	5
99	Jubilant Life	95	0.2	32	15	6	17	13	22	11
100	KRBL	93	0.2	88	34	14	21	13	24	5
	TOTAL / AVG	**38,927**	**100.0**	**22**	**15**	**7**	**17**	**18**	**22**	**16**
Rank	**Company**	**Wealth Created**		**CAGR (2012-17, %)**			**RoE (%)**		**P/E (x)**	
		INR b	**Share (%)**	**Price**	**PAT**	**Sales**	**2017**	**2012**	**2017**	**2012**

Note: L to P stands for Loss to Profit

Appendix 2: MOSL 100: Fastest Wealth Creators (2012-2017)

Rank	Company	2012-17 Price		CAGR 12-17 (%)		Wealth Created		RoE (%)		P/E (x)	
		CAGR (%)	Times (x)	PAT	Sales	INR b	Share (%)	2017	2012	2017	2012
1	Ajanta Pharma	96	28.9	45	24	149	0.4	32	26	31	7
2	KRBL	88	23.3	34	14	93	0.2	21	13	24	5
3	Bajaj Finance	71	14.8	35	36	585	1.5	19	20	35	8
4	Dalmia Bharat	69	13.7	13	25	157	0.4	6	5	62	8
5	Symphony	68	13.4	23	20	99	0.3	33	32	70	15
6	Alembic Pharma	67	12.9	25	16	108	0.3	21	33	29	7
7	Eicher Motors	67	12.9	42	4	642	1.6	31	19	42	19
8	Natco Pharma	64	12.0	52	31	132	0.3	29	13	30	19
9	Vakrangee	64	11.9	50	24	158	0.4	25	17	34	20
10	Aurobindo Pharma	63	11.4	65	26	361	0.9	25	8	17	19
11	TVS Motor Company	60	10.5	28	11	186	0.5	20	18	45	15
12	P I Industries	51	7.9	41	19	100	0.3	28	25	25	16
13	Bajaj Finserv	47	6.8	11	55	553	1.4	14	26	29	7
14	Motherson Sumi	47	6.8	44	24	426	1.1	19	14	33	28
15	Berger Paints	45	6.4	19	9	198	0.5	22	23	55	20
16	GRUH Finance	44	6.2	20	24	122	0.3	27	31	49	19
17	Whirlpool India	44	6.2	20	9	130	0.3	21	26	50	20
18	MRF	44	6.1	34	7	215	0.6	17	15	17	12
19	Amara Raja Batteries	43	6.1	17	18	127	0.3	18	26	32	12
20	IIFL Holdings	43	6.0	38	21	105	0.3	16	8	18	14
21	Edelweiss Financial	42	5.7	37	32	108	0.3	14	5	22	16
22	Britannia Industries	42	5.7	37	11	335	0.9	33	44	46	39
23	UPL	41	5.6	26	16	232	0.6	24	13	21	11
24	Page Industries	40	5.4	24	25	134	0.3	40	54	61	33
25	Balkrishna Industries	40	5.4	21	4	110	0.3	20	24	19	9
26	Shree Cement	40	5.3	16	8	482	1.2	17	23	45	18
27	Supreme Industries	39	5.2	12	9	112	0.3	25	35	32	11
28	Cholamandalam Inv.	39	5.2	37	21	118	0.3	17	11	21	16
29	HPCL	39	5.2	114	0	438	1.1	39	1	6	56
30	Torrent Pharma	38	4.9	22	17	209	0.5	20	27	30	16
31	Sundaram Finance	37	4.9	8	13	142	0.4	14	21	26	8
32	Biocon	37	4.8	12	13	179	0.5	13	15	37	14
33	Bayer Crop Sciences	36	4.7	10	4	112	0.3	14	22	46	18
34	Rajesh Exports	36	4.6	25	57	140	0.4	22	21	14	9
35	Maruti Suzuki	35	4.5	32	14	1,413	3.6	16	10	31	26
36	IndusInd Bank	34	4.4	29	22	620	1.6	14	18	29	19
37	The Ramco Cement	34	4.4	11	4	123	0.3	17	19	24	9
38	AIA Engineering	34	4.4	18	10	115	0.3	15	15	37	19
39	Zee Entertainment	33	4.2	17	16	401	1.0	19	17	40	20
40	Yes Bank	33	4.2	28	21	496	1.3	15	21	21	13
41	Kansai Nerolac	33	4.2	17	10	155	0.4	16	20	44	23
42	Havells India	33	4.1	8	-2	221	0.6	17	39	52	19
43	Piramal Enterprises	32	4.1	74	32	247	0.6	8	1	26	102
44	Jubilant Life	32	4.0	15	6	95	0.2	17	13	22	11
45	Pidilite Industries	32	3.9	22	12	268	0.7	25	24	42	29
46	Emami	31	3.9	8	11	179	0.5	22	36	62	24
47	BPCL	30	3.7	63	-1	677	1.7	31	5	10	30
48	Voltas	30	3.7	15	3	99	0.3	13	15	32	17
49	Shriram City Union	29	3.6	11	18	107	0.3	11	20	26	10
50	HCL Technologies	29	3.6	29	18	884	2.3	26	25	15	14
Rank	Company	2012-17 Price		CAGR 12-17 (%)		Wealth Created		RoE (%)		P/E (x)	
		CAGR (%)	Times (x)	PAT	Sales	INR b	Share (%)	2017	2012	2017	2012

Appendix 2: MOSL 100: Fastest Wealth Creators (2012-2017) … continued

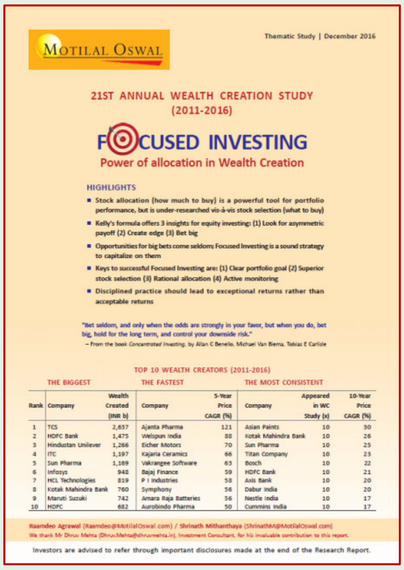
Rank	Company	2012-17 Price		CAGR (12-17, %)		Wealth Created		RoE (%)		P/E (x)	
		CAGR (%)	Times (x)	PAT	Sales	INR b	Share (%)	2017	2012	2017	2012
51	United Spirits	29	3.6	7	-1	216	0.6	15	4	116	42
52	Godrej Consumer	28	3.5	18	14	406	1.0	24	20	44	29
53	Max Financial	28	3.4	-5	12	127	0.3	17	21	39	9
54	Marico	28	3.4	19	8	271	0.7	33	28	50	34
55	P & G Hygiene	27	3.4	19	12	171	0.4	82	26	56	40
56	Asian Paints	27	3.3	15	12	717	1.8	25	35	53	32
57	Bharat Forge	27	3.2	8	0	168	0.4	15	19	40	18
58	Kotak Mahindra Bank	26	3.2	22	21	1,050	2.7	13	14	33	22
59	Tata Communication	26	3.2	L to P	4	142	0.4	20	-36	64	-
60	Bharat Electronics	25	3.1	12	8	249	0.6	20	14	23	14
61	IOC	24	2.9	13	-3	1,219	3.1	20	18	9	6
62	Muthoot Finance	24	2.9	6	5	96	0.2	18	30	12	5
63	Cadila Healthcare	24	2.9	18	12	298	0.8	21	25	30	24
64	Ashok Leyland	23	2.8	22	12	148	0.4	24	19	16	14
65	Glenmark Pharma	23	2.8	20	18	149	0.4	26	19	21	18
66	HDFC Bank	23	2.8	24	21	2,315	5.9	17	17	24	23
67	Bosch	23	2.8	4	5	456	1.2	15	23	54	24
68	Lupin	22	2.7	24	20	414	1.1	19	22	25	27
69	Bajaj Holdings	22	2.7	8	23	151	0.4	14	20	10	5
70	UltraTech Cement	21	2.6	4	6	682	1.8	11	17	41	19
71	Adani Ports	21	2.6	28	26	438	1.1	22	23	18	23
72	Dabur India	21	2.6	14	8	301	0.8	25	37	40	29
73	JSW Steel	21	2.6	26	10	281	0.7	16	7	13	14
74	Tech Mahindra	21	2.6	20	40	216	0.6	17	28	16	8
75	Sun TV Network	21	2.6	8	7	192	0.5	25	28	31	18
76	L&T Finance	21	2.6	18	23	131	0.3	13	10	21	18
77	Sun Pharma	19	2.4	23	32	728	1.9	19	20	24	24
78	Petronet LNG	19	2.4	10	2	176	0.5	20	30	18	12
79	M & M Financial	19	2.4	-4	20	101	0.3	7	21	35	11
80	LIC Housing Finance	19	2.3	16	18	178	0.5	17	16	16	14
81	HDFC	17	2.2	15	15	1,350	3.5	18	23	22	18
82	Hind. Unilever	17	2.2	11	7	1,081	2.8	64	71	45	34
83	Hindustan Zinc	17	2.2	6	9	662	1.7	22	19	18	11
84	Axis Bank	16	2.1	-1	15	618	1.6	7	19	30	11
85	TCS	16	2.1	20	19	2,499	6.4	30	35	19	22
86	Container Corpn.	15	2.0	0	8	125	0.3	10	16	29	14
87	Titan Company	15	2.0	6	8	206	0.5	19	41	52	34
88	Grasim Industries	15	2.0	3	7	243	0.6	9	14	18	10
89	Cipla	14	1.9	-5	16	231	0.6	7	15	53	21
90	Cummins India	14	1.9	6	4	125	0.3	19	26	36	26
91	GSK Consumer	13	1.9	13	8	101	0.3	21	31	33	33
92	ITC	13	1.9	11	10	1,594	4.1	22	32	33	29
93	M & M	13	1.8	2	7	368	0.9	11	18	23	14
94	Power Grid Corpn.	13	1.8	17	20	479	1.2	15	14	14	15
95	Larsen & Toubro	13	1.8	5	11	660	1.7	12	15	25	18
96	Shriram Transport	12	1.8	-1	12	109	0.3	11	22	19	10
97	Colgate-Palmolive	12	1.8	5	8	120	0.3	45	102	47	34
98	Reliance Industries	12	1.8	10	-3	1,888	4.8	11	11	14	13
99	Rural Elec. Corpn.	12	1.8	17	19	164	0.4	19	19	6	7
100	Tata Motors	11	1.7	-14	10	523	1.3	11	43	20	5
	TOTAL	**22**	**2.8**	**15**	**7**	**38,927**	**100.0**	**17**	**18**	**22**	**16**
Rank	**Company**	**2012-17 Price**		**CAGR (12-17, %)**		**Wealth Created**		**RoE (%)**		**P/E (x)**	
		CAGR (%)	**Times (x)**	**PAT**	**Sales**	**INR b**	**Share (%)**	**2017**	**2012**	**2017**	**2012**

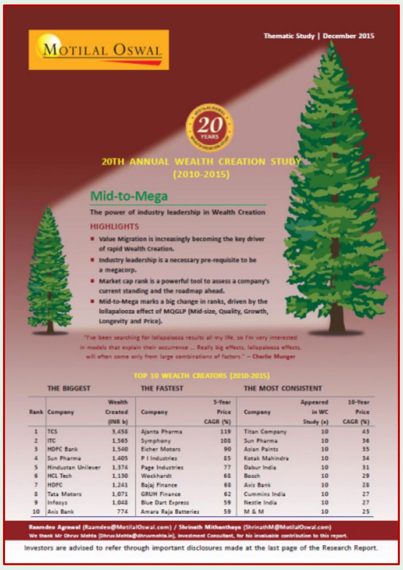
Note: L to P stands for Loss to Profit

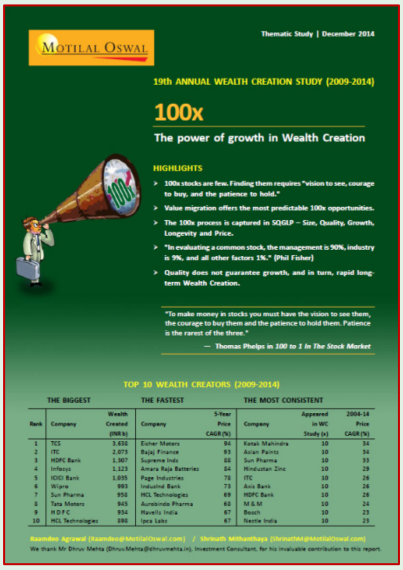
Appendix 3: MOSL 100: Alphabetical order

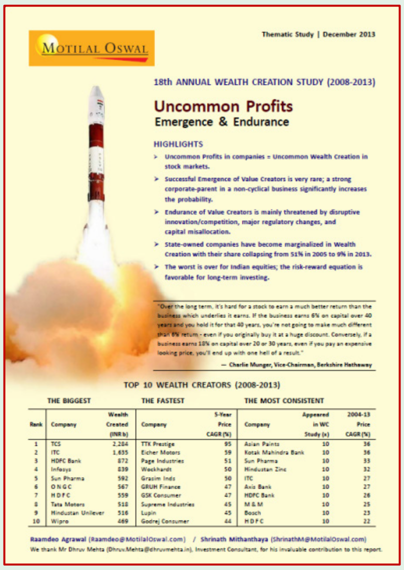
Company	WC Rank		Wealth Created			Company	WC Rank		Wealth Created		
	Biggest	Fastest	INR b	Price CAGR %	Price Mult. (x)		Biggest	Fastest	INR b	Price CAGR %	Price Mult. (x)
Adani Ports	28	71	438	21	2.6	Kansai Nerolac	64	41	155	33	4.2
AIA Engineering	84	38	115	34	4.4	Kotak Mahindra	9	58	1,050	26	3.2
Ajanta Pharma	66	1	149	96	28.9	KRBL	100	2	93	88	23.3
Alembic Pharma	89	6	108	67	12.9	L&T Finance	74	76	131	21	2.6
Amara Raja Batteries	76	19	127	43	6.1	Larsen & Toubro	16	95	660	13	1.8
Ashok Leyland	68	64	148	23	2.8	LIC Housing Finance	57	80	178	19	2.3
Asian Paints	12	56	717	27	3.3	Lupin	30	68	414	22	2.7
Aurobindo Pharma	34	10	361	63	11.4	M & M	33	93	368	13	1.8
Axis Bank	19	84	618	16	2.1	M & M Financial	94	79	101	19	2.4
BPCL	14	47	677	30	3.7	Marico	39	54	271	28	3.4
Bajaj Finance	20	3	585	71	14.8	Maruti Suzuki	5	35	1,413	35	4.5
Bajaj Finserv	21	13	553	47	6.8	Max Financial	77	53	127	28	3.4
Bajaj Holdings	65	69	151	22	2.7	Motherson Sumi	29	14	426	47	6.8
Balkrishna Inds	87	25	110	40	5.4	MRF	49	18	215	44	6.1
Bayer Crop Sciences	86	33	112	36	4.7	Muthoot Finance	98	62	96	24	2.9
Berger Paints	52	15	198	45	6.4	Natco Pharma	73	8	132	64	12.0
Bharat Electronics	41	60	249	25	3.1	P & G Hygiene	59	55	171	27	3.4
Bharat Forge	60	57	168	27	3.2	P I Industries	95	12	100	51	7.9
Biocon	55	32	179	37	4.8	Page Industries	72	24	134	40	5.4
Bosch	26	67	456	23	2.8	Petronet LNG	58	78	176	19	2.4
Britannia Inds	35	22	335	42	5.7	Pidilite Industries	40	45	268	32	3.9
Cadila Healthcare	37	63	298	24	2.9	Piramal Enterprises	42	43	247	32	4.1
Cholamandalam Inv.	83	28	118	39	5.2	Power Grid Corpn.	25	94	479	13	1.8
Cipla	45	89	231	14	1.9	Rajesh Exports	71	34	140	36	4.6
Colgate-Palmolive	82	97	120	12	1.8	Reliance Industries	3	98	1,888	12	1.8
Container Corpn.	79	86	125	15	2.0	Rural Elec. Corpn.	61	99	164	12	1.8
Cummins India	78	90	125	14	1.9	Shree Cement	24	26	482	40	5.3
Dabur India	36	72	301	21	2.6	Shriram City Union	91	49	107	29	3.6
Dalmia Bharat	63	4	157	69	13.7	Shriram Transport	88	96	109	12	1.8
Edelweiss Financial	90	21	108	42	5.7	Sun Pharma	11	77	728	19	2.4
Eicher Motors	17	7	642	67	12.9	Sun TV Network	53	75	192	21	2.6
Emami	56	46	179	31	3.9	Sundaram Finance	69	31	142	37	4.9
GSK Consumer	93	91	101	13	1.9	Supreme Industries	85	27	112	39	5.2
Glenmark Pharma	67	65	149	23	2.8	Symphony	97	5	99	68	13.4
Godrej Consumer	31	52	406	28	3.5	Tata Communication	70	59	142	26	3.2
Grasim Industries	43	88	243	15	2.0	Tata Motors	22	100	523	11	1.7
GRUH Finance	81	16	122	44	6.2	TCS	1	85	2,499	16	2.1
HDFC	6	81	1,350	17	2.2	Tech Mahindra	47	74	216	21	2.6
HPCL	27	29	438	39	5.2	The Ramco Cement	80	37	123	34	4.4
Havells India	46	42	221	33	4.1	Titan Company	51	87	206	15	2.0
HCL Technologies	10	50	884	29	3.6	Torrent Pharma	50	30	209	38	4.9
HDFC Bank	2	66	2,315	23	2.8	TVS Motor Company	54	11	186	60	10.5
Hind. Unilever	8	82	1,081	17	2.2	UltraTech Cement	13	70	682	21	2.6
Hindustan Zinc	15	83	662	17	2.2	United Spirits	48	51	216	29	3.6
IIFL Holdings	92	20	105	43	6.0	UPL	44	23	232	41	5.6
IndusInd Bank	18	36	620	34	4.4	Vakrangee	62	9	158	64	11.9
IOC	7	61	1,219	24	2.9	Voltas	96	48	99	30	3.7
ITC	4	92	1,594	13	1.9	Whirlpool India	75	17	130	44	6.2
JSW Steel	38	73	281	21	2.6	Yes Bank	23	40	496	33	4.2
Jubilant Life	99	44	95	32	4.0	Zee Entertainment	32	39	401	33	4.2

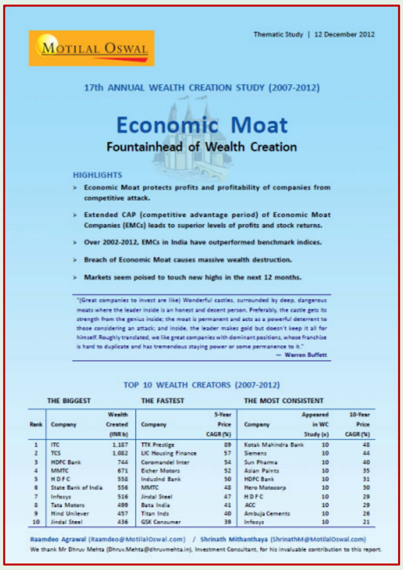
Motilal Oswal Wealth Creation Study Gallery

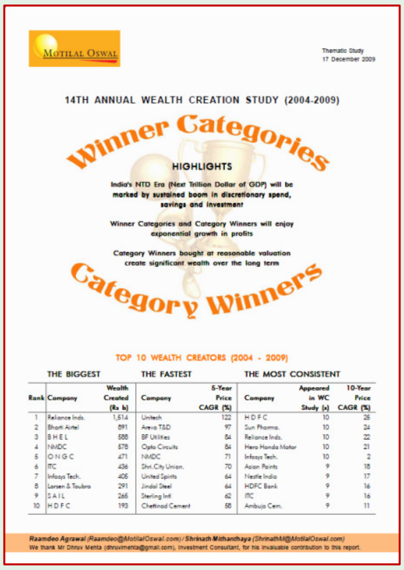


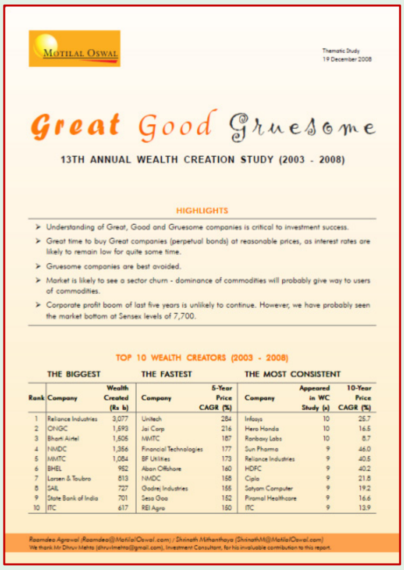












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