MOTILAL OSWAL

MOTILAL OSWAL 20 YEARS WEALTH CREATION STUDY

20TH ANNUAL WEALTH CREATION STUDY (2010-2015)

Mid-to-Mega

The power of industry leadership in Wealth Creation

HIGHLIGHTS

- Value Migration is increasingly becoming the key driver of rapid Wealth Creation.
- Industry leadership is a necessary pre-requisite to be a megacorp.
- Market cap rank is a powerful tool to assess a company's current standing and the roadmap ahead.
- Mid-to-Mega marks a big change in ranks, driven by the lollapalooza effect of MQGLP (Mid-size, Quality, Growth, Longevity and Price).

"I've been searching for lollapalooza results all my life, so I'm very interested in models that explain their occurrence ... Really big effects, lollapalooza effects, will often come only from large combinations of factors." **– Charlie Munger**

TOP 10 WEALTH CREATORS (2010-2015)

	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	3,458	Ajanta Pharma	119	Titan Company	10	43
2	ITC	1,565	Symphony	108	Sun Pharma	10	36
3	HDFC Bank	1,540	Eicher Motors	90	Asian Paints	10	35
4	Sun Pharma	1,405	P I Industries	85	Kotak Mahindra	10	34
5	Hindustan Unilever	1,374	Page Industries	77	Dabur India	10	31
6	HCL Tech	1,130	Wockhardt	68	Bosch	10	29
7	HDFC	1,241	Bajaj Finance	68	Axis Bank	10	28
8	Tata Motors	1,071	GRUH Finance	62	Cummins India	10	27
9	Infosys	1,048	Blue Dart Express	59	Nestle India	10	27
10	Axis Bank	774	Amara Raja Batteries	59	M & M	10	25

Raamdeo Agrawal (Raamdeo@MotilalOswal.com) / **Shrinath Mithanthaya** (ShrinathM@MotilalOswal.com)
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Motilal Oswal 20th Annual Wealth Creation Study

Abbreviations and Terms used in this report

Abbreviation / Term	Description
2005, 2010, 2015, 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 for the past 19 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). The biggest Wealth Creators are listed in Appendix I (pages 44-45) and the fastest in Appendix II (pages 46-47).

The table below shows companies which missed out on the top 100 Wealth Creators list due to their stock underperforming the Sensex.

Exhibit 1

Market Outperformance Filter (Sensex CAGR over 2010-15 was 9.8%)

Who missed the Wealth Creators list ...

Company	WC (INR b)	Price CAGR (%)	Normal Rank*
L&T	60,307	9.7	16
Wipro	52,785	8.2	18
SBI	46,411	5.1	20
Bharti Airtel	32,170	4.8	32
ONGC	27,544	2.2	38
Power Grid	21,847	6.3	47
IOC	17,372	4.4	58
Hindustan Zinc	17,127	6.1	59
Hero MotoCorp	13,980	6.3	71
Bharat Electronics	9,254	8.9	94
ABB	9,043	8.7	95
Rural Elec. Corp.	8,170	5.9	100

... and who made it

Company	WC (INR b)	Price CAGR (%)	Rank
Kansai Nerolac	8,161	27	89
GRUH Finance	8,036	62	90
AIA Engineering	7,985	26	91
Supreme Inds	7,858	50	92
P I Inds	7,841	85	93
Bajaj Holdings	7,809	16	94
Jubilant Food	7,690	36	95
Alstom T&D	7,322	14	96
Whirlpool India	7,291	36	97
Petronet LNG	7,159	18	98
Info Edge (India)	6,981	31	99
Godrej Inds	6,763	20	100

* If the stock had outperformed the Sensex

Wealth Creation 2010-2015

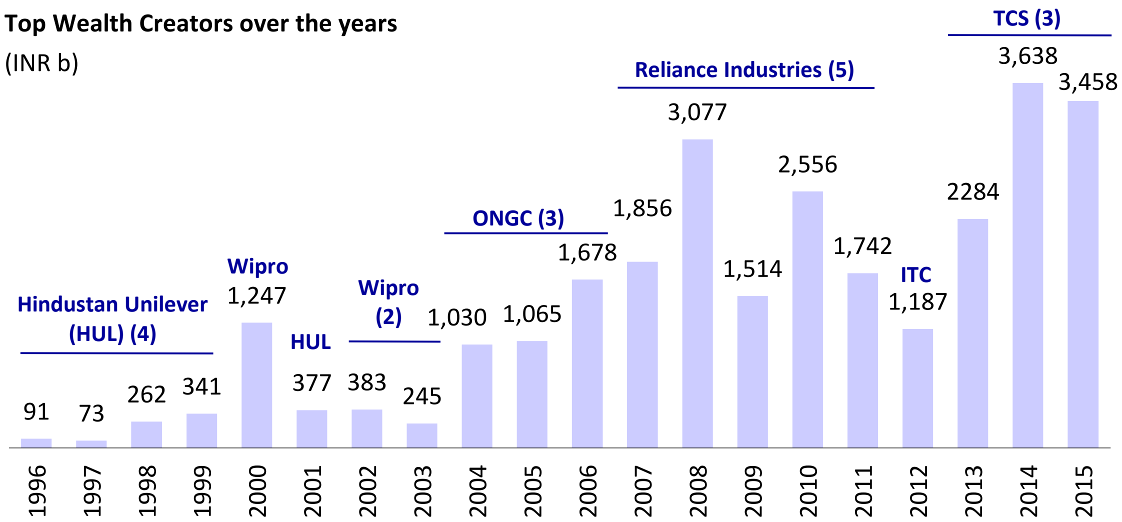
Findings Summary

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

- **TCS** has emerged as the biggest Wealth Creator for the period 2010-15, retaining the top spot it held even in the previous two study periods (2009-14 and 2008-13).
- **ITC** and **HDFC Bank** have also retained their No.2 and No.3 position for the third year in succession.

Exhibit 2

TCS the biggest Wealth Creator for the third year in a row

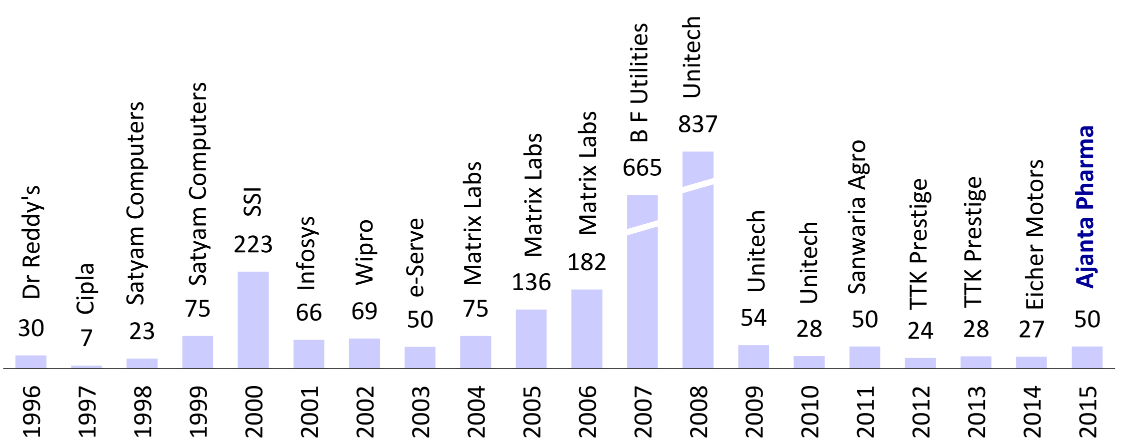


Ajanta is the Fastest Wealth Creator

- **Ajanta Pharma** emerged as the Fastest Wealth Creator during 2010-15, with Price CAGR of 119%, followed by **Symphony** at 108%.
- **Eicher Motors** and **Page Industries** are among the top 10 Fastest Wealth Creators for the last 4 studies.
- The base market cap of all these stocks in 2010 was less than INR 20 billion, including 5 of them in single-digit billion.

Exhibit 3

History of Fastest Wealth Creators (5-year Price multiplier, x)



Titan Industries is the Most Consistent Wealth Creator

- **Titan Industries** is the Most Consistent Wealth Creator over 2005-15, by virtue of: (1) Appearing among top 100 Wealth Creators in each of the last 10 studies; and (2) Highest 10-year Price CAGR of 43%, ahead of **Sun Pharma** (36%) and **Asian Paints** (35%).
- 8 of the top 10 Most Consistent Wealth Creators are consumer-facing companies, with **Bosch** and **Cummins India** the only exceptions.

Consumer/Retail re-emerges as the largest ever Wealth Creating sector

- After losing its top spot to Technology sector during 2009-14, **Consumer/Retail** has re-emerged as India's biggest Wealth Creating sector over 2010-2015.

Exhibit 4

Consumer/Retail is the leading Wealth Creating sector, led by P/E re-rating (flight to safety)

Sector	WC	Share of WC %		CAGR 10-15, %		P/E, x		ROE, %	
(No of companies)	(INR b)	2015	2010	Price	PAT	2015	2010	2015	2010
Consumer/Retail (25)	7,519	22	7	28	16	44	28	28	29
Financials (17)	6,712	20	15	23	21	21	20	16	14
Technology (6)	6,170	18	10	23	23	23	22	30	30
Auto (14)	4,914	14	5	29	21	23	17	20	25
Healthcare (14)	4,481	13	4	31	29	33	30	21	17
Cement (5)	1,337	4	2	21	-2	32	11	11	24
Capital Goods (5)	681	2	10	19	8	51	31	19	24
Telecom/Media (2)	613	2	3	24	21	24	21	16	10
Oil & Gas (3)	580	2	17	22	15	13	10	17	12
Others (9)	1,226	4	28	23	18	33	27	19	19
Total	**34,233**	**100**	**100**	**25**	**19**	**27**	**21**	**20**	**20**

Commodity collapse drives up Wealth Destruction

- The total Wealth Destroyed during 2010-15 is INR 14.6 trillion, 43% of the total Wealth Created by top 100 companies. This is a significant jump from the previous 5-year period.
- 8 of the top 10 Wealth Destroying companies are engaged in global commodity business. The only exceptions are **BHEL** and **NTPC**.
- 6 of the top 10 Wealth Destroyers are public sector companies.

Exhibit 5

Global commodity companies top Wealth Destroyers list

Company	Wealth Destroyed		Price
	INR b	% Share	CAGR (%)
MMTC	1,522	10	-50
Reliance Industries	820	6	-5
SAIL	758	5	-23
NMDC	651	4	-15
BHEL	593	4	-13
Jindal Steel	505	3	-26
NTPC	492	3	-7
Hindustan Copper	435	3	-35
Vedanta	427	3	-17
Tata Steel	293	2	-13
Total of Above	**6,494**	**44**	
Total Wealth Destroyed	**14,654**	**100**	

Exhibit 6

Usual suspects at the sector level too

Sector	Wealth Destroyed (INR b)	% Share
Metals / Mining	3,866	26
Utilities	1,905	13
Constn / Real Estate	1,371	9
Capital Goods	1,165	8
Oil & Gas	1,106	8
Banking & Finance	873	6
Telecom	466	3
Technology	442	3
Textiles	322	2
Chemicals & Fertilizers	210	1
Others	2,927	20
Total	**14,654**	**100**

For detailed findings, please see pages 32-42.

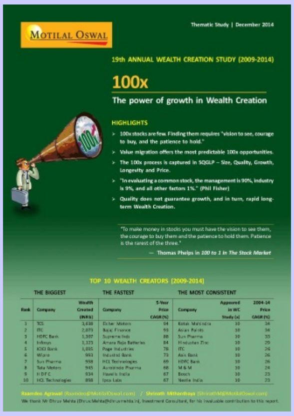
Theme 2016

Mid-to-Mega

The power of industry leadership in Wealth Creation

Preamble

100x v/s Mid-to-Mega



In our 19th Annual Wealth Creation Study last year, we studied the idea of **100x** i.e. stocks which rose 100-fold from the purchase price within 20 years.

The study, while insightful, also suggests some difficulties of **100x** stock picking:

- **100x ideas are few and far between** – we came across only 47 enduring 100x stocks over 20 years, 1994 to 2014. Hence, creating a full portfolio of 100x stocks is a challenge.
- **100x returns are very aspirational and somewhat theoretical** – The average time taken for stocks to rise 100 times turned out to be 12 years, translating into a return CAGR of 47%. To enjoy such high returns over a long period requires high level of patience, which is rare among investors.

We believe the current study – **Mid-to-Mega** – is more practical:

- The number of **Mid-to-Mega** ideas is higher at an 9-12 every year; and
- Similar to the **100x** study, the possible returns are high, but achievable within a much more realistic time window of 5 years.

We hope readers will practice one or both of the methodologies and create significant wealth from investing in equities.

1. Summary

The MQGLP lollapalooza

1.1 Definitions

We classify stocks as Mega, Mid and Mini based on market cap ranks. Mega are the top 100 stocks, Mid the next 200 and Mini all others.

1.2 What is Mid-to-Mega

Mid-to-Mega stands for a company's stock crossing over from the Mid (i.e. ranks 101 to 300) to the Mega category (i.e. top 100). This marks a significant crossover for any company, both in terms of achieving critical mass and scale in its operations, and recognition of the same by the stock markets.

1.3 Why Mid-to-Mega

There are 3 crossovers relevant to the buyers of stocks – (1) Mini-to-Mega, (2) Mini-to-Mid and (3) Mid-to-Mega. Data suggests that of the 3, **Mid-to-Mega** is the most profitable in terms of risk-adjusted returns, and most plausible in terms of associated probability. From 2000 to 2015, across 5-year time windows, **Mid-to-Mega** stocks delivered median return of 46% with relatively low risk as indicated by healthy portfolio RoE of 20% and reasonable P/E of 15-23x in the year of purchase. Probability of **Mid-to-Mega** at 5-12% is also significantly higher than the other 2 crossovers.

Exhibit 1

Mid-to-Mega portfolios – Performance profile

Period	No. of stocks	Portfolio Return *	Sensex Return	Alpha over Sensex	PAT CAGR	Average RoE	Year of Purchase	
							P/E	RoE
2000-05	17	55%	5%	50%	35%	22%	5	13%
2001-06	12	86%	26%	60%	44%	27%	3	15%
2002-07	12	82%	30%	52%	83%	21%	11	9%
2003-08	12	115%	39%	76%	67%	24%	6	8%
2004-09	11	53%	12%	41%	31%	16%	12	14%
2005-10	9	46%	22%	24%	44%	21%	15	20%
2006-11	11	32%	12%	21%	49%	32%	23	24%
2007-12	13	29%	6%	24%	32%	31%	22	29%
2008-13	19	30%	4%	26%	26%	30%	20	30%
2009-14	20	46%	18%	28%	28%	26%	15	26%
2010-15	24	33%	10%	23%	20%	26%	22	26%
Median	**12**	**46%**	**12%**	**28%**	**35%**	**26%**	**15**	**20%**
Minimum	**9**	**29%**	**4%**	**21%**	**20%**	**16%**	**3**	**8%**
Maximum	**24**	**115%**	**39%**	**76%**	**83%**	**32%**	**23**	**30%**

* Portfolio return considered here is median of stock returns

1.4 What it takes to achieve Mid-to-Mega

We believe the process to achieving **Mid-to-Mega** is captured in the acronym **MQGLP**, powered by "industry leadership inside" (inspired by the phrase, Intel Inside).
MQGLP stands for **Mid-size** (of company), **Quality** (of business and management), **Growth** (in earnings), **Longevity** (of both quality & growth) and **Price** (favorable valuation).

Industry leadership: The most striking feature emerging from this study is the key role of industry leadership in the pecking order of market cap ranks. Thus, currently, among the top 100 companies, as high as 88 are leaders in their respective industries. Even among the companies that moved from Mid-to-Mega in recent years, about 70% are industry leaders.

1.5 Mid-to-Mega – A lollapalooza effect

"Lollapalooza effect" is a term popularized by Charlie Munger, partner of Warren Buffett in Berkshire Hathaway. It stands for really big outcomes arising from multiple factors acting together. We believe **Mid-to-Mega** is one such lollapalooza effect. Multiple factors – Size, Quality, Growth, Longevity and Purchase Price – need to act together for a stock to raise its rank from Mid to Mega. We believe applying the 6 steps mentioned in section 6.1 (page 24) is a good starting point to increase the probability of the **Mid-to-Mega** lollapalooza.

We proceed to discuss the report in detail.

2. Introduction

Defining Mega, Mid, Mini

The ultimate objective of all investors is to profit from a massive and rapid expansion in the value of their stocks, i.e. higher stock price and market capitalization, without major issuances of fresh equity. Further, investors – more so individuals rather than institutional investors – prefer to buy small and midcap stocks and see them appreciate into large cap stocks.

In this report, we call large, mid and small cap stocks as **Mega**, **Mid** and **Mini**. There is no standard definition of what constitutes Mega, Mid and Mini. The popular approach is to define market cap ranges for these categories, e.g. stocks with market cap greater than US$ 5 billion are Mega, those between US$ 1 billion and US$ 5 billion are Mid, and so on.

However, such absolute market cap ranges need to be adjusted for inflation and currency across years. To overcome this, we choose a time-independent definition of the 3 categories:

- **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.

2.1 Why ranks?

In any journey, it is highly advantageous to have full clarity on the three key elements – (1) the starting point, (2) the destination, and (3) the shortest path thereto. This study has convinced us that market cap rank analysis offers investors – and even company managements – a clear roadmap of the journey that lies ahead. Consider Exhibit 2 below.

Exhibit 2

Market Cap Ranks – Relevance and roadmap

INR b	2000	2005	2010	2015	CAGR 00-15	2020 Est
GDP	19,725	31,783	63,501	126,538	13%	235,118
Total Market Cap	7,389	15,817	59,336	98,088	19%	197,289
Market Cap % of GDP	*37%*	*50%*	*93%*	*78%*		*84%*
Top 100 stocks	6,552	12,767	45,462	74,216	18%	147,967
% of Market Cap	*89%*	*81%*	*77%*	*76%*		*75%*
The Mega stocks						
Top stock	1,259	1,259	3,515	4,989	10%	9,864
% of Market Cap	*17.0%*	*8.0%*	*5.9%*	*5.1%*		*5.0%*
100th stock	8	24	104	205	24%	395
% of Market Cap	*0.1%*	*0.2%*	*0.2%*	*0.2%*		*0.2%*
				Mid-to-Mega		
The Aspirants						
300th stock (Mid)	1	5	22	38	26%	79
% of 100th stock	*15%*	*19%*	*21%*	*19%*		*20%*
500th stock (Mini)	0.4	2	8	14	27%	28
% of 100th stock	*5%*	*7%*	*7%*	*7%*		*7%*

Mini-to-Mid

Assumptions for 2020 estimates:

- **2015-20 CAGR:** GDP 13%, Total market cap 15%
- Market cap of top 100 stocks to be 75% of total market cap
- Market cap of top stock at 5% of total market cap and 100th stock at 0.2% of total market cap
- Market cap of 300th stock at 20% of 100th stock, and that of 500th stock at 7% of 100th stock

Key insights from Exhibit 2:

- The top 100 stocks are very relevant as they constitute over 75% of the total market cap.
- There is high level of consistency in the relative market caps and ranks, e.g.
  - Market cap of the top stock is settling around 5% of total market cap.
  - Likewise, market cap of the 300th stock is consistently around 20% of the top 100th stock and so on.
- There is a clear market cap roadmap for investors and company managements, e.g.
  - If the 300th company today (i.e. Mid) aspires to be in the Mega league by 2020, it will need to raise its market cap from INR 38 billion to at least INR 395 billion in 5 years – 10x, CAGR of 58%.
  - Likewise, if the 500th company today (i.e. Mini) aspires to be in the Mid league by 2020, it will need to raise its market cap from INR 14 billion to at least INR 79 billion in 5 years – 5.6x, CAGR of 41%.

Having defined the terms Mega, Mid and Mini, we proceed to address the fundamental questions of **Mid-to-Mega**:

- What is **Mid-to-Mega** (Section 3)
- Why **Mid-to-Mega** (Section 4)
- What it takes to achieve **Mid-to-Mega** (Section 5) and
- How to shortlist potential **Mid-to-Mega** stocks (Section 6).

3. What is Mid-to-Mega

A significant crossover

For the purposes of this report, **Mid-to-Mega** stands for a company's stock crossing over from the Mid (i.e. ranks 101 to 300) to the Mega category (i.e. top 100). This marks a significant crossover for any company, both in terms of achieving critical mass and scale in its operations, and recognition of the same by the stock markets.

Intuitively, such a crossover implies handsome returns for its investors. Further, shorter the time taken for such **Mid-to-Mega** crossovers, higher the returns for investors. Hence, in this report, we focus on **Mid-to-Mega** within a practical time window of 5 years from the year of purchase.

Having defined **Mid-to-Mega**, we examine why this analysis and stock picking approach is worthwhile. Before that, we briefly make a case for Mega companies.

3.1 Why Mega

- **Bedrock of India's corporate sector:** The top 100 Mega companies form the bedrock of India's corporate sector and capital markets. Currently, they account for 75% of total market cap and an even higher 88% of total corporate profits. 88 of the top 100 are industry leaders i.e. No. 1, 2 or 3 in their respective businesses.
- **Mega companies are difficult to dislodge:** Data suggests that it is increasingly difficult to dislodge Mega companies from their top 100 category. There is a steady decline in the number of companies falling out of the top 100 league. Between 2000 and 2008, about 40

companies used to drop out every 5 years. That number has now come down to less than 30 (Exhibit 3).

Exhibit 4 shows that earlier, new listings of large companies like Maruti, NTPC, TCS, etc accounted for companies dropping out of the Mega category. However, more recently, the Mega companies are being replaced by those which rise from the Mid category, making a strong case for investing in potential **Mid-to-Mega** stocks.

Exhibit 3

The number of dropouts from the Mega category is falling …

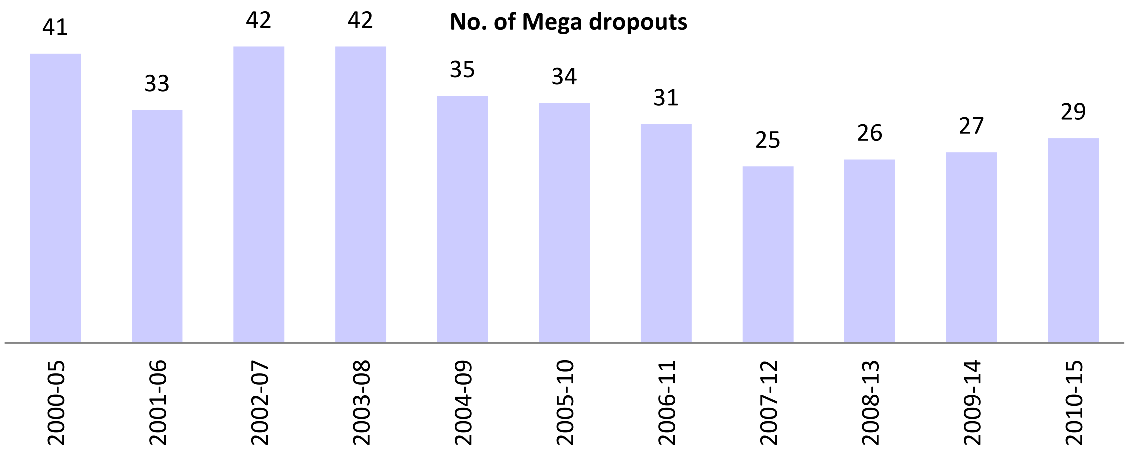
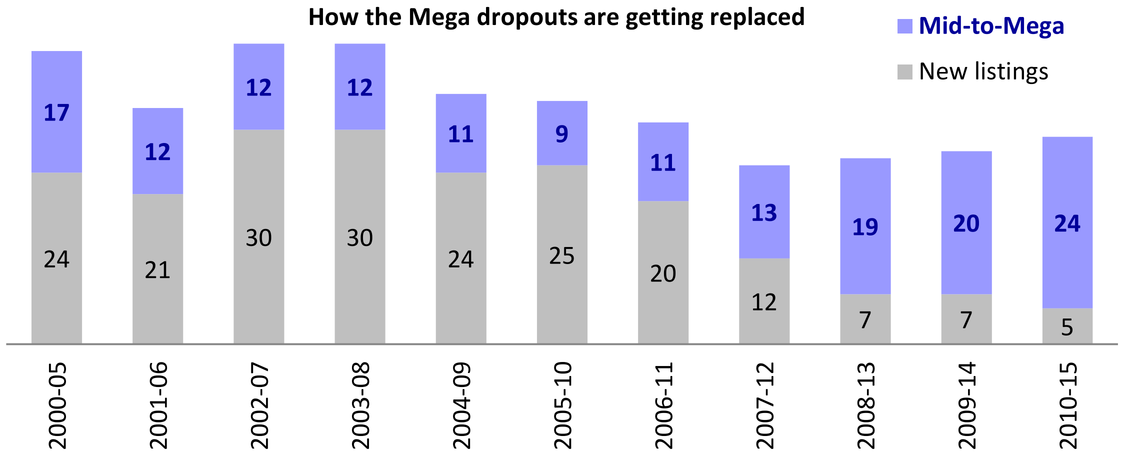


Exhibit 4

… and they are increasingly being replaced by Mid-to-Mega stocks



4. Why Mid-to-Mega

The most profitable-cum-plausible crossover

In this study, even as we focus on **Mid-to-Mega**, we have analyzed all 9 possible crossovers within the 3 categories of stocks (Exhibit 5). Based on the analysis, we have a simple answer to the question "Why Mid-to-Mega?" – **it is the most profitable-cum-plausible category crossover for investors**.

Exhibit 5

Mini, Mid, Mega – 9 possible crossovers

MINI	Mega	Move up from rank > 300 to less than 100
	Mid	Move up from rank > 300 to 101-300
	Mini	No change in category
MID	Mega	Move up from rank 101-300 to less than 100
	Mid	No change in category
	Mini	Slip down from rank 101-300 to greater than 300
MEGA	Mega	No change in category
	Mid	Slip down from rank < 100 to 101-300
	Mini	Slip down from rank < 100 to greater than 300

Of the above mentioned 9 crossovers, only 3 are relevant to the buyers of stocks –

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

Of the 3, we believe **Mid-to-Mega is the most profitable-cum-plausible crossover, adjusted for risk**. We derive this conclusion from three sources –

1. Performance profile of the **Mid-to-Mega** portfolios from 2000 through 2015
2. Stock-specific examples of **Mid-to-Mega** and
3. A 3x3 matrix capturing the crossover returns and associated probabilities.

4.1 Performance profile of Mid-to-Mega portfolios

Exhibit 6 captures the various performance metrics of **Mid-to-Mega** portfolios through the years 2000 to 2015. Under each metric, the median value across the years is aspirational, and yet within the realms of possibility.

A realistic reading of the table would be thus – in any given year, it should be possible to construct a **Mid-to-Mega** portfolio of Indian equities with the following attributes:

• Number of stocks	:	**9 to 12**
• Portfolio RoE in the year of purchase	:	**20%**
• Portfolio P/E in year of purchase	:	**15x to 23x**
• Expected PAT CAGR over the next 5 years	:	**20-35%**
• Expected return CAGR over the next 5 years	:	**29-46%**
• Expected alpha over benchmark (Sensex)	:	**21-28%**

The healthy RoE and modest P/E in the year of purchase indicate lower risk to earn the high expected return CAGR and alpha over benchmark.

Exhibit 6

Mid-to-Mega portfolios – Performance profile

Period	No. of stocks	Portfolio Return *	Sensex Return	Alpha over Sensex	PAT CAGR	Average RoE	Year of Purchase P/E	Year of Purchase RoE
2000-05	17	55%	5%	50%	35%	22%	5	13%
2001-06	12	86%	26%	60%	44%	27%	3	15%
2002-07	12	82%	30%	52%	83%	21%	11	9%
2003-08	12	115%	39%	76%	67%	24%	6	8%
2004-09	11	53%	12%	41%	31%	16%	12	14%
2005-10	9	46%	22%	24%	44%	21%	15	20%
2006-11	11	32%	12%	21%	49%	32%	23	24%
2007-12	13	29%	6%	24%	32%	31%	22	29%
2008-13	19	30%	4%	26%	26%	30%	20	30%
2009-14	20	46%	18%	28%	28%	26%	15	26%
2010-15	24	33%	10%	23%	20%	26%	22	26%
Median	**12**	**46%**	**12%**	**28%**	**35%**	**26%**	**15**	**20%**
Minimum	**9**	**29%**	**4%**	**21%**	**20%**	**16%**	**3**	**8%**
Maximum	**24**	**115%**	**39%**	**76%**	**83%**	**32%**	**23**	**30%**

* Portfolio return considered here is median of stock returns

4.2 Stock specific examples of Mid-to-Mega

We found **Mid-to-Mega** to be time and sector agnostic. Thus, every 5-year window offered **Mid-to-Mega** opportunities across sectors.

We present below the rank improvement and stock performance trend of 6 companies with varied business models, 2 each from 2010-15, 2005-10 and 2000-05. The finding is akin to stating the obvious – all companies which crossed over from **Mid-to-Mega** have handsomely outperformed the benchmark.

Exhibit 7

Example 1: Motherson Sumi (2010-15)

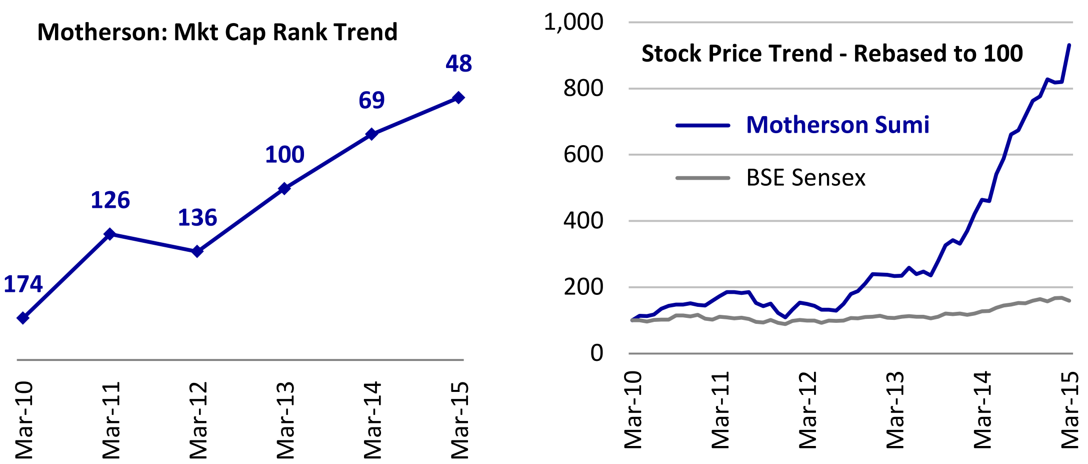
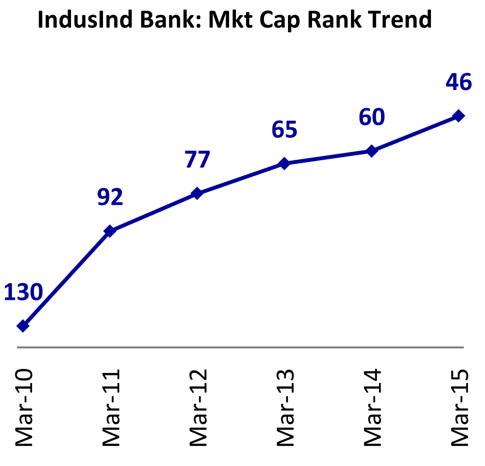


Exhibit 8

Example 2: IndusInd Bank (2010-15)



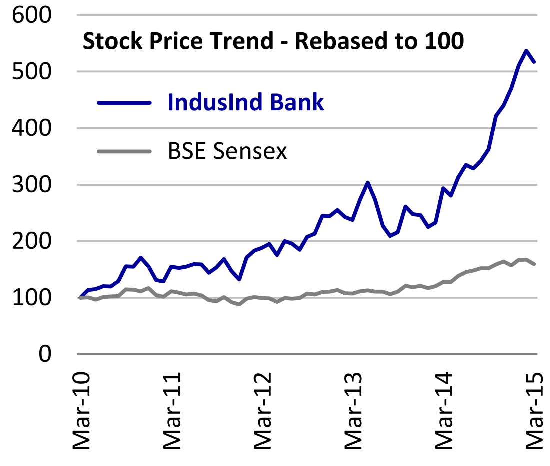
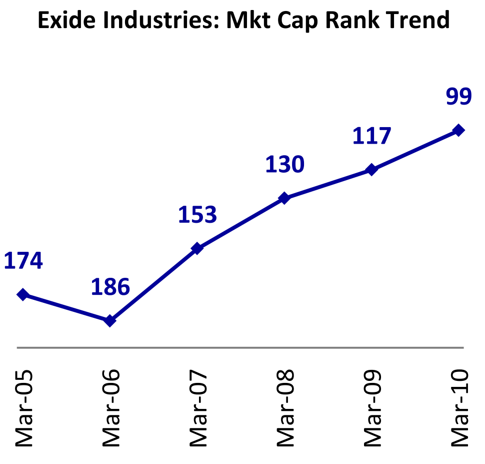


Exhibit 9

Example 3: Exide Industries (2005-10)



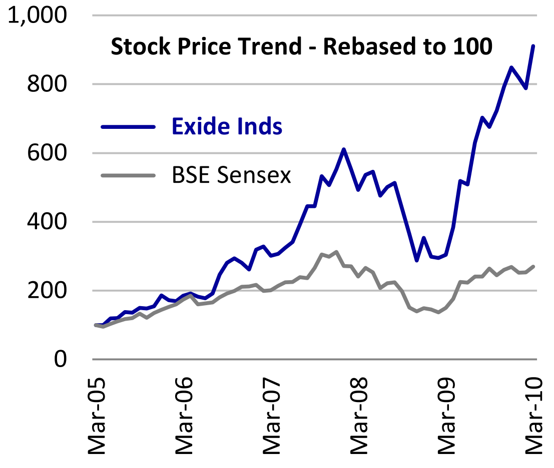
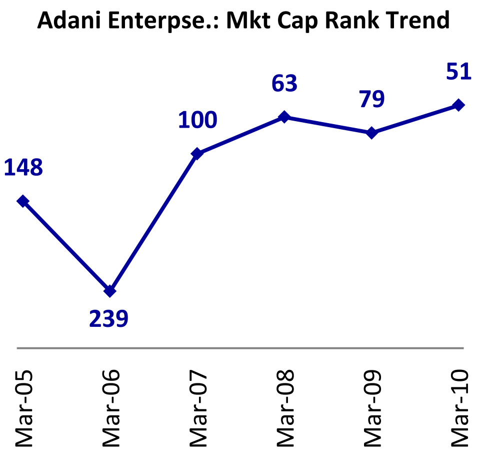


Exhibit 10

Example 4: Adani Enterprises (2005-10)



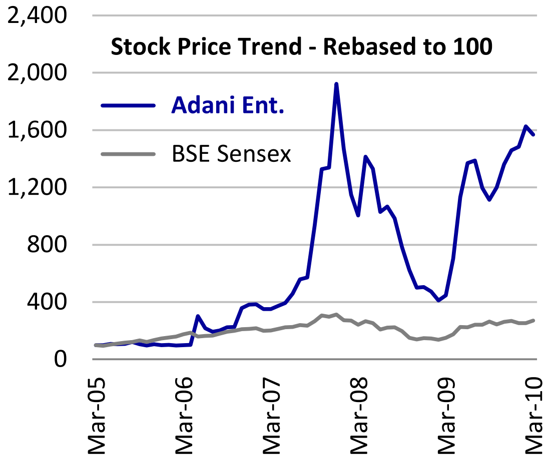
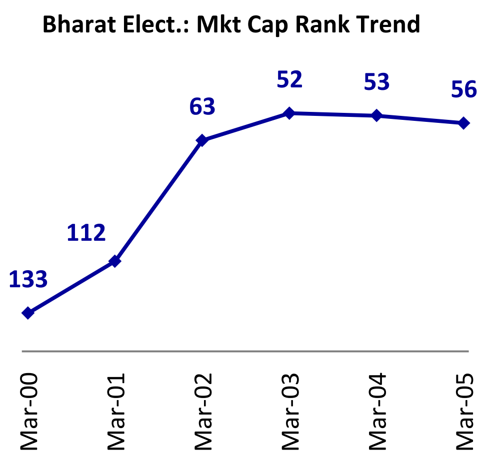


Exhibit 11

Example 5: Bharat Electronics (2000-05)



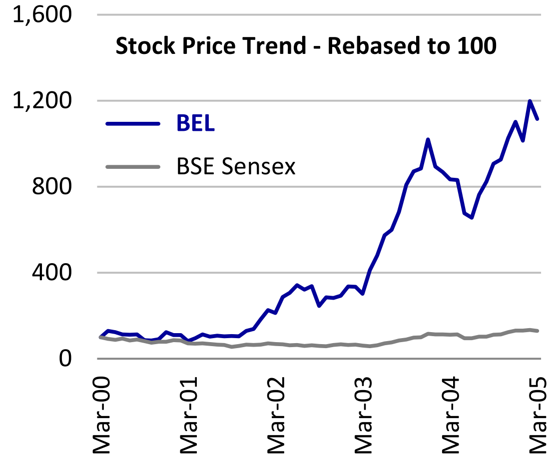
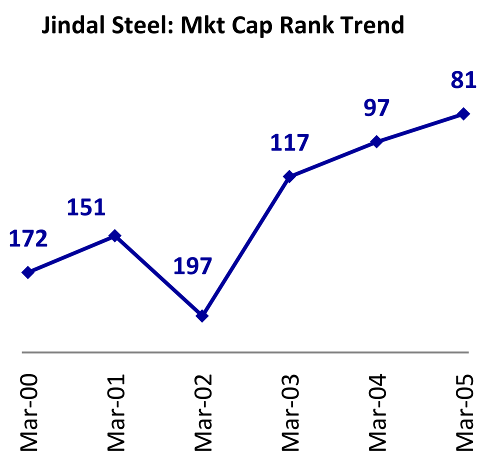
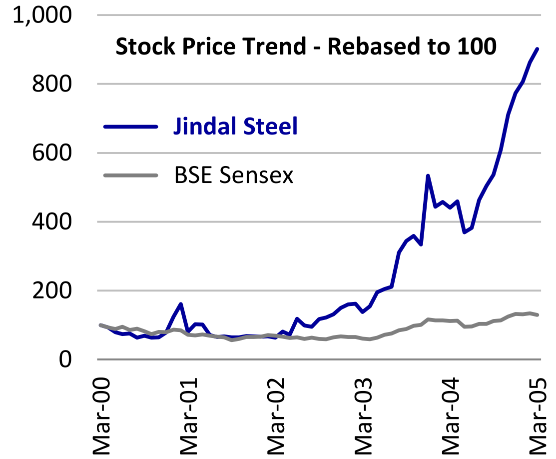


Exhibit 12

Example 6: Jindal Steel (2000-05)





4.3 3x3 matrix of crossover returns and associated probabilities

Sections 4.1 and 4.2 prove why **Mid-to-Mega** is the most profitable crossover for investors. Here, we make a case for why it is also the most plausible, based on probabilities of successful crossovers.

We studied all 9 crossover possibilities in 3 time windows of 5 years – 2000-2005, 2005-2010 and 2010-2015. The findings for 2010-15 are detailed in Exhibit 13. An illustrative reading of the 3 buy-case crossovers is as follows –

- **Mini-to-Mega** : 68% return; 3 stocks out of 1,908, i.e. low probability of 0.2%
- **Mini-to-Mid** : 38% return; 64 stocks out of 1,908, i.e. again low probability of 3.4%
- **Mid-to-Mega** : 33% return; 24 stocks out of 200, i.e. higher probability of 12%.

Exhibit 13

2010-15: Crossover findings

From	To	No. of stocks	2010-15 return CAGR *	Alpha over Sensex **	Base of stocks	Probability
MINI	**Mega**	**3**	**68%**	**58%**	**1,908**	**0.2%**
	Mid	**64**	**38%**	**28%**	**1,908**	**3.4%**
	Mini	1,841	0%	-10%	1,908	96.5%
MID	**Mega**	**24**	**33%**	**23%**	**200**	**12.0%**
	Mid	88	9%	-1%	200	44.0%
	Mini	88	-19%	-29%	200	44.0%
MEGA	Mega	71	11%	1%	100	71.0%
	Mid	26	-13%	-23%	100	26.0%
	Mini	3	-32%	-42%	100	3.0%

* median; ** Sensex CAGR over 2010-15 is 10%

The above trends are broadly similar for the other 2 time windows as seen in Exhibit 14. Thus, the probability of **Mid-to-Mega** is the highest among the 3 crossovers.

Exhibit 14

Mini, Mid, Mega crossovers – 2000-05, 2005-10, 2010-15

Note: Figures in brackets indicate number of companies

2000-05: Median return CAGR

Market return : 5%

TO \ FROM	Mini	Mid	Mega
Mega	158% (1)	55% (17)	21% (59)
Mid	57% (58)	21% (90)	-4% (28)
Mini	19% (1,039)	-3% (93)	-40% (13)
Total stocks	1,098	200	100

2005-10: Median return CAGR

Market return : 22%

TO \ FROM	Mini	Mid	Mega
Mega	76% (2)	46% (9)	27% (66)
Mid	61% (25)	24% (89)	9% (32)
Mini	11% (1,465)	4% (102)	-32% (3)
Total stocks	1,492	200	100

2010-15: Median return CAGR

Market return : 10%

TO \ FROM	Mini	Mid	Mega
Mega	68% (3)	33% (24)	11% (71)
Mid	38% (64)	9% (88)	-13% (26)
Mini	0% (1,841)	-19% (88)	-32% (3)
Total stocks	1,908	200	100

Based on the above findings, we draw up a matrix, which captures the returns and probability of the same in each crossover (Exhibit 15).

Mid-to-Mega may indeed have the highest probability among the 3 buy crossovers. However, in absolute terms, probability of success is still very low at 5-12%. This implies significant effort is required to achieve the high returns delivered by a successful **Mid-to-Mega** stock/portfolio.

To improve the chances of success, investors need to first understand what it takes to achieve **Mid-to-Mega**. This is the core of this study, and is detailed in the next section.

Exhibit 15

Mini, Mid, Mega crossovers – Returns and probability matrix

TO \ FROM	Mini	Mid	Mega
Mega	**Highest returns** Very low probability	**Strong returns** Low-to-Medium probability	**Market Performance** High probability
Mid	**Strong returns** Low probability	**Market Performance** High probability	**Underperformance** Medium probability
Mini	**Underperformance** Very high probability	**Underperformance** Medium probability	**Massive capital loss** Low probability

5. What it takes to achieve Mid-to-Mega

MQGLP powered by "industry leadership inside"

We believe the process to achieving **Mid-to-Mega** is captured in the acronym **MQGLP**, powered by "industry leadership inside" (inspired by the phrase, Intel Inside). MQGLP stands for **Mid-size** (of company), **Quality** (of business and management), **Growth** (in earnings), **Longevity** (of both quality & growth) and **Price** (favorable valuation). We discuss each of these elements in the following sections.

5.1 M – Mid-size

The starting point of the **Mid-to-Mega** journey is Mid-size of the company, defined herein as market cap rank from 101 to 300. Companies in this category have already achieved certain size and scale of operations, and are well known in the stock market. They typically have a fairly long track record of published financial data, which allows for informed investment decision-making.

5.2 Q – Quality

There are two aspects to Q in MQGLP – (1) Quality of business and (2) Quality of management.

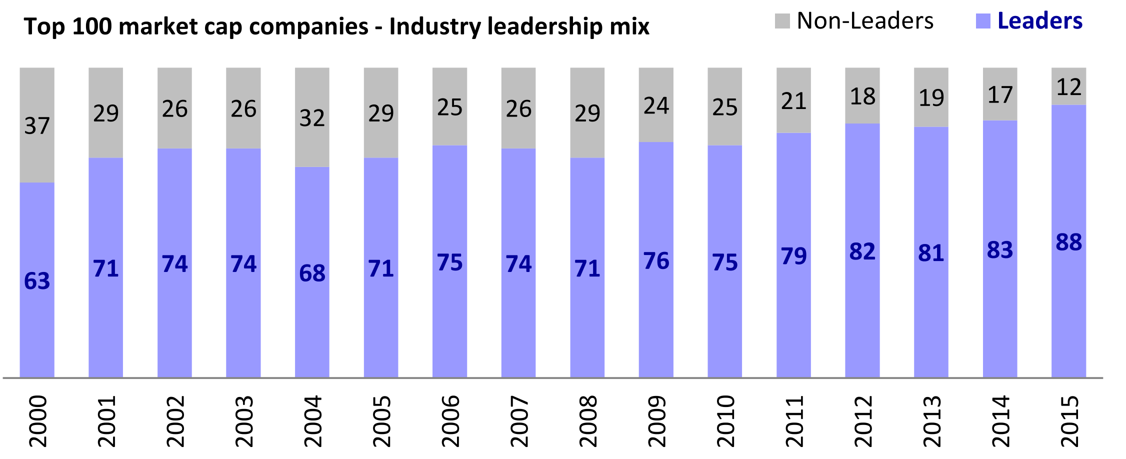
5.2.1 Quality of business

We discuss two issues under Quality of business – (1) Industry leadership and (2) Economic Moat.

1. **Industry leadership:** The most striking feature emerging from this study is the key role of industry leadership in the pecking order of market cap ranks. Thus, **currently, among the top 100 Mega companies, as high as 88 are leaders in their respective industries**. Further, the number of leaders in the top 100 companies is continuously rising (Exhibit 16).
   (**Note:** For the purposes of this report, industry leadership implies that a company is No. 1, 2 or 3 by revenue in its industry or market segment.)

Exhibit 16

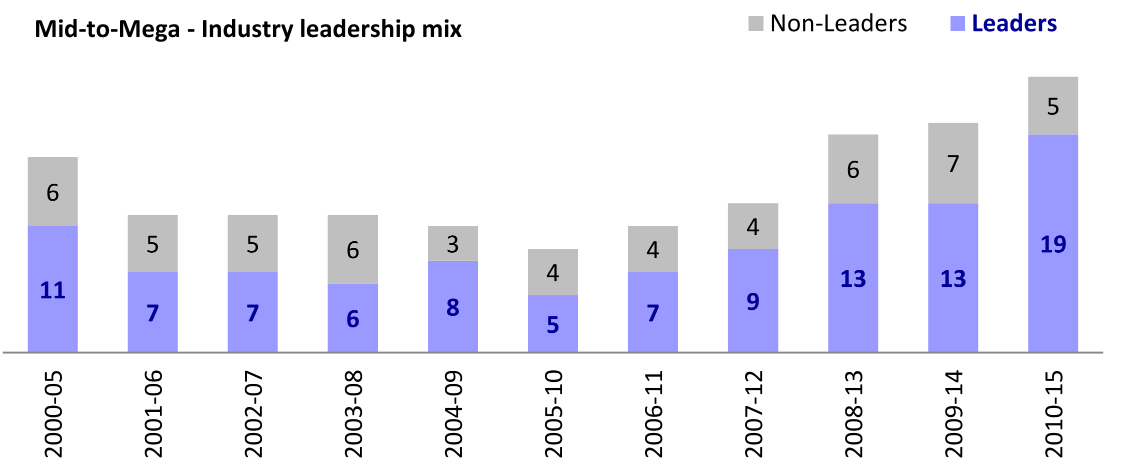
Number of industry leaders in the top 100 market cap companies is continuously rising

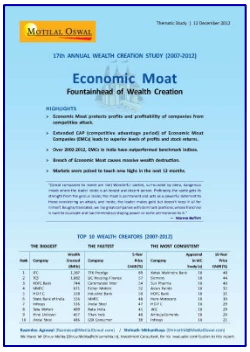


Equally interesting is that even among the companies that have moved from **Mid-to-Mega** in recent years, 70% are industry leaders, and this trend too is rising (Exhibit 17). The rising trend of industry leadership statistically confirms the intuitive understanding that the larger companies are increasingly becoming more relevant to the economy and the stock markets.

Exhibit 17

Number of industry leaders among Mid-to-Mega companies is also rising





To read our Wealth Creation Study on Economic Moat, visit www.motilaloswal.com

2. **Economic Moat:** The concept of 'Economic Moat' has its roots in the traditional moat. A moat is a deep, wide trench, usually filled with water, surrounding a castle or fortified place. In many cases, the waters are also infested with sharks and crocodiles to further keep enemies at bay, and the inhabitants safe.

Akin to the traditional moat, Economic Moat protects a company's profits from being attacked by competitive forces. Two key indicators to test whether a company enjoys Economic Moat or not are:

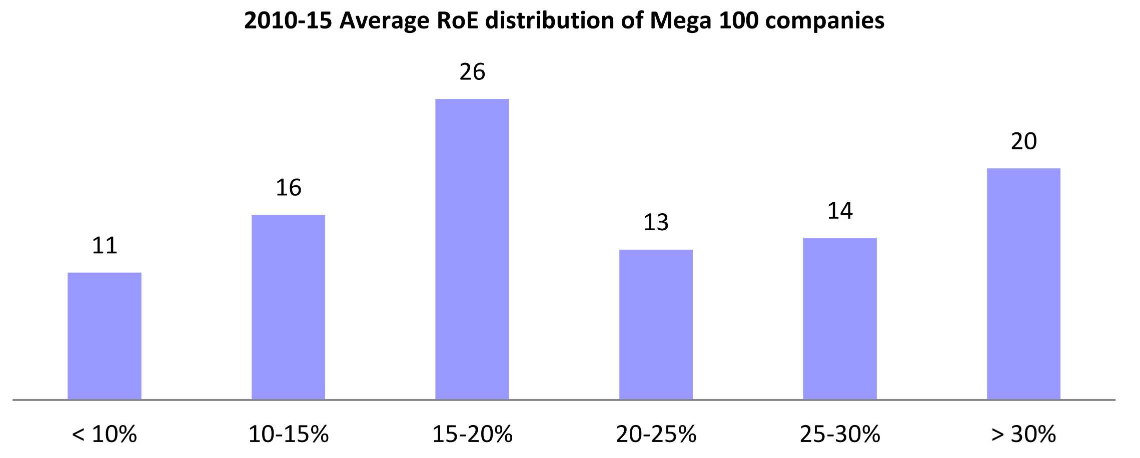
(1) A distinct value proposition that gives the company an edge over its competitors, and

(2) Return on Equity consistently higher than cost of equity (in the Indian context, cost of equity is 15%, which is the long-period return of benchmark equity indices).

73 of the top 100 Mega companies have 5-year average RoE higher than 15% (Exhibit 18). This juxtaposed with the fact that 88 of the top 100 are industry leaders establishes presence of strong moats, and partly explains why it is increasingly becoming difficult to dislodge the Megas.

Exhibit 18

73 of the 100 Mega companies enjoy some version of Economic Moat



5.2.2 Quality of management

The management of a company is the most important factor for its successful **Mid-to-Mega** journey. We believe there are 3 key aspects to quality of management:

1. Unquestionable integrity
2. Demonstrable competence and
3. Growth and profit mindset.

All of the above are subjective and non-quantifiable issues. Thus, **assessing quality of management is a true art rather than science**. In Exhibit 19, we list some indicators which can serve as a broad checklist for this process.

Exhibit 19

Broad indicators to judge quality of management

Management Quality aspect	Indicators
1. Unquestionable integrity	• Impeccable track record of corporate governance, fully respecting the law of the land.
	• Concern for all stakeholders (and not only the majority shareholders). Other stakeholders include customers, employees, debt-holders, government, community, and minority shareholders.
	• Paying full tax and a well-articulated dividend policy are key favorable indicators of management integrity. Corporate empire-building to the detriment of minority shareholders is a negative indicator.
2. Demonstrable competence	• Excellence in strategic planning and execution.
	• The above should mainly reflect in the company enjoying a sustainable competitive advantage over its peers, reflecting by way of above-average return on capital (RoE, RoCE).
	• "Keeping the growth going" is yet another key indicator of management competence.
3. Growth & profit mindset	• Long-range profit outlook, i.e. ensuring sufficient resources go into long-term issues like product development, brand building, capacity creation/expansion, succession planning, etc.
	• Efficient capital allocation including decisions like organic or inorganic growth, same-franchise or diversified growth, domestic or overseas growth, etc.
	• Persisting with growth plans despite temporary setbacks.

Change in management/ownership: All cases of change in management and/or ownership also need to be closely examined as they hold potential to alter the fortunes of companies, e.g.

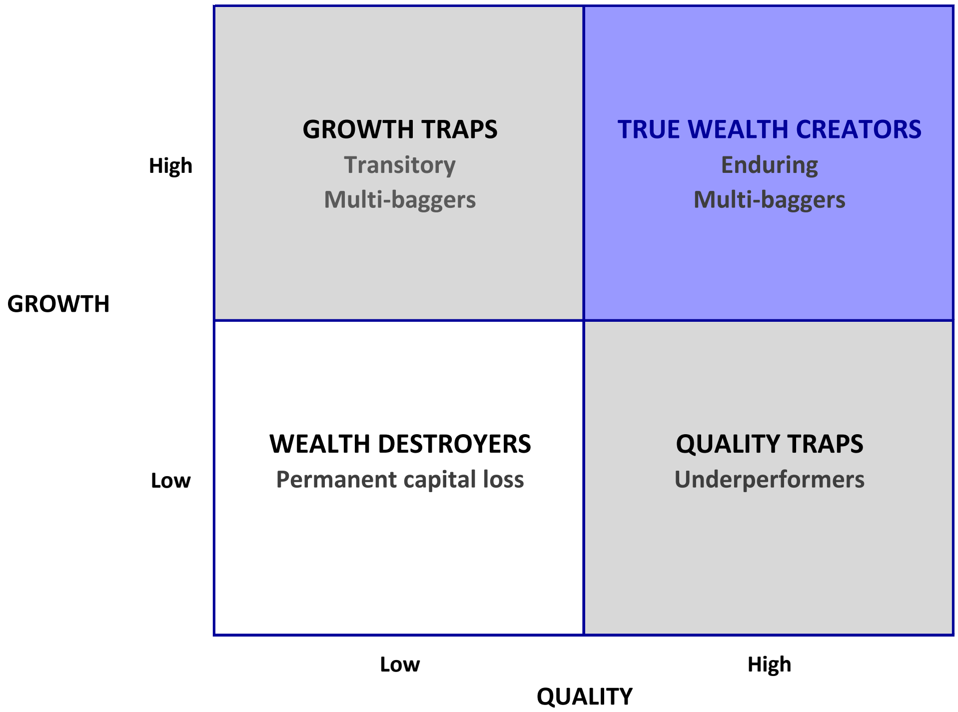
- Induction of N Chandrasekaran as MD & CEO of TCS
- Induction of Ramesh Sobti as MD & CEO of IndusInd Bank
- Acquisition of United Breweries by Heineken
- Acquisition of United Spirits by Diageo.

5.3 G – Growth

For long-term investing, Quality or Moat is a necessary condition, but not sufficient. There is enough empirical evidence that long-period stock price returns are almost equal to long-period earnings growth. High quality sans growth leads to what we call the **Quality Trap** (Exhibit 20) i.e. typically healthy RoE, high free cash flow and high dividend payouts, which keeps valuations high, but no earnings growth. Exhibit 21 captures some of the recent Quality Traps.

Exhibit 20

The Quality-Growth Matrix



Matrix quadrants in brief:

1. **Low-Quality-Low-Growth:** Such companies and their stocks are clearly avoidable.
2. **Low-Quality-High-Growth:** Such companies may prove to be **Growth Traps**. The high growth in these companies is most likely due to cyclical upturns, but gets mistaken for secular high growth. If bought very cheap, such stocks may still end up as multi-baggers, but at best transitory.
3. **High-Quality-Low-Growth:** Such companies may prove to be **Quality Traps**. The high quality in these companies blinds investors to the possibility that these companies may not be able to grow their earnings at a healthy pace due to low underlying base rate (e.g. **Castrol** in lubricants, **Colgate** in oral care, **Hindustan Unilever** in soaps & detergents, etc). As a result, stock performance remains muted.
4. **High-Quality-High-Growth:** These are the **Enduring Multi-baggers**, especially if bought at favorable valuations.

Exhibit 21

Some recent Quality Traps

Company	2010-15			
	Average RoE	PAT CAGR	Price CAGR	Alpha *
Hero MotoCorp	51%	2%	6%	-4%
Wipro	25%	9%	8%	-2%
Hindustan Zinc	21%	10%	6%	-4%
ACC	19%	-6%	10%	0%

* 2010-15 Sensex CAGR is 10%

5.3.1 Importance of growth

Earnings growth is a conundrum – it is a very important determinant of stock prices, and yet, very difficult to determine! Further, growth is uniquely specific to each company, and hence, does not yield itself to standard frameworks. Our view is that while one may not be able to precisely estimate growth, there are situations that favor occurrence of high earnings growth.

5.3.2 High-growth situations

We analyzed the growth pattern of two sets of Mega companies – (1) those which clocked FY10-15 sales CAGR of at least 20%, and (2) those which clocked FY10-15 PAT CAGR of at least 25%. This analysis helped us identify the following 8 high-growth situations:

1. Value Migration
2. Sustained industry tailwind
3. Small base with large opportunity
4. New large investment getting commissioned
5. Inorganic growth through M&A
6. Consolidation of competition
7. Operating & Financial leverage
8. Turnaround from loss to profit.

5.3.3 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 catalysts of the **Mid-to-Mega** journey, 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 public sector banks to private banks.

Exhibit 22

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
Titan Industries	Unorganized jewelry market	Organized jewelry retailing
Hero MotoCorp	Scooters	Motorcycles
Interglobe Aviation (Indigo)	Full service airlines and railways	Low cost airlines

5.3.4 Sustained sector tailwind

A few sectors provide a sustained tailwind for all their constituent companies to clock high growth over long periods of time e.g. banking, IT, pharma, autos, housing finance, feminine hygiene, telecom services (both voice and data), etc.

5.3.5 Small base with large opportunity

Some companies have managed to launch a new or niche business with a huge opportunity. Their own small starting base ensures sustained growth for several years to come e.g.

- Bajaj Finance venturing into consumer finance
- Page Industries in branded innerwear

- GRUH Finance in mortgages
- Eicher Motors' niche leisure bike business taking off
- Symphony launching air coolers.

5.3.6 New large investment getting commissioned

Companies that commission new large investments are likely to reap benefits of the same for the initial few years at least, e.g.

- Cairn India's oilfields in Rajasthan getting commissioned
- Indian Oil Corporation expected to fully commission its 15 million ton refinery at Paradip by end-FY16.

5.3.7 Inorganic growth through M&A

Successful mergers and acquisitions translate into high sales and earnings growth for the acquiring company e.g.

- Motherson Sumi acquiring several auto ancillary companies overseas
- Tech Mahindra acquiring the beleaguered Satyam Computers
- Ultratech acquiring several cement plants, the latest from Jaypee group.

5.3.8 Consolidation of competition

In rare cases, consolidation of competition ensures that incremental business growth accrues to the remaining incumbents, e.g.

- Marico acquired Nihar, a key competitor to its coconut oil brand Parachute. This lowered the level of competition, and ensured high growth for the company.
- In malted drinks, Nestle withdrew from India its global leading brand, Milo. This left the marketplace wide open for incumbent GlaxoSmithKline Consumer's brand, Horlicks.

5.3.9 Operating & Financial leverage

In specific situations, usually due to management action, companies manage high earnings growth without significant revenue growth. This is mainly triggered by trimming fixed costs (leading to operating leverage) or controlling interest cost (leading to financial leverage).

- **Operating Leverage example:** Bata's CY08 to CY13 PAT CAGR was 28% on the back of only 16% CAGR in Sales. This was because employee cost over the period fell sharply from 17% of Sales to 11% (Exhibit 23).
- **Operating-cum-Financial Leverage example:** Bharti Infratel's FY11 to FY15 PAT CAGR was 35% on the back of only 8% CAGR in Sales. Higher EBITDA Margin apart, Interest cost to Sales halved from 5% to 2.5% driving Financial leverage (Exhibit 24).

Exhibit 23

Bata: Operating leverage of lower employee costs

INR m	CY08	CY13	CAGR
Sales	9,870	20,652	**16%**
Expenditure	8,977	17,416	**14%**
Employee cost	1,701	2,234	**6%**
% of Sales	17%	11%	
EBITDA	**892**	**3,236**	**29%**
EBITDA Margin	9.0%	15.7%	
Adjusted PAT	**606**	**2,047**	**28%**
PAT Margin	6.1%	9.9%	

Exhibit 24

Bharti Infratel: Operating & Financial leverage

INR b	FY11	FY15	CAGR
Sales	85.1	116.7	8%
Expenditure	53.8	66.6	6%
EBITDA	**31.3**	**50.0**	**12%**
EBITDA Margin	36.8%	42.9%	
Interest cost	4.3	2.9	-10%
% of sales	5.1%	2.5%	
Adjusted PAT	**5.4**	**17.7**	**35%**
% of sales	6.3%	15.2%	

5.3.10 Turnaround from loss to profit

In rare cases, again led by management action, companies manage a successful turnaround from loss to profit, e.g. Tata Motors and more recently Gujarat Pipavav Port.

Exhibit 25
Tata Motors: Turnaround in JLR

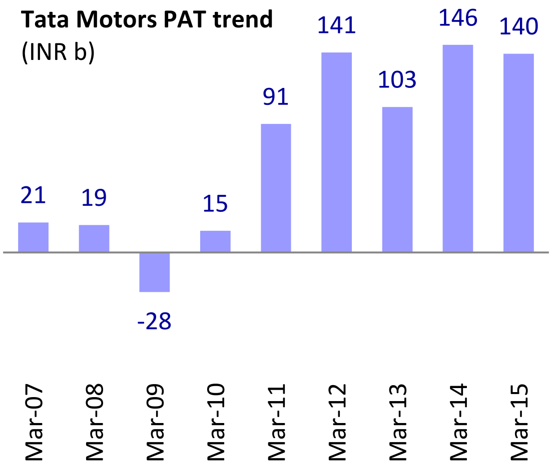
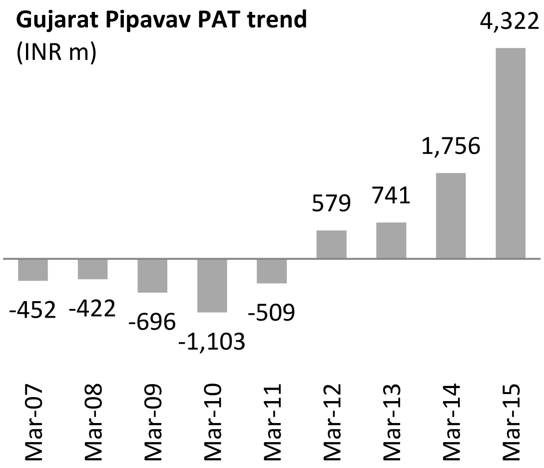


Exhibit 26
Guj. Pipavav: New management led turnaround



5.4 L – Longevity

Apart from enjoying high quality of business and management and healthy rate of earnings growth, **Mid-to-Mega** companies also need to sustain both quality and growth. Here, it may be interesting to note that during the 10 years 2005 to 2015, 62 Mega companies maintained their market cap rank within the top 100. Going further back, in the 20 years 1995 to 2015, 40 companies maintained their rank within the top 100.

In the context of longevity, competence of management is tested at two levels –

1. Extending CAP (i.e. Competitive Advantage Period); and
2. Delaying mean reversion of growth rate.

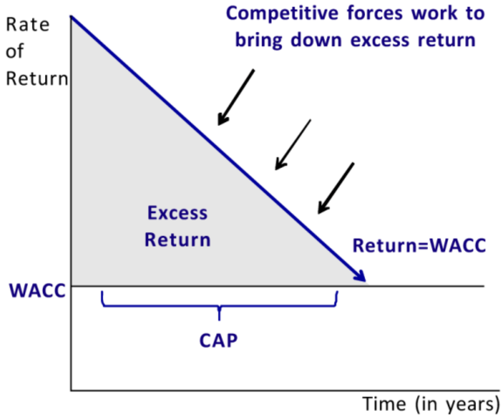
5.4.1 Extending CAP

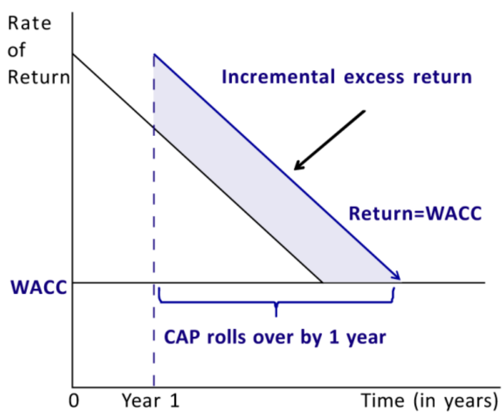
Competitive advantage period (CAP) is the time during which a company generates returns on investment that significantly exceed its cost of capital. Economic laws suggest that if a company earns supernormal return on its invested capital, it will attract competitors who will accept lower returns, eventually driving down overall industry returns to economic cost of capital, and sometimes even below it.

However, a company with a great business and great management sustains its superior rates of return and keeps extending its CAP. This creates incremental excess return both for the company and in turn for its equity investors. (The idea of CAP and its extension is depicted in Exhibit 27.)

Exhibit 27

Companies usually enjoy a certain CAP … **… but successful companies tend to extend it**





5.4.2 Delaying mean reversion of growth rate

The other aspect of longevity is about delaying the mean reversion of growth rates. After the initial hyper and high growth phases, rates tend to taper off to the mean rate (which is usually the nominal GDP growth rate). This is due to both competition and also the company's own high-base effect. However, competent managements can delay such reversion to mean either by (1) new streams of organic growth, and/or (2) inorganic growth via judicious, earnings-accretive and value-enhancing acquisitions.

5.5 P – Price

Growth in stock price is a multiplicative function of growth in earnings and growth in valuation. The **Mid-to-Mega** phenomenon ideally needs both these legs of growth to kick in. The G of MQGLP addresses earnings growth whereas P (i.e. favorable Price of purchase) is designed to address valuation growth.

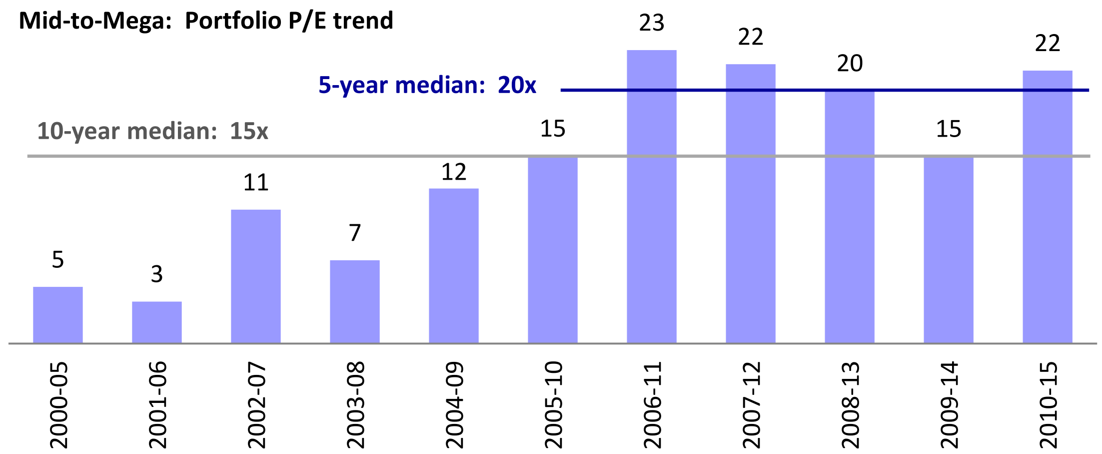
The simplest way to improve the odds of valuation growth is by ensuring favorable valuation at the time of purchase, typically implying low P/E. However, in the **Mid-to-Mega** situation, expecting to get stocks at very low P/Es is unreasonable, as they are well-known and widely tracked by analysts and investors.

Further, in certain situations, low P/E may not be the sole determinant of favorable valuation e.g. during bottom-of-cycle, earnings of cyclical stocks are depressed, leading to high P/Es; likewise, where companies are expected to turn from loss to profit, current P/E cannot be calculated.

The last 10 5-year windows suggest **Mid-to-Mega** portfolio P/E of 15x in the year of purchase. However, in the last 5 periods, the purchase P/E of **Mid-to-Mega** portfolios has been higher at 20x (Exhibit 28).

Exhibit 28

Mid-to-Mega portfolio P/E should ideally be around 20x



Having studied the MQGLP elements of **Mid-to-Mega**, the next challenge is to apply them and shortlist potential stocks.

6. How to shortlist potential Mid-to-Mega stocks

Backtesting the MQGLP lollapalooza

We backtested MQGLP to examine its efficacy in picking **Mid-to-Mega** stocks and/or delivering superior portfolio returns. In this section, we present the findings of such backtesting, and in the process, suggest a 6-step approach to shortlist stocks which hold the potential to successfully complete the **Mid-to-Mega** journey.

6.1 Backtesting of MQGLP

We reproduce here the more recent performance profile of Mid-to-Mega portfolios.

Exhibit 29

Mid-to-Mega portfolios – Performance profile

Period	No. of stocks	Portfolio Return *	Sensex Return	Alpha over Sensex	PAT CAGR	Average RoE	Year of Purchase P/E	Year of Purchase RoE
2005-10	9	46%	22%	24%	44%	21%	15	20%
2006-11	11	32%	12%	21%	49%	32%	23	24%
2007-12	13	29%	6%	24%	32%	31%	22	29%
2008-13	19	30%	4%	26%	26%	30%	20	30%
2009-14	20	46%	18%	28%	28%	26%	15	26%
2010-15	24	33%	10%	23%	20%	26%	22	26%
Median	**16**	**33%**	**11%**	**24%**	**30%**	**28%**	**21**	**26%**
Minimum	**9**	**29%**	**4%**	**21%**	**20%**	**21%**	**15**	**20%**
Maximum	**24**	**46%**	**22%**	**28%**	**49%**	**32%**	**23**	**30%**

* Portfolio return considered here is median of stock returns

We juxtapose findings from Exhibit 29 with our MQGLP formula to arrive at the following backtesting approach –

1. **Starting list:** Start with the 200 Mids (i.e. ranks 101 to 300) for the respective year (M of MQGLP).
2. **20% RoE for Quality of business:** Filter these 200 stocks for year of purchase RoE of at least 20% (MQGLP's Quality of business quantified in Exhibit 29 by minimum portfolio RoE of 20% in year of purchase).
3. **Industry leaders:** From the above list, select industry leaders (complying with MQGLP's "industry leadership inside" phenomenon, discussed earlier). Further, we find that in cases of Value Migration (e.g. IT, healthcare) and very high industry tailwind (e.g. mortgages), even non-leaders scale up significantly. So, we include them along with industry leaders.
4. **20% PAT growth:** From the list arrived at post step 3, select companies with preceding 2-year PAT CAGR of 20%. (MQGLP's Growth in earnings, quantified by minimum forward PAT CAGR of 20% from Exhibit 29. The rationale here is that the growth momentum expected ahead should already be visible in the recent past).
5. **Seculars for Longevity:** Next, prefer seculars over cyclicals (MQGLP's Longevity is best exhibited by secular companies rather than cyclicals).
6. **Favorable purchase price:** Finally, decide a suitable P/E for the stock based on a subjective call on competence, integrity and growth mindset of the management. Still, as a thumb rule, prefer P/Es below 25x, barring exceptional cases. (This corresponds to matching MQGLP's Quality of management in deciding favorable Purchase Price).

We consistently applied the above steps to Mids across rolling 5-year time windows from 2005 to 2015. Our findings are summarized in Exhibit 30. Barring 2005-10, the approach listed above successfully achieved both objectives –

- Significantly improving the probability of identifying **Mid-to-Mega** stocks; and
- In the process, delivering handsome returns and alpha over benchmark.

Exhibit 30

MQGLP backtesting results

Years	No. of stocks	No. of MTMs	% of MTM	Portfolio return	Sensex	Alpha
2005-10	7	0	0%	26%	22%	4%
2006-11	6	1	17%	25%	12%	13%
2007-12	9	5	56%	29%	6%	24%
2008-13	9	6	67%	32%	4%	28%
2009-14	15	7	47%	39%	18%	20%
2010-15	9	4	44%	33%	10%	23%

Note: MTM stands for Mid-to-Mega cases

In Exhibit 31, we detail the 2010-15 backtesting results of 2010-15 to reinforce efficacy of the 6-step process.

Exhibit 31

Mid-to-Mega: 6-step backtesting results – 2010-15

Stock	Backtesting criteria						Results			
	2010 Mkt Cap Rank	2010 RoE	Company Status	PAT CAGR 08-10	Secular	P/E 2010	PAT CAGR 10-15	Price CAGR 10-15	Mkt Cap Rank 2015	Mid-to-Mega
Aurobindo Pharma	160	37	VM *	52%	Yes	10	23%	45%	54	Yes
MRF	278	20	Leader	21%	Yes	10	30%	42%	125	No
Pidilite Industries	150	35	Leader	26%	Yes	21	13%	39%	64	Yes
Mindtree	285	34	VM *	46%	Yes	11	19%	35%	150	No
CRISIL	233	41	Leader	39%	Yes	21	11%	34%	127	No
Torrent Pharma	176	31	VM *	30%	Yes	21	27%	34%	102	No
Bajaj Finserv	165	22	Leader	L to P	Yes	9	-26%	33%	89	Yes
LIC Housing Finance	110	23	Leader	33%	Yes	12	15%	20%	90	Yes
Apollo Tyres	220	39	Leader	48%	Yes	6	12%	19%	175	No
							Portfolio average	**33%**		
							Sensex	**10%**		
							Alpha	**23%**		

* VM stands for Value Migration beneficiary

6.2 Mid-to-Mega – a lollapalooza effect

“Lollapalooza effect” is a term popularized by Charlie Munger, partner of Warren Buffett in Berkshire Hathaway. It stands for really big outcomes arising from multiple factors acting together.

We believe **Mid-to-Mega** is one such lollapalooza effect. Many of the multiple factors – Size, Quality, Growth, Longevity and Purchase Price – need to act together for a stock to raise its rank from Mid to Mega. We believe applying the 6 steps mentioned in section 6.1 is a good starting point to increase the probability of the **Mid-to-Mega** lollapalooza.

“I’ve been searching for lollapalooza results all my life, so I’m very interested in models that explain their occurrence … Really big effects, lollapalooza effects, will often come only from large combinations of factors.” *– Charlie Munger*

7. Mega-to-Mid

Lessons on how equity investing could go wrong

As a tailpiece to the **Mid-to-Mega** study, we also make a quick assessment of its converse – Mega-to-Mid i.e. companies whose rank slipped from the top 100.

2005 through 2015, there are 161 cases of companies slipping from Mega-to-Mid category (the number of companies is 112, implying some companies have slipped in more than one 5-year time window.)

We analyzed the fundamental cause of Mega-to-Mid instances, which we present in Exhibits 32 and 33. The findings hold lessons which hold true in all cases of equity investing.

Exhibit 32
Why Mega-to-Mid happens

Cause of Mega-to-Mid	No. of cases	% of total
Cyclical downturns	57	35%
Management lapses *	46	29%
Reverse Value Migration	19	12%
Capital misallocation	13	8%
Fads	11	7%
Quality Trap	4	2%
Others	11	7%
TOTAL	**161**	**100%**

Exhibit 33
More non-leaders feature in Mega-to-Mid

Leadership mix	No. of cos.
Leaders	30
Non-leaders	82
Total	**112**

* Management lapses refer to lack of competence and/or integrity and/or growth mindset

7.1 Why Mega-to-Mid happens

We found 6 main causes of Mega-to-Mid during 2000 to 2015 -

1. **Cyclical downturns:** Stocks from sectors like metals, capital goods, construction, and real estate exited the top 100 market cap ranks during a cyclical downturn in their sales and profits.
2. **Management lapses:** In several cases, stocks' exit from the Mega category was due to management lapses in one or more of their key required traits – competence, integrity and growth-cum-profit mindset.
3. **Reverse Value Migration:** This was mainly true of public sector banks, which saw their value migrate to private sector counterparts.
4. **Capital misallocation:** This too is a form of management lapse, but merits separate mention e.g. unsuccessful global acquisitions of companies have caused them to exit the Mega category.
5. **Fads:** Some companies enter into the top 100 ranks on the back of temporary investor fads (e.g. in the mid-2000s, companies supposed to have huge land banks became fads). When the fad fades away, these companies slip out of the Mega category.
6. **Quality Trap:** As discussed earlier, some high-quality companies cease to grow their earnings at least in line with that of the benchmark. As a result, over time, their market cap ranks falls below the top 100.

7.2 Key takeaways from Mega-to-Mid

- **Cyclical downturns are the biggest cause of Mega-to-Mid.** This reinforces the fact that cyclical stocks (commodities, capital goods, etc) do not yield themselves to a Buy-and-Hold strategy. Investors who choose to invest in cyclical stocks need to exit them before the cycle turns negative, even if it means selling a bit too soon.
- **Management holds the key not only for Mid-to-Mega but also Mega-to-Mid.** Exhibit 32 above confirms that Management issues are a major cause of Mega-to-Mid. Investors need to be on the watch out for management's lack of competence and/or integrity and/or growth mindset and/or capital misallocation.
- **Importance of industry leadership is reinforced.** In **Mid-to-Mega**, 2 in every 3 companies are industry leaders. Exhibit 33 suggests it is almost the exact opposite in Mega-to-Mid cases, with 4 in 5 companies being non-leaders.

The last point completes our case, and takes us back to what we started off saying –
Mid-to-Mega, the power of industry leadership in Wealth Creation.

Market Outlook

Market Outlook

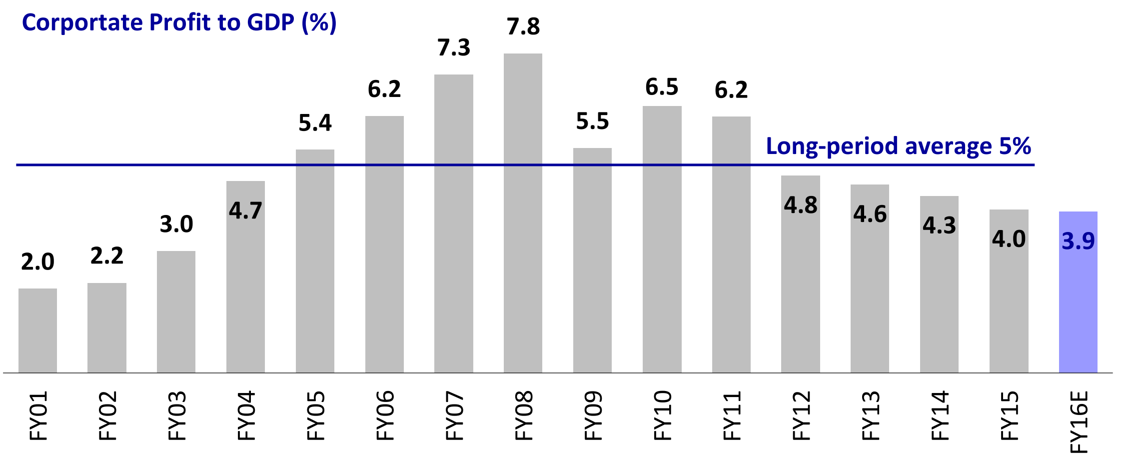
A macro perspective

Corporate Profit to GDP

- Aggregate profit of India Inc is stagnant at around INR 4 trillion over FY14-16 even as nominal GDP continues to grow year after year.
- As a result, Corporate Profit to GDP is continuously declining – from over 6% in FY10 and FY11 to below 4% in FY16.
- This looks to be the bottom, and next 3-5 years could see corporate profits rising to significantly higher levels.

Exhibit 1

Corporate Profit to GDP seems bottoming out; expect significantly higher levels going forward

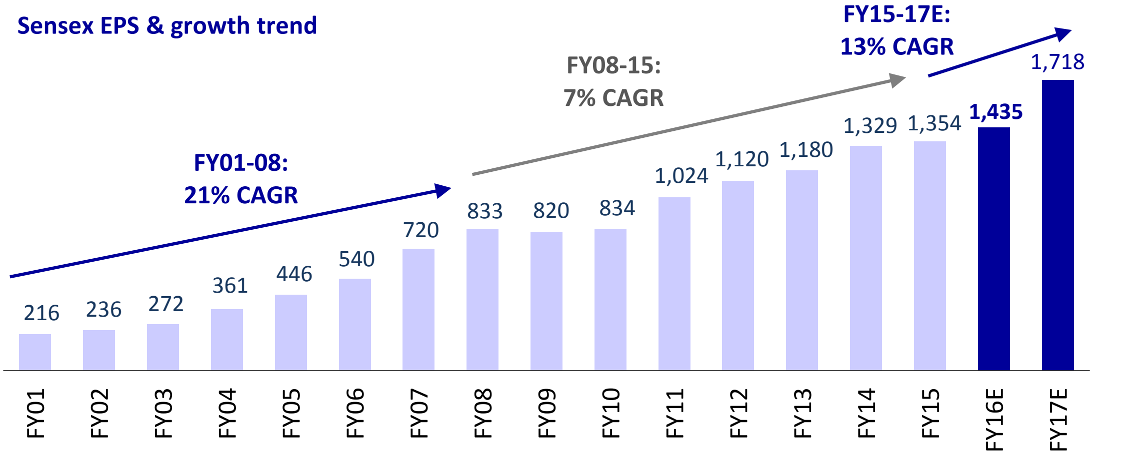


Sensex Earnings

- Massive fall in commodity prices is impacting profits of Sensex's constituent companies.
- The worst may still not be over for commodities. Hence, expect few more quarters of weak Sensex earnings, with recovery from FY17 onwards on the low base of FY16.

Exhibit 2

Sensex EPS dragged down by massive fall in commodity prices

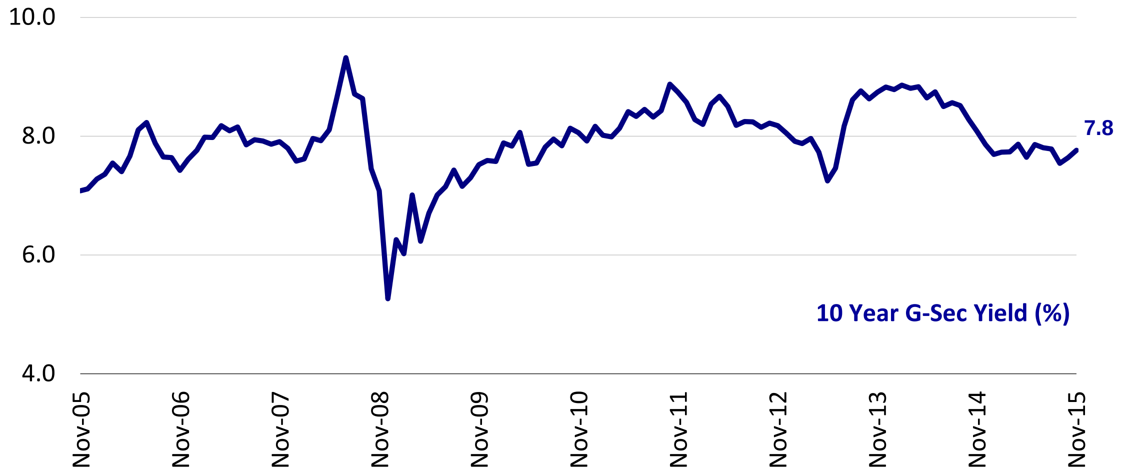


Interest Rates

- Downward journey in interest rate cycle has started.
- The room for further rate cuts in the next 1-2 years is high.
- Interest rates should touch the bottom around 5% levels.

Exhibit 3

Downward journey in interest rates has started; expect rates to touch the bottom at 5% levels

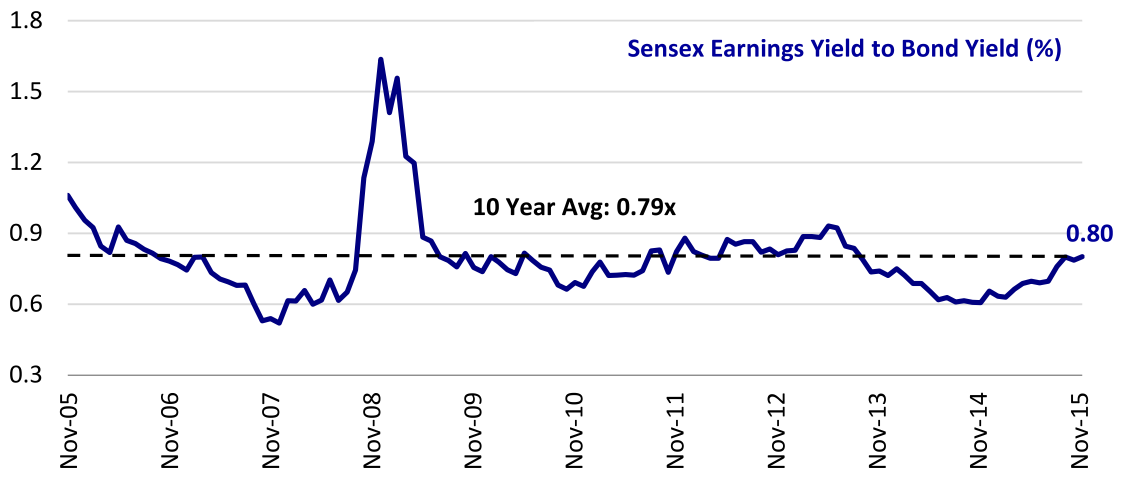


Sensex Earnings Yield to Bond Yield

- Buoyant market sentiment despite muted Sensex earnings growth has kept earnings to bond yield at 0.8x, in line with the long-period average.
- Falling interest rates should improve this ratio, triggering the next market rally.

Exhibit 4

Sensex Earnings Yield to Bond Yield at long-period average; lower interest rates should improve this



Market Valuation

- Market Cap to GDP at 70% is below the long-period average of 76%. This trend has lasted for much of the last 5 years.
- Likewise, Sensex P/E at 16x is also hovering around the long-period average of 16-17x.
- Expect current level of valuation to last till promise of earnings growth emerges.

Exhibit 5

Market Cap to GDP has been below long-period average for much of the last 5 years

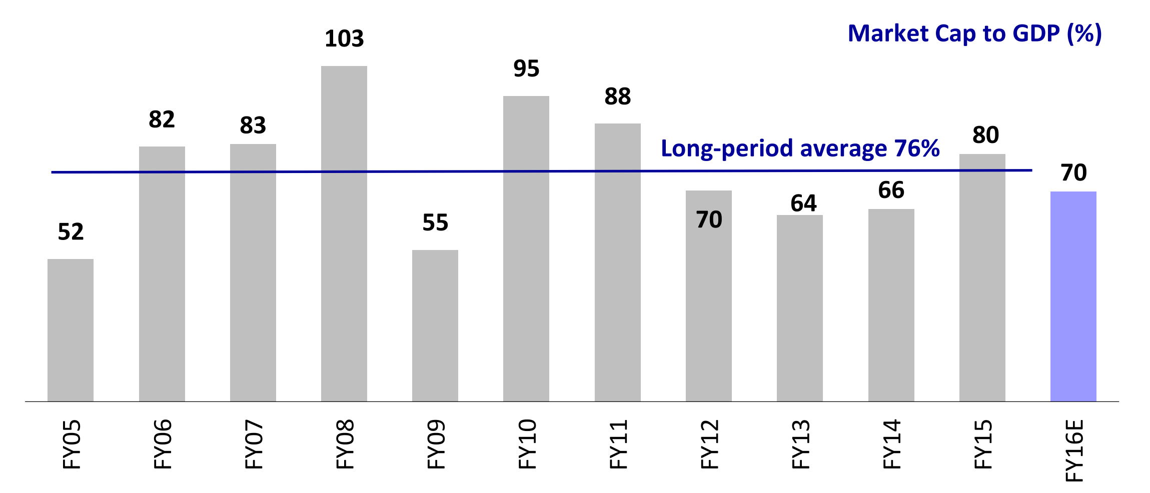
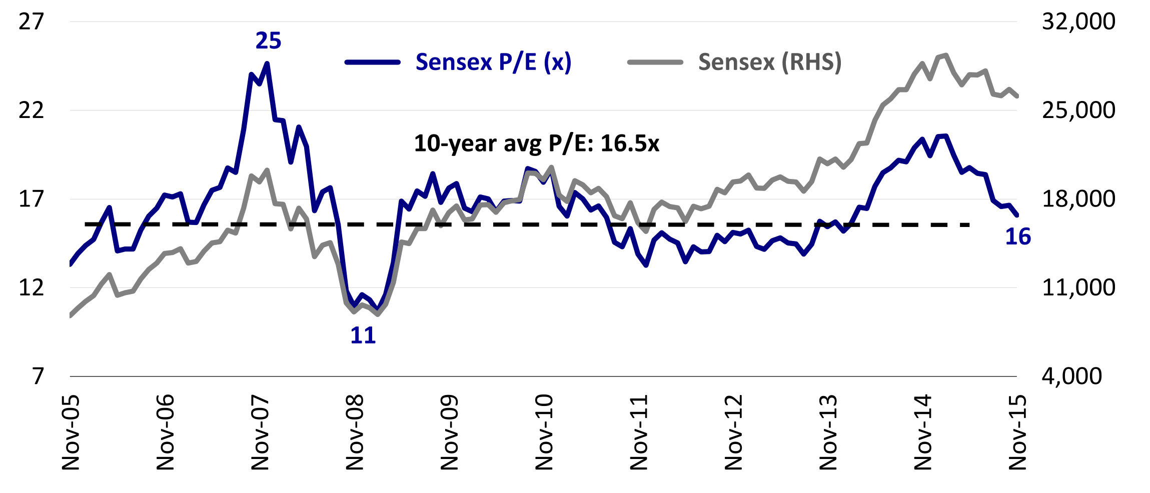


Exhibit 6

One-year forward Sensex P/E is at the long-period average given no earnings growth trigger



Market outlook

- Bottoming out of commodities and meaningful pick-up in investment cycle should lay the foundation for long-term recovery of corporate earnings.
- Acceleration in earnings coupled with softening interest rates will likely usher in the next round of market expansion, albeit a few quarters later.

2010-15 Wealth Creation Study: Detailed findings

#1 The Biggest Wealth Creators

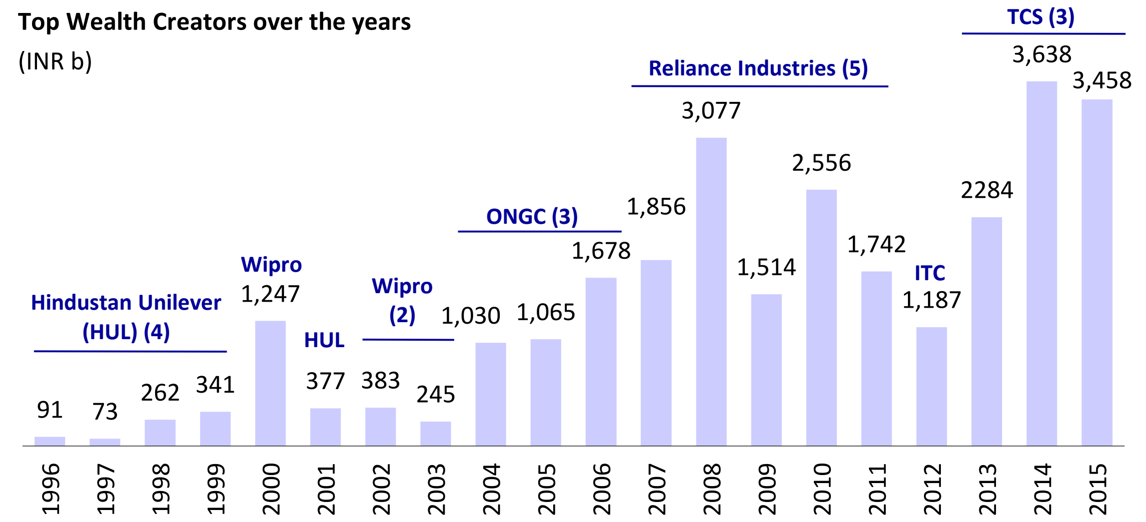
TCS is the Biggest Wealth Creator for the third time in a row

- **TCS** has emerged as the biggest Wealth Creator for the period 2010-15, retaining the top spot it held even in the previous two study periods (2009-14 and 2008-13).
- **ITC** and **HDFC Bank** have also retained their No.2 and No.3 position for the third year in succession.
- 8 of the top 10 Wealth Creators are the same as of last year. **Hindustan Unilever** and **Axis Bank** have entered the top 10 replacing **Wipro** and **ICICI Bank**.

Exhibit 1 **Top 10 Biggest Wealth Creators**

Rank	Company	Wealth Created		CAGR (%)		P/E (x)		RoE (%)	
		INR b	% share	Price	PAT	2015	2010	2015	2010
1	TCS	3,458	10	27	23	25	22	39	38
2	ITC	1,565	5	20	18	27	24	31	29
3	HDFC Bank	1,540	4	21	29	24	29	17	14
4	Sun Pharma	1,405	4	42	27	47	27	17	17
5	Hind. Unilever	1,374	4	30	15	43	24	109	81
6	H D F C	1,241	4	19	22	24	24	19	18
7	HCL Tech	1,130	3	41	42	19	19	30	20
8	Tata Motors	1,071	3	29	40	11	15	25	32
9	Infosys	1,048	3	11	15	21	24	24	27
10	Axis Bank	774	2	19	25	18	19	17	15
Total of Top 10		**14,605**	**43**	**24**	**24**	**23**	**23**	**25**	**25**
Total of Top 100		**34,233**	**100**	**25**	**19**	**27**	**21**	**20**	**20**

Exhibit 2 **TCS is the biggest Wealth Creator for the third year in a row**



Key Takeaway

Reliance Industries' rapid change of fortune

As recent as 2011, Reliance Industries was the Biggest Wealth Creator for the 5th successive year. Since then, there has been a rapid change of its fortune. The next 3 years, Reliance failed to make it to the top 100 Wealth Creators list. This year, it actually in the list of top 10 Biggest Wealth Destroyers. Goes to show that companies can ill afford to rest on their past glory.

#2 The Fastest Wealth Creators

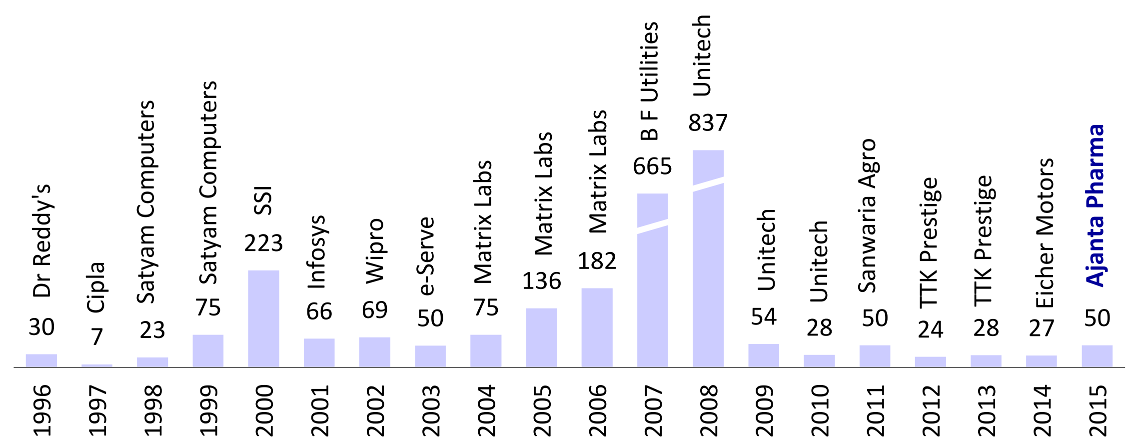
Ajanta Pharma is the Fastest Wealth Creator

- **Ajanta Pharma** has emerged as the Fastest Wealth Creator during 2010-15, with a stock price rise of 50x over 5 years (119% CAGR).
- **Eicher Motors** and **Page Industries** are among the top 10 Fastest Wealth Creators for the last 4 studies.
- Every single stock of the top 10 Fastest Wealth Creators has seen a massive P/E re-rating on the back of hyper earnings growth.
- The base market cap of all these stocks in 2010 was less than INR 20 billion, including 5 of them in single-digit billion.

Exhibit 3 **Top 10 Fastest Wealth Creators**

Rank	Company	Price Appn. (x)	CAGR (%) Price	CAGR (%) PAT	Mkt Cap (INR b) 2015	Mkt Cap (INR b) 2010	P/E (x) 2015	P/E (x) 2010
1	Ajanta Pharma	50	119	56	108	2	35	6
2	Symphony	39	108	26	91	2	78	6
3	Eicher Motors	25	90	49	431	17	70	21
4	P I Industries	22	85	42	83	3	34	7
5	Page Industries	17	77	38	153	9	78	22
6	Wockhardt	13	68	L to P	205	15	51	N.A.
7	Bajaj Finance	13	68	59	205	12	23	13
8	GRUH Finance	11	62	24	88	8	43	11
9	Blue Dart Express	10	59	16	173	17	133	28
10	Amara Raja Batteries	10	59	20	142	14	35	8

Exhibit 4 **History of Fastest Wealth Creators (5-year Price multiplier, x)**



Key Takeaway

Look for small, well-managed companies with a scalable opportunity

All the Fastest Wealth Creators were small when purchased (i.e. in 2010) and operating in a large sector (e.g. pharmaceuticals, finance, autos) or scalable niche (air-coolers, branded innerwear). 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 a very high level of sustained Wealth Creation.

#3 The Most Consistent Wealth Creators

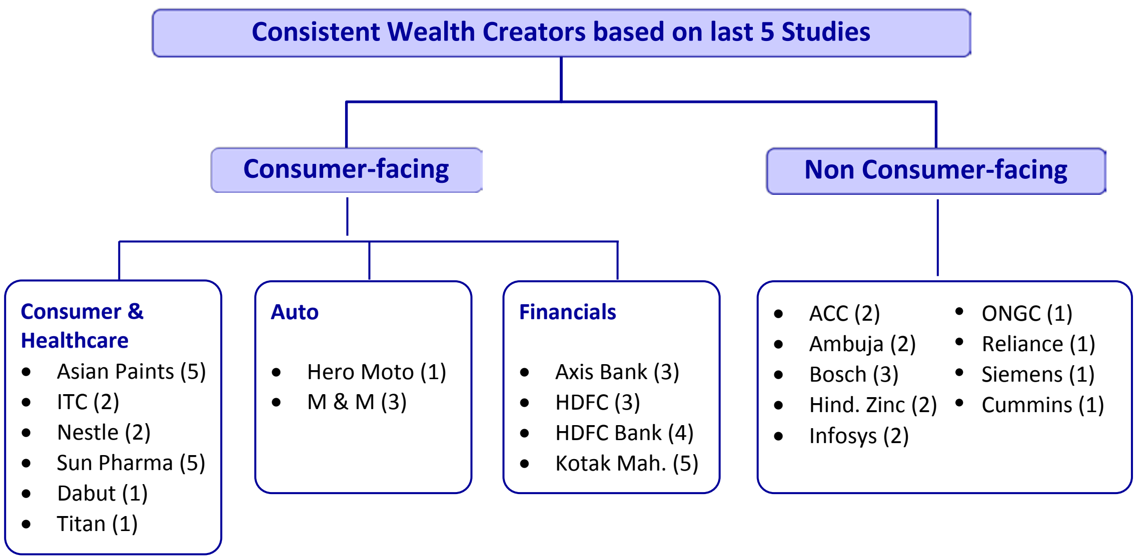
Titan is the Most Consistent Wealth Creator

- **Titan Industries** is the Most Consistent Wealth Creator over the 10-year period 2005-15, by virtue of –
  1. Appearing among top 100 Wealth Creators in each of the last 10 studies; and
  2. Highest 10-year Price CAGR (43%), ahead of **Sun Pharma** (36%) and **Asian Paints** (35%).
- 8 of the top 10 Most Consistent Wealth Creators are consumer-facing companies, with **Bosch** and **Cummins India** the only exceptions.

Exhibit 5 **Top 10 Most Consistent Wealth Creators**

		Appeared in	10-yr Price	10-yr PAT	P/E (x)		RoE (%)	
Rank	Company	WC Study (x)	CAGR (%)	CAGR (%)	2015	2005	2015	2005
1	Titan Company	10	43	44	42	45	29	14
2	Sun Pharma	10	36	28	46	22	25	41
3	Asian Paints	10	35	23	56	22	33	30
4	Kotak Mahindra	10	34	34	33	25	15	11
5	Dabur India	10	31	21	44	21	36	46
6	Bosch	10	29	13	63	17	16	35
7	Axis Bank	10	28	36	18	20	18	19
8	Cummins India	10	27	18	36	17	25	18
9	Nestle India	10	27	17	52	22	46	77
10	M & M	10	25	17	25	9	11	29

Exhibit 6 **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

Market is a voting machine in the short run, weighing machine in the long run

For the top 10 Most Consistent Wealth Creators, the correlation co-efficient between 10-year PAT CAGR and 10-year Price CAGR is a high 0.7. Thus, even as the market is a voting machine in the short run, in the long run it a weighing machine, closely measuring earnings growth.

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

Superior earnings and price performance over benchmark

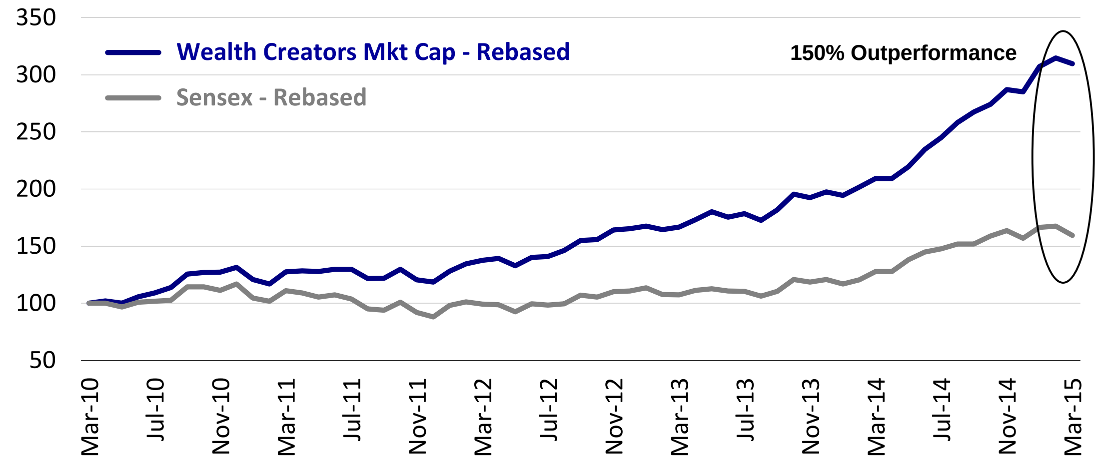
We compare the performance of Wealthex (top 100 Wealth Creators index) with the BSE Sensex on 3 parameters - (1) market performance, (2) earnings growth and (3) valuation.

- **Market performance:** Over 2010-15, Wealth Creating companies have delivered point-to-point return CAGR of 25% v/s 10% for the BSE Sensex. March 2015 over March 2010, Wealthex is up 210% whereas the Sensex is up 60% i.e. 150% outperformance over 5 years.
- **Earnings growth:** Wealthex clocked 5-year earnings CAGR of 19% v/s 10% for BSE Sensex. Further, YoY earnings growth for Wealthex is higher for every year except 2012.
- **Valuation:** Wealthex P/E has seen a marginal re-rating vis-à-vis the Sensex. Thus, the 15pp outperformance of Wealthex is explained largely by the 9pp higher earnings growth.

Exhibit 7 **Wealthex v/s Sensex: Superior market performance on the back of higher earnings growth**

	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	5 Year CAGR (%)
BSE SENSEX	**17,528**	**19,445**	**17,404**	**18,836**	**22,386**	**27,957**	**10**
YoY (%)		*11*	*-10*	*8*	*19*	*25*	
Wealthex - based to Sensex	**17,528**	**22,362**	**24,104**	**29,234**	**36,682**	**54,275**	**25**
YoY (%)		*28*	*8*	*21*	*25*	*48*	
Sensex EPS (Rs)	**834**	**1,024**	**1,120**	**1,180**	**1,329**	**1,353**	**10**
YoY (%)		*23*	*9*	*5*	*13*	*2*	
Wealthex EPS (Rs)	**839**	**1,248**	**1,295**	**1,543**	**1,794**	**2,044**	**19**
YoY (%)		*49*	*4*	*19*	*16*	*14*	
Sensex PE (x)	**21**	**19**	**16**	**16**	**17**	**21**	**0**
Wealthex PE (x)	**21**	**18**	**19**	**19**	**20**	**27**	**5**

Exhibit 8 **Wealthex invariably outperforms benchmark indices handsomely**



Key Takeaway

Markets are slave to earnings growth

For both the Wealth Creators and the Sensex, market performance is closely tracking earnings growth, reconfirming the key takeaway in the previous section. In other words –
Superior earnings growth = Superior Wealth Creation

#5 Wealth Creation: Sectoral analysis

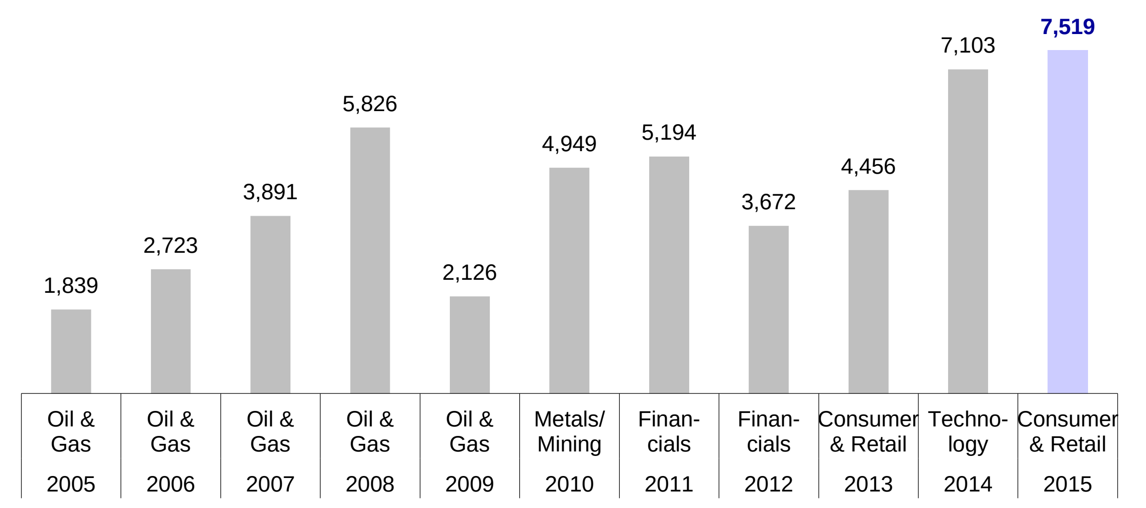
Consumer/Retail is the highest ever Wealth Creating sector

- After losing its top spot to Technology sector during 2009-14, **Consumer/Retail** has re-emerged as India's biggest Wealth Creating sector over 2010-2015.
- The Wealth Created by the **Consumer/Retail** sector between 2010 and 2015 was INR 7.5 trillion, the highest ever by any sector.
- Ironically, the sector's 2010-15 PAT CAGR at 16% was lower than the Universe average of 19%. However, the sector has seen a massive P/E re-rating, from 28x in 2010 to 44x in 2015, reflecting the market's flight to relatively safe seculars rather than uncertain cyclicals.

Exhibit 9 **Consumer/Retail is the top Wealth Creating sector, led by P/E rerating (flight to safety)**

Sector	WC	Share of WC %		CAGR 10-15, %		P/E, x		ROE, %	
(No of companies)	(INR B)	2015	2010	Price	PAT	2015	2010	2015	2010
Consumer/Retail (25)	7,519	22	7	28	16	44	28	28	29
Financials (17)	6,712	20	15	23	21	21	20	16	14
Technology (6)	6,170	18	10	23	23	23	22	30	30
Auto (14)	4,914	14	5	29	21	23	17	20	25
Healthcare (14)	4,481	13	4	31	29	33	30	21	17
Cement (5)	1,337	4	2	21	-2	32	11	11	24
Capital Goods (5)	681	2	10	19	8	51	31	19	24
Telecom/Media (2)	613	2	3	24	21	24	21	16	10
Oil & Gas (3)	580	2	17	22	15	13	10	17	12
Others (9)	1,226	4	28	23	18	33	27	19	19
Total	**34,233**	**100**	**100**	**25**	**19**	**27**	**21**	**20**	**20**

Exhibit 10 **Consumer/Retail: All-time high in Wealth Creation**



Key Takeaway

Value Migration is increasingly becoming the key driver of rapid Wealth Creation

Three of the top 5 Wealth Creating sectors – Financials, Technology and Healthcare – are beneficiaries of Value Migration i.e. flow of value from outmoded business designs to new business designs. In Financials, value is migrating from public sector banks to private banks. In Technology and Healthcare, value is migrating from developed world to emerging markets.

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

PSUs' decade of decline: Wealth Creation hits rock bottom

- PSUs' (public sector undertakings) Wealth Creation performance during 2010-15 is a virtual repeat of the previous study (2009-14):
  - The number of PSUs in the top 100 Wealth Creators is at an all-time low of only 5.
  - The Wealth Created by these 5 PSUs is also at an all-time low of just 2% of total, from as high as 51% over 2000-05, signaling near-total value migration to the private sector.
- The 5 Wealth Creating PSUs are **BPCL**, **HPCL**, **Petronet LNG**, **Concor** and **LIC Housing**.
- Even these 5 companies on average are weaker than their private counterparts on all key metrics – 5-year Sales CAGR, PAT CAGR, Average RoE and Price CAGR.

Exhibit 11 **PSUs' woes continue**

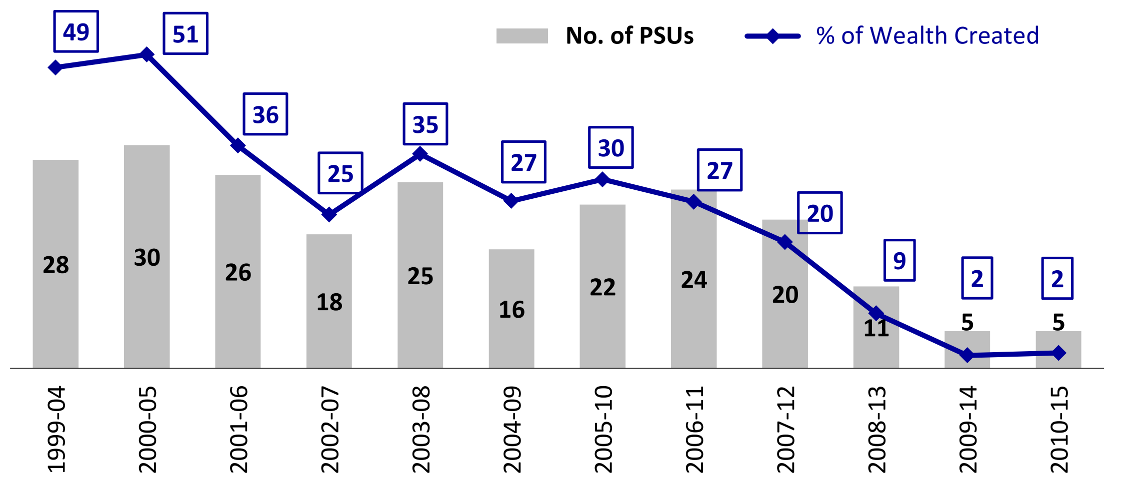
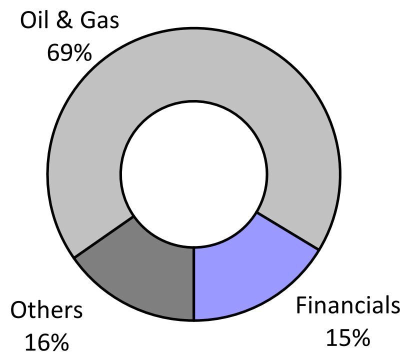


Exhibit 12 **The PSU Wealth Creators are weaker than their private counterparts on every single parameter**

	2010-2015	
	PSU	Private
No. of Wealth Creators in Top 100	5	95
Share of Wealth Created (%)	2	98
5-year Sales CAGR (%)	15	19
5-year PAT CAGR (%)	14	20
5-year Price CAGR (%)	19	26
P/E - 2010 (x)	12	21
P/E - 2015 (x)	15	27
RoE - 2010 (%)	14	20
RoE - 2015 (%)	17	20

Exhibit 13 **3 of the 5 PSU Wealth Creators are from Oil & Gas (BPCL, HPCL and Petronet LNG)**



Key Takeaway

Entrepreneurship – the differentiator between private sector and PSUs

The key differentiator between private sector and PSUs is the spirit of entrepreneurship of business owners and professional managers i.e. a strong focus on profit and profitability. There appear to be only two solutions to end PSUs' woes – (1) aggressive professionalization and/or (2) active disinvestment / privatization.

#7 Wealth Creation: Age & Size (market cap)

Catch 'em young! …

- The youngest companies (1-20 years) have created the most wealth (40% of total) and also the fastest (Price CAGR of 27%).
- This is on the back of highest PAT growth (25% CAGR), accompanied with the highest delta in RoE (20% in 2015 v/s 16% in 2010).

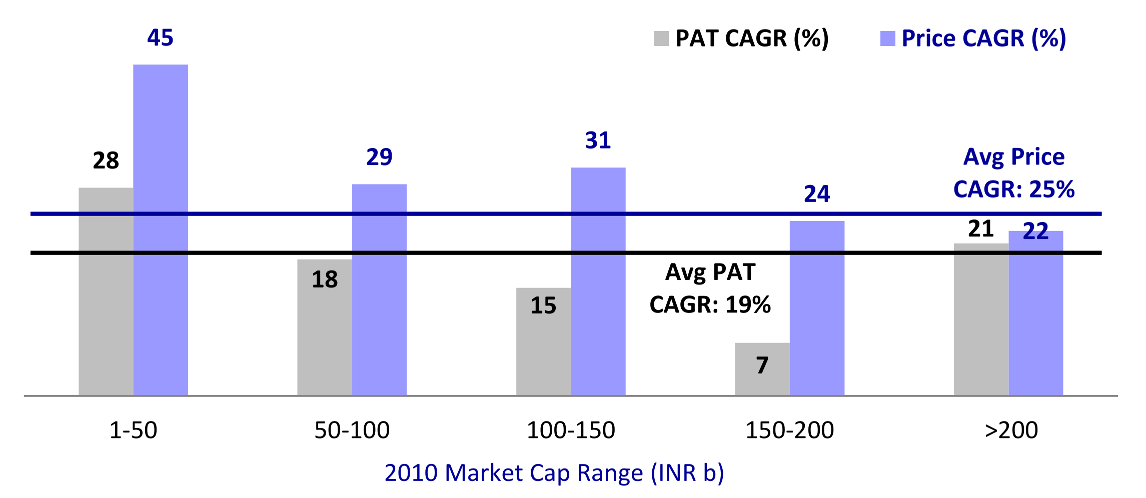
Exhibit 14 **Youngest companies have created more wealth and at a faster pace**

2010 Age	No. of	WC	% Share	CAGR (%)		PE (x)		RoE (%)	
Range	Cos.	(INR b)	of WC	Price	PAT	2015	2010	2015	2010
1-20	31	13,846	40	27	25	26	24	20	16
21-40	35	10,130	30	25	17	29	21	20	21
41-60	16	3,433	10	26	17	31	21	18	15
Above 61	18	6,824	20	23	15	24	17	22	29
Total	**100**	**34,233**	**100**	**25**	**19**	**27**	**21**	**20**	**20**

… and small!

- 38 out of 100 Wealth Creators had market cap of less than INR 50b in 2010.
- These companies have clocked the highest Price CAGR of 45% (v/s average 25%).
- This is on the back of highest PAT CAGR of 28% (v/s average 19%).
- Between 2010 and 2015, small caps also saw the highest P/E re-rating – from 23x in 2010 to 42x in 2015.

Exhibit 15 **Small caps continue to create big wealth!**



Key Takeaway

Small is big in Wealth Creation!

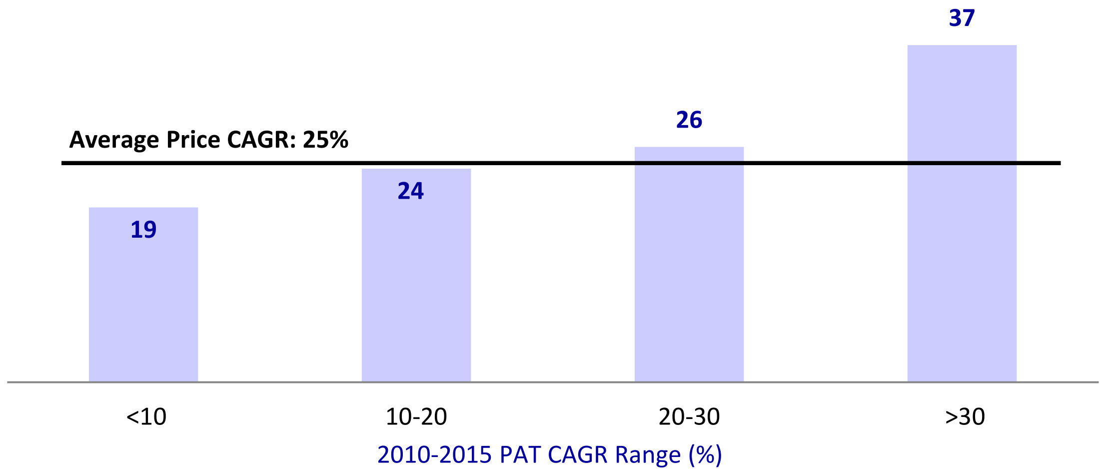
Small companies enjoy the low-base effect, and are able to clock PAT growth significantly higher than their larger counterparts. They are also relatively unknown to begin with. Once their growth story gets recognized, their valuations also get re-rated, leading to rapid pace of Wealth Creation.

#8 Wealth Creation: Earnings growth & Market Cap

Earnings growth is non-negotiable for Wealth Creation

- Year after year, our study re-confirms the near-direct correlation between pace of Wealth Creation and earnings growth.
- Over 2010-15, Price CAGR was progressively higher with higher PAT CAGR.

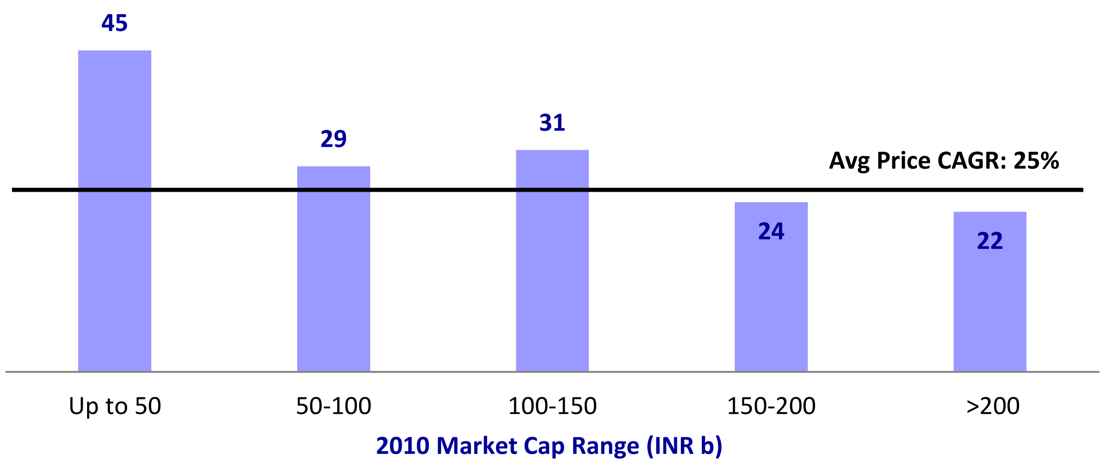
Exhibit 16 **Higher the earnings growth, higher the Price CAGR**



Small is big for Wealth Creation

- Data for 2010-15 suggest a near-perfect inverse relation between size and speed of Wealth Creation i.e. smaller the market cap, faster is the Wealth Created.

Exhibit 17 **Near-perfect inverse relation between size and pace of Wealth Creation (i.e. Price CAGR)**



Key Takeaway

Small cap or large cap?

Our Wealth Creation studies consistently suggest merit of investing in mid- and small caps. At the same time, however, they are prone to high mortality, whereas large caps stand for stability of returns, albeit somewhat lower than their smaller counterparts. Portfolios with a healthy mix of the two should be an ideal strategy for investors.

#9 Wealth Creation: Valuation parameters analysis

Low valuation, high returns

- The general rule of low valuation, high returns held true in 2010-15.
- 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 2010, we calculate this ratio based on the actual profits reported over the next five years).

Exhibit 18 **Payback ratio less than 1x remains a sure shot formula for multi-baggers**

Range	No. of	WC	% Share	CAGR (%)		PE (x)		RoE (%)	
in 2010	Cos.	(INR b)	of WC	Price	PAT	2015	2010	2015	2010
P/E									
Loss-making	4	862	3	35	L to L	NA	NA	-7	-21
<10	12	1,579	5	28	1	25	8	13	21
10-20	33	9,883	29	28	21	20	15	19	21
20-30	35	18,884	55	24	20	28	24	23	20
> 30	16	3,026	9	24	25	41	43	20	17
Total	**100**	**34,233**	**100**	**25**	**19**	**27**	**21**	**20**	**20**
Price / Book									
< 2	11	2,188	6	31	17	21	12	16	12
2-3	22	4,233	12	20	15	19	16	15	15
3-4	16	5,613	16	31	18	28	17	17	20
4-5	12	7,194	21	28	25	27	25	18	18
> 5	39	15,006	44	24	20	31	26	30	32
Total	**100**	**34,233**	**100**	**25**	**19**	**27**	**21**	**20**	**20**
Price / Sales									
<1	20	4,200	12	36	32	19	16	20	14
1-2	21	5,552	16	29	16	26	15	16	20
2-3	23	6,549	19	28	14	36	20	21	27
3-4	11	4,297	13	21	22	23	24	18	13
> 4	25	13,634	40	23	19	28	24	23	24
Total	**100**	**34,233**	**100**	**25**	**19**	**27**	**21**	**20**	**20**
Payback ratio									
< 1	21	4,863	14	38	34	20	17	22	18
1-2	28	10,364	30	28	18	24	16	20	22
2-3	34	15,397	45	23	18	28	23	20	18
> 3	17	3,610	11	21	8	52	30	20	27
Total	**100**	**34,233**	**100**	**25**	**19**	**27**	**21**	**20**	**20**

#10 Wealth Destruction: Companies & Sectors

The Commodity Collapse

- The total Wealth Destroyed during 2010-15 is INR 14.6 trillion, 43% of the total Wealth Created by top 100 companies. This is a significant jump from the previous 5-year period.
- 8 of the top 10 Wealth Destroying companies are engaged in global commodity business. The only exceptions are **BHEL** and **NTPC**.
- 6 of the top 10 Wealth Destroyers are PSUs. Of these, 5 – **MMTC**, **SAIL**, **NMDC**, **BHEL** and **NTPC** – are in the top 10 list for the third consecutive year.

Exhibit 19

Global commodity companies top Wealth Destroyers list

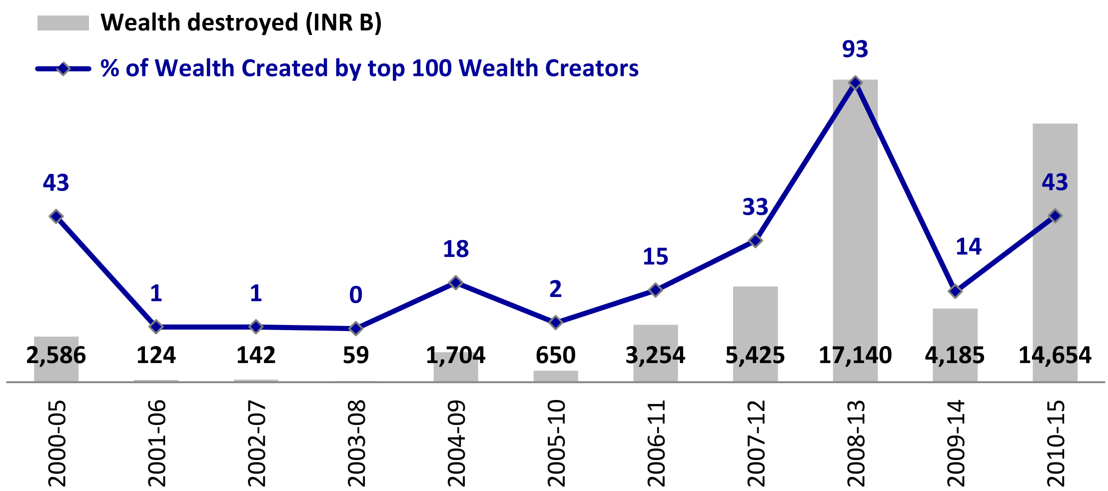
Company	Wealth Destroyed		Price
	INR b	% Share	CAGR (%)
MMTC	1,522	10	-50
Reliance Industries	820	6	-5
SAIL	758	5	-23
NMDC	651	4	-15
BHEL	593	4	-13
Jindal Steel	505	3	-26
NTPC	492	3	-7
Hindustan Copper	435	3	-35
Vedanta	427	3	-17
Tata Steel	293	2	-13
Total of Above	**6,494**	**44**	
Total Wealth Destroyed	**14,654**	**100**	

Exhibit 20

The usual suspects at the sector level too

Sector	Wealth Destroyed (INR b)	% Share
Metals / Mining	3,866	26
Utilities	1,905	13
Constn / Real Estate	1,371	9
Capital Goods	1,165	8
Oil & Gas	1,106	8
Banking & Finance	873	6
Telecom	466	3
Technology	442	3
Textiles	322	2
Chemicals & Fertilizers	210	1
Others	2,927	20
Total	**14,654**	**100**

Exhibit 21 **Level of Wealth Destruction up during 2010-15**



Key Takeaway

The roller-coaster ride of cyclicals

From 2005 to 2010, 5-7 cyclicals invariably featured in the top 10 biggest Wealth Creators. Things have turned the full cycle in the last 5 years, with a similar number featuring among the top Wealth Destroyers. However, if all the government's measures to kick-start the economy go through, the cycle may turn positive yet again and cyclicals may regain their lost glory. Investors need to decide whether they wish to ride this roller-coaster or stay away.

Space for Notes

Appendix 1: MOSL 100: Biggest Wealth Creators (2010-2015)

Rank	Company	Wealth Created		CAGR (2010-15, %)			RoE (%)		P/E (x)	
		INR b	Share (%)	Price	PAT	Sales	2015	2010	2015	2010
1	TCS	3,458	10.1	27	23	26	39	38	25	22
2	ITC	1,565	4.6	20	18	15	31	29	27	24
3	HDFC Bank	1,540	4.5	21	29	26	17	14	24	29
4	Sun Pharma	1,405	4.1	42	27	47	17	17	47	27
5	Hindustan Unilever	1,374	4.0	30	15	13	109	81	43	24
6	H D F C	1,241	3.6	19	22	14	19	18	24	24
7	HCL Technologies	1,130	3.3	41	42	25	30	20	19	19
8	Tata Motors	1,071	3.1	29	40	23	25	32	11	15
9	Infosys	1,048	3.1	11	15	19	24	27	21	24
10	Axis Bank	774	2.3	19	25	25	17	15	18	19
11	Lupin	757	2.2	44	29	22	27	27	38	21
12	ICICI Bank	730	2.1	11	21	13	14	9	15	23
13	Maruti Suzuki	691	2.0	21	8	11	16	22	29	16
14	Bosch	646	1.9	40	18	20	18	17	60	26
15	Kotak Mahindra Bank	628	1.8	29	18	24	14	16	33	20
16	Asian Paints	580	1.7	32	11	17	29	49	56	23
17	UltraTech Cement	505	1.5	20	14	28	11	24	38	13
18	Eicher Motors	413	1.2	90	49	24	24	8	70	21
19	Nestle India	411	1.2	21	13	14	42	113	56	39
20	M & M	411	1.2	17	5	20	12	24	24	13
21	Motherson Sumi	404	1.2	56	29	39	26	21	52	19
22	Idea Cellular	403	1.2	23	27	21	14	8	21	23
23	B P C L	396	1.2	26	24	15	21	12	12	11
24	Dr Reddy's Labs	377	1.1	22	46	16	24	9	25	61
25	Tech Mahindra	365	1.1	24	30	37	21	24	23	15
26	IndusInd Bank	364	1.1	39	39	29	17	16	26	20
27	United Spirits	338	1.0	23	Loss	8	-256	-1	-32	-731
28	Dabur India	327	1.0	27	16	18	32	54	44	27
29	Adani Ports	312	0.9	14	28	33	21	20	28	47
30	Aurobindo Pharma	301	0.9	45	23	28	31	31	23	9
31	Cipla	300	0.9	16	2	16	11	18	48	25
32	Shree Cement	295	0.9	36	-9	12	8	37	88	12
33	Bajaj Auto	293	0.9	15	14	13	27	59	19	18
34	Titan Company	266	0.8	34	27	20	26	34	43	33
35	Godrej Consumer	263	0.8	32	22	32	21	36	39	24
36	Pidilite Industries	250	0.7	39	13	17	23	31	60	21
37	Cadila Healthcare	244	0.7	26	18	19	27	31	31	22
38	Bharat Forge	239	0.7	38	LP	18	22	-4	39	-89
39	Siemens	234	0.7	13	-3	3	14	25	82	35
40	Yes Bank	222	0.6	26	33	37	17	15	17	18
41	Britannia Industries	221	0.6	46	46	16	55	36	38	37
42	Grasim Industries	212	0.6	5	-11	10	8	25	19	8
43	Zee Entertainment	211	0.6	21	9	17	28	17	34	18
44	Ambuja Cements	210	0.6	16	4	7	15	19	27	15
45	United Breweries	208	0.6	39	24	16	14	11	102	51
46	GSK Consumer	202	0.6	33	20	18	28	26	45	27
47	Wockhardt	190	0.6	68	LP	0	12	-	51	-2
48	Bajaj Finance	182	0.5	68	59	44	19	8	23	13
49	Colgate-Palmolive	182	0.5	24	5	15	73	131	49	21
50	Emami	181	0.5	37	23	17	39	27	47	28
Rank	Company	Wealth Created		CAGR (2010-15, %)			RoE (%)		P/E (x)	
		INR b	Share (%)	Price	PAT	Sales	2015	2010	2015	2010

Appendix 1: MOSL 100: Biggest Wealth Creators (2010-2015) … continued

Rank	Company	Wealth Created		CAGR (2010-15, %)			RoE (%)		P/E (x)	
		INR b	Share (%)	Price	PAT	Sales	2015	2010	2015	2010
51	Marico	181	0.5	29	20	17	31	35	44	29
52	P & G Hygiene	169	0.5	29	14	21	28	34	68	36
53	Bajaj Finserv	163	0.5	33	-26	-27	5	21	176	9
54	Blue Dart Express	156	0.5	59	16	20	42	14	133	28
55	Havells India	153	0.4	38	41	11	21	17	49	52
56	Castrol India	152	0.4	22	4	7	96	77	49	22
57	Torrent Pharma	151	0.4	34	27	20	30	28	26	20
58	Sundaram Finance	148	0.4	52	16	16	15	18	29	8
59	Divi's Labs	148	0.4	21	20	27	24	22	28	26
60	Page Industries	144	0.4	77	38	35	51	40	78	22
61	Cummins India	142	0.4	19	12	9	27	28	31	23
62	Glenmark Pharma	141	0.4	24	8	22	16	14	45	22
63	Container Corpn	139	0.4	13	6	11	14	18	29	22
64	Apollo Hospitals	138	0.4	30	20	21	11	8	56	33
65	GSK Pharma	138	0.4	14	-1	11	25	28	61	30
66	MRF	136	0.4	42	29	19	20	18	18	12
67	Shriram Transport	134	0.4	16	3	15	11	23	25	14
68	UPL	131	0.4	24	17	18	20	18	17	12
69	Ashok Leyland	130	0.4	21	-21	16	4	18	156	18
70	LIC Housing Finance	130	0.4	20	15	26	18	20	16	12
71	Amara Raja Batteries	128	0.4	59	20	24	24	31	35	8
72	Berger Paints	124	0.4	48	17	18	21	20	55	17
73	ACC	115	0.3	10	-6	7	14	27	25	11
74	H P C L	112	0.3	15	0	14	11	12	15	7
75	Gillette India	111	0.3	28	3	17	21	24	99	34
76	CRISIL	107	0.3	31	11	18	32	37	54	24
77	TVS Motor	106	0.3	45	58	18	27	5	38	58
78	Ajanta Pharma	106	0.3	119	56	29	37	18	35	6
79	Aditya Birla Nuvo	102	0.3	13	56	11	11	3	15	61
80	Bayer Crop Science	101	0.3	39	25	18	19	23	32	20
81	Mahindra Finance	95	0.3	28	21	31	15	20	16	10
82	WABCO India	95	0.3	52	9	18	14	29	89	17
83	Shriram City Union	94	0.3	35	24	27	14	19	23	11
84	SPARC	94	0.3	38	Loss	35	-40	-153	-295	-96
85	Symphony	89	0.3	108	26	25	38	43	78	6
86	Piramal Enterprises	86	0.3	15	43	7	24	29	5	18
87	Mindtree	86	0.2	35	20	22	27	32	20	11
88	Hexaware Tech	84	0.2	56	19	20	25	16	29	7
89	Kansai Nerolac	82	0.2	27	11	16	17	21	43	21
90	GRUH Finance	80	0.2	62	24	28	29	26	43	11
91	AIA Engineering	80	0.2	26	20	18	21	19	27	22
92	Supreme Industries	79	0.2	50	16	16	27	38	28	8
93	P I Industries	78	0.2	85	42	29	27	32	34	7
94	Bajaj Holdings	78	0.2	16	-9	6	15	25	17	5
95	Jubilant Foodworks	77	0.2	36	27	34	17	28	87	61
96	Alstom T&D India	73	0.2	14	-9	1	9	22	123	38
97	Whirlpool India	73	0.2	36	8	9	23	73	44	14
98	Petronet LNG	72	0.2	18	17	30	16	18	15	14
99	Info Edge (India)	70	0.2	31	-14	25	2	14	419	46
100	Godrej Industries	68	0.2	20	15	22	12	12	29	22
	TOTAL	**34,233**	**100**	**25**	**19**	**18**	**20**	**20**	**27**	**21**
Rank	Company	Wealth Created		CAGR (2010-15, %)			RoE (%)		P/E (x)	
		INR b	Share (%)	Price	PAT	Sales	2015	2010	2015	2010

Appendix 2: MOSL 100: Fastest Wealth Creators (2010-2015)

Rank	Company	2010-15 Price		CAGR 10-15 (%)		Wealth Created		RoE (%)		P/E (x)	
		CAGR (%)	Times (x)	PAT	Sales	INR b	Share (%)	2015	2010	2015	2010
1	Ajanta Pharma	119	50.5	56	29	106	0	37	18	35	6
2	Symphony	108	39.0	26	25	89	0	38	43	78	6
3	Eicher Motors	90	24.6	49	24	413	1	24	8	70	21
4	P I Industries	85	21.7	42	29	78	0	27	32	34	7
5	Page Industries	77	17.2	38	35	144	0	51	40	78	22
6	Wockhardt	68	13.4	LP	0	190	1	12	-	51	-2
7	Bajaj Finance	68	13.2	59	44	182	1	19	8	23	13
8	GRUH Finance	62	11.1	24	28	80	0	29	26	43	11
9	Blue Dart Express	59	10.2	16	20	156	0	42	14	133	28
10	Amara Raja Batteries	59	10.2	20	24	128	0	24	31	35	8
11	Motherson Sumi	56	9.3	29	39	404	1	26	21	52	19
12	Hexaware Tech	56	9.2	19	20	84	0	25	16	29	7
13	WABCO India	52	8.2	9	18	95	0	14	29	89	17
14	Sundaram Finance	52	8.1	16	16	148	0	15	18	29	8
15	Supreme Industries	50	7.7	16	16	79	0	27	38	28	8
16	Berger Paints	48	7.1	17	18	124	0	21	20	55	17
17	Britannia Industries	46	6.7	46	16	221	1	55	36	38	37
18	TVS Motor	45	6.4	58	18	106	0	27	5	38	58
19	Aurobindo Pharma	45	6.4	23	28	301	1	31	31	23	9
20	Lupin	44	6.2	29	22	757	2	27	27	38	21
21	Sun Pharma	42	5.7	27	47	1,405	4	17	17	47	27
22	MRF	42	5.7	29	19	136	0	20	18	18	12
23	HCL Technologies	41	5.5	42	25	1,130	3	30	20	19	19
24	Bosch	40	5.3	18	20	646	2	18	17	60	26
25	Pidilite Industries	39	5.3	13	17	250	1	23	31	60	21
26	United Breweries	39	5.2	24	16	208	1	14	11	102	51
27	IndusInd Bank	39	5.2	39	29	364	1	17	16	26	20
28	Bayer Crop Science	39	5.1	25	18	101	0	19	23	32	20
29	Havells India	38	5.1	41	11	153	0	21	17	49	52
30	Bharat Forge	38	5.0	LP	18	239	1	22	-4	39	-89
31	SPARC	38	5.0	Loss	35	94	0	-40	-153	-295	-96
32	Emami	37	4.9	23	17	181	1	39	27	47	28
33	Jubilant Foodworks	36	4.7	27	34	77	0	17	28	87	61
34	Shree Cement	36	4.7	-9	12	295	1	8	37	88	12
35	Whirlpool India	36	4.6	8	9	73	0	23	73	44	14
36	Mindtree	35	4.4	20	22	86	0	27	32	20	11
37	Shri.City Union.	35	4.4	24	27	94	0	14	19	23	11
38	Torrent Pharma	34	4.3	27	20	151	0	30	28	26	20
39	Titan Company	34	4.3	27	20	266	1	26	34	43	33
40	Bajaj Finserv	33	4.2	-26	-27	163	0	5	21	176	9
41	GSK Consumer	33	4.2	20	18	202	1	28	26	45	27
42	Godrej Consumer	32	4.0	22	32	263	1	21	36	39	24
43	Asian Paints	32	4.0	11	17	580	2	29	49	56	23
44	Info Edge (India)	31	3.9	-14	25	70	0	2	14	419	46
45	CRISIL	31	3.9	11	18	107	0	32	37	54	24
46	Apollo Hospitals	30	3.7	20	21	138	0	11	8	56	33
47	Hindustan Unilever	30	3.7	15	13	1,374	4	109	81	43	24
48	Tata Motors	29	3.6	40	23	1,071	3	25	32	11	15
49	P & G Hygiene	29	3.6	14	21	169	0	28	34	68	36
50	Marico	29	3.6	20	17	181	1	31	35	44	29
Rank	Company	2010-15 Price		CAGR 10-15 (%)		Wealth Created		RoE (%)		P/E (x)	
		CAGR (%)	Times (x)	PAT	Sales	INR b	Share (%)	2015	2010	2015	2010

Appendix 2: MOSL 100: Fastest Wealth Creators (2010-2015) … continued

Rank	Company	2010-15 Price		CAGR (10-15, %)		Wealth Created		RoE (%)		P/E (x)	
		CAGR (%)	Times (x)	PAT	Sales	INR b	Share (%)	2015	2010	2015	2010
51	Kotak Mahindra Bank	29	3.5	18	24	628	2	14	16	33	20
52	Mahindra Finance	28	3.4	21	31	95	0	15	20	16	10
53	Gillette India	28	3.4	3	17	111	0	21	24	99	34
54	Dabur India	27	3.3	16	18	327	1	32	54	44	27
55	Kansai Nerolac	27	3.3	11	16	82	0	17	21	43	21
56	TCS	27	3.3	23	26	3,458	10	39	38	25	22
57	Yes Bank	26	3.2	33	37	222	1	17	15	17	18
58	Cadila Healthcare	26	3.2	18	19	244	1	27	31	31	22
59	B P C L	26	3.1	24	15	396	1	21	12	12	11
60	AIA Engineering	26	3.1	20	18	80	0	21	19	27	22
61	Colgate-Palmolive	24	3.0	5	15	182	1	73	131	49	21
62	UPL	24	3.0	17	18	131	0	20	18	17	12
63	Glenmark Pharma	24	3.0	8	22	141	0	16	14	45	22
64	Tech Mahindra	24	2.9	30	37	365	1	21	24	23	15
65	Idea Cellular	23	2.8	27	21	403	1	14	8	21	23
66	United Spirits	23	2.8	Loss	8	338	1	-256	-1	-32	-731
67	Castrol India	22	2.7	4	7	152	0	96	77	49	22
68	Dr Reddy's Labs	22	2.7	46	16	377	1	24	9	25	61
69	HDFC Bank	21	2.6	29	26	1,540	4	17	14	24	29
70	Divi's Labs	21	2.6	20	27	148	0	24	22	28	26
71	Ashok Leyland	21	2.6	-21	16	130	0	4	18	156	18
72	Maruti Suzuki	21	2.6	8	11	691	2	16	22	29	16
73	Nestle India	21	2.6	13	14	411	1	42	113	56	39
74	Zee Entertainment	21	2.5	9	17	211	1	28	17	34	18
75	LIC Housing Finance	20	2.5	15	26	130	0	18	20	16	12
76	UltraTech Cement	20	2.5	14	28	505	1	11	24	38	13
77	ITC	20	2.5	18	15	1,565	5	31	29	27	24
78	Godrej Industries	20	2.5	15	22	68	0	12	12	29	22
79	H D F C	19	2.4	22	14	1,241	4	19	18	24	24
80	Axis Bank	19	2.4	25	25	774	2	17	15	18	19
81	Cummins India	19	2.4	12	9	142	0	27	28	31	23
82	Petronet LNG	18	2.3	17	30	72	0	16	18	15	14
83	M & M	17	2.2	5	20	411	1	12	24	24	13
84	Bajaj Holdings	16	2.1	-9	6	78	0	15	25	17	5
85	Ambuja Cements	16	2.1	4	7	210	1	15	19	27	15
86	Shriram Transport	16	2.1	3	15	134	0	11	23	25	14
87	Cipla	16	2.1	2	16	300	1	11	18	48	25
88	Piramal Enterprises	15	2.1	43	7	86	0	24	29	5	18
89	H P C L	15	2.0	0	14	112	0	11	12	15	7
90	Bajaj Auto	15	2.0	14	13	293	1	27	59	19	18
91	Adani Ports	14	1.9	28	33	312	1	21	20	28	47
92	GSK Pharma	14	1.9	-1	11	138	0	25	28	61	30
93	Alstom T&D India	14	1.9	-9	1	73	0	9	22	123	38
94	Siemens	13	1.9	-3	3	234	1	14	25	82	35
95	Aditya Birla Nuvo	13	1.8	56	11	102	0	11	3	15	61
96	Container Corpn	13	1.8	6	11	139	0	14	18	29	22
97	Grasim Industries	5	1.3	-11	10	212	1	8	25	19	8
98	Infosys	11	1.7	15	19	1,048	3	24	27	21	24
99	ICICI Bank	11	1.7	21	13	730	2	14	9	15	23
100	ACC	10	1.6	-6	7	115	0	14	27	25	11
	TOTAL	**25**	**3.1**	**19**	**18**	**34,233**	**100**	**20**	**20**	**27**	**21**
Rank	Company	2010-15 Price		CAGR (10-15, %)		Wealth Created		RoE (%)		P/E (x)	
		CAGR (%)	Times (x)	PAT	Sales	INR b	Share (%)	2015	2010	2015	2010

Appendix 3: MOSL 100: Alphabetical order

Company	WC Rank		Wealth Created		
	Biggest	Fastest	INR b	Price CAGR %	Price Mult. (x)
ACC	73	100	115	10	1.6
Adani Ports	29	91	312	14	1.9
Aditya Birla Nuvo	79	95	102	13	1.8
AIA Engineering	91	60	80	26	3.1
Ajanta Pharma	78	1	106	119	50.5
Alstom T&D India	96	93	73	14	1.9
Amara Raja Batteries	71	10	128	59	10.2
Ambuja Cements	44	85	210	16	2.1
Apollo Hospitals	64	46	138	30	3.7
Ashok Leyland	69	71	130	21	2.6
Asian Paints	16	43	580	32	4.0
Aurobindo Pharma	30	19	301	45	6.4
Axis Bank	10	80	774	19	2.4
B P C L	23	59	396	26	3.1
Bajaj Auto	33	90	293	15	2.0
Bajaj Finance	48	7	182	68	13.2
Bajaj Finserv	53	40	163	33	4.2
Bajaj Holdings	94	84	78	16	2.1
Bayer Crop Science	80	28	101	39	5.1
Berger Paints	72	16	124	48	7.1
Bharat Forge	38	30	239	38	5.0
Blue Dart Express	54	9	156	59	10.2
Bosch	14	24	646	40	5.3
Britannia Industries	41	17	221	46	6.7
Cadila Healthcare	37	58	244	26	3.2
Castrol India	56	67	152	22	2.7
Cipla	31	87	300	16	2.1
Colgate-Palmolive	49	61	182	24	3.0
Container Corpn	63	96	139	13	1.8
CRISIL	76	45	107	31	3.9
Cummins India	61	81	142	19	2.4
Dabur India	28	54	327	27	3.3
Divi's Labs	59	70	148	21	2.6
Dr Reddy's Labs	24	68	377	22	2.7
Eicher Motors	18	3	413	90	24.6
Emami	50	32	181	37	4.9
Gillette India	75	53	111	28	3.4
GSK Pharma	65	92	138	14	1.9
GSK Consumer	46	41	202	33	4.2
Glenmark Pharma	62	63	141	24	3.0
Godrej Consumer	35	42	263	32	4.0
Godrej Industries	100	78	68	20	2.5
Grasim Industries	42	97	212	5	1.3
GRUH Finance	90	8	80	62	11.1
H D F C	6	79	1241	19	2.4
H P C L	74	89	112	15	2.0
Havells India	55	29	153	38	5.1
HCL Technologies	7	23	1130	41	5.5
HDFC Bank	3	69	1540	21	2.6
Hexaware Tech	88	12	84	56	9.2
Hindustan Unilever	5	47	1374	30	3.7
ICICI Bank	12	99	730	11	1.7
Idea Cellular	22	65	403	23	2.8
IndusInd Bank	26	27	364	39	5.2
Info Edge (India)	99	44	70	31	3.9
Infosys	9	98	1048	11	1.7
ITC	2	77	1565	20	2.5
Jubilant Foodworks	95	33	77	36	4.7
Kansai Nerolac	89	55	82	27	3.3
Kotak Mahindra	15	51	628	29	3.5
LIC Housing Finance	70	75	130	20	2.5
Lupin	11	20	757	44	6.2
M & M	20	83	411	17	2.2
Mahindra Finance	81	52	95	28	3.4
Marico	51	50	181	29	3.6
Maruti Suzuki	13	72	691	21	2.6
Mindtree	87	36	86	35	4.4
Motherson Sumi	21	11	404	56	9.3
MRF	66	22	136	42	5.7
Nestle India	19	73	411	21	2.6
P & G Hygiene	52	49	169	29	3.6
P I Industries	93	4	78	85	21.7
Page Industries	60	5	144	77	17.2
Petronet LNG	98	82	72	18	2.3
Pidilite Industries	36	25	250	39	5.3
Piramal Enterprises	86	88	86	15	2.1
Shree Cement	32	34	295	36	4.7
Shriram City Union	83	37	94	35	4.4
Shriram Transport	67	86	134	16	2.1
Siemens	39	94	234	13	1.9
SPARC	84	31	94	38	5.0
Sun Pharma	4	21	1405	42	5.7
Sundaram Finance	58	14	148	52	8.1
Supreme Industries	92	15	79	50	7.7
Symphony	85	2	89	108	39.0
Tata Motors	8	48	1071	29	3.6
TCS	1	56	3458	27	3.3
Tech Mahindra	25	64	365	24	2.9
Titan Company	34	39	266	34	4.3
Torrent Pharma	57	38	151	34	4.3
TVS Motor	77	18	106	45	6.4
UltraTech Cement	17	76	505	20	2.5
United Breweries	45	26	208	39	5.2
United Spirits	27	66	338	23	2.8
UPL	68	62	131	24	3.0
WABCO India	82	13	95	52	8.2
Whirlpool India	97	35	73	36	4.6
Wockhardt	47	6	190	68	13.4
Yes Bank	40	57	222	26	3.2
Zee Entertainment	43	74	211	21	2.5

MOTILAL OSWAL

20 YEARS

WEALTH CREATION STUDY

Over the last 20 years, the Motilal Oswal Annual Wealth Creation Study has covered several aspects of Wealth Creation. In the pages that follow, we present at a glance, the highlights and insights gleaned from these 20 Wealth Creation Studies.

STUDY 1: 1991-1996

Aspects of Wealth Creation

Essence

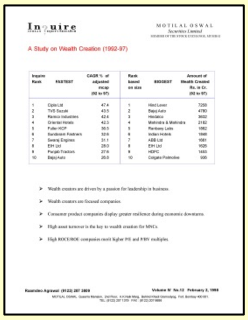
Wealth creating companies have substantially high RoE (Return on Equity) and RoCE (Return on Capital Employed). There is also a high correlation between RoE and P/E.

Highlights & Insights

- Right judgment of long-term sustainability, prosperity of business, and responsible management play a crucial role in identifying wealth creators.
- Wealth creation occurs when a great management runs a great business. But if an outsider were to buy into such great businesses through the stock market, he/she must enter at the right price to earn substantial appreciation.

STUDY 2: 1992-1997

Good Businesses Which Get Better



Essence

For sustained wealth creation, "The principle one must bear in mind while identifying a right the business economics must not only be distinctly superior but should get better with time."

Highlights & Insights

- RoE is a product of three key ratios: (1) Net Profit to Sales (PAT Margin); (2) Sales to Assets (Asset Turnover); and (3) Asset to Equity (Gearing).
- Wealth creators tend to exhibit rising PAT margin, stable asset turnover and a falling gearing (i.e. funding expansions through internal accruals).
- RoCE of wealth creators tends to be substantially higher than the prevailing coupon rate.

STUDY 3: 1993-1998

Competitive Strengths of Wealth Creators

Essence

Successful equity investing is: (1) Identifying the right business (2) Which is run by a competent management; and (3) Is acquired at a price which is at a huge discount to its underlying value.

Highlights & Insights

- Widespread usage of IT in the years to come and India's competitive advantage in this sector would provide exciting opportunities.
- With global integration, businesses such as pharma will benefit significantly from an improvement in their business economics.

- Earnings power is the prime source of wealth creation. Arithmetically, Price/Book (Mkt Cap/NW) = RoE (PAT/NW) x P/E (Mkt Cap/PAT).

STUDY 4: 1994-1999

How to Value Growth

Essence

High earnings growth firms with high RoE, bought at a reasonable PEG (PE/Earnings Growth ratio), create maximum wealth.

Highlights & Insights

- Earnings growth and earning power are the key drivers to wealth creation.
- The value of any company depends primarily on three factors: (1) Current profit, (2) Current capital employed, (3) Future growth in profits and profitability
- Consistency, profitability and sustainability are the key drivers to the valuation of growth.
- One valuation ratio which captures growth is PEG (P/E to Earnings growth).

STUDY 5: 1995-2000

Characteristics of Multi-Baggers

Essence

A high-growth business, run by an outstanding management, and purchased with a five-year payback outlook of <1, has a good chance of being a big winner.

Highlights & Insights

Key characteristics of multi-baggers:

- Growth story where the business has a tailwind
- Huge opportunity size
- Great business economics i.e. favourable competitive landscape leading to high RoE
- Outstanding management (Management should have a long-range profit outlook. It has to have unquestionable integrity.)
- Significant re-rating potential

STUDY 6: 1996-2001

Components of Value

Essence

There are five Forces of Wealth Creation – Return on Capital Employed, Capital Employed, Growth in Capital Employed, Cost of Capital and Margin of Safety.

Highlights & Insights

- Value of a share is the present value of future free cash flows, and is given by the formula:
  C x (RoC – G)/(R – G)
  where C: Capital Employed; RoC: Return on Capital; G: Growth in Capital Employed; R: Cost of Capital
- The above four factors combined with Margin of Safety, together make up what we call the Five Forces of Wealth Creation.

STUDY 7: 1997-2002

Value of Stock

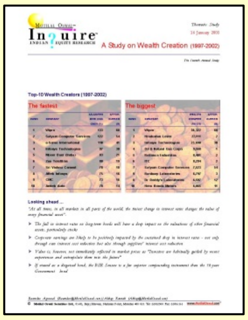
Essence

"At all times, in all markets in all parts of the world, the tiniest change in interest rates changes the value of every financial asset"

– *Warren Buffett*

Highlights & Insights

- Investing means laying out money today to receive more money in real terms tomorrow i.e. after taking inflation into account.
- Value of bonds or equities is always related to the risk-free rate that government securities offer. Therefore, if the interest rate on government securities rises, the prices of all other securities must adjust downward and vice-versa.



STUDY 8: 1998-2003

Transitory vs Enduring Wealth Creators

Essence

Multi-baggers could be of two types: transitory and enduring. Only good quality managements running a good business can deliver enduring multi-baggers.

Highlights & Insights

- Multi-baggers are super stocks that multiply in value over a period of time.
- Enduring multi-baggers are those companies, whose wealth creation is long lasting. Transitory multi-baggers are typically cyclicals and fad companies with questionable quality of management.
- The key factors behind creation of multi-baggers are: (1) Quality of business, (2) Quality of management, and (3) Huge margin of safety in the purchase price.

9TH ANNUAL WEALTH CREATION STUDY

STUDY 9: 1999-2004

Business Cycles in Commodity Stocks

Essence

Commodity prices, profits and stocks rise sharply in the 'squeeze' phase of the cycle. But no squeeze is permanent, and prices plummet when it ends. So, the way to make money in commodities and commodity stocks is to 'sell too soon'.

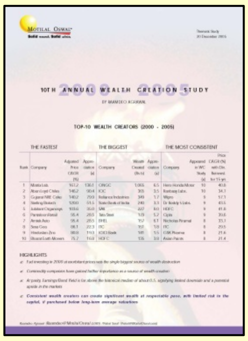
Highlights & Insights

A commodity cycle goes through five phases:

- **Gloom:** low capacity utilisation, low prices and low profits (even losses)
- **Recovery:** moderate capacity utilisation, gradual price escalation, steadily rising profits
- **Squeeze:** near-100% utilisation, supply squeeze, sharp price hikes, exponential profits
- **Euphoria:** Fresh capacity surge in excess of incremental demand, prices dropping off
- **Glut:** Excess supply, plunge in product prices, profits disappear.

STUDY 10: 2000-2005

Price & Value



10TH ANNUAL WEALTH CREATION STUDY

Essence

For consistent wealth creation over very long periods, look for leaders in non-cyclical businesses that deliver high returns on net worth.

Highlights & Insights

- The 10th Study introduced a new concept – Most Consistent Wealth Creators.
- The key observations of the top 10 most consistent wealth creators were –
  1. Nine out of top 10 companies were consumer-facing companies
  2. All businesses were non-cyclical in character
  3. All companies were leaders in their respective business segments
  4. The companies were highly profitable in terms of return on net worth.

STUDY 11: 2001-2006

Terms of Trade

Essence

Favorable terms of trade are an important characteristic of a wealth creating company. When terms of trade change from adverse to favorable, the impact on the speed of wealth creation can be significant.

Highlights & Insights

- Terms of trade may be defined as 'the relationship between debtors and creditors', and measured as the ratio of debtors to creditors (in percentage terms).
- A company enjoys favorable terms of trade if its debtors are lower than its creditors.

11TH ANNUAL WEALTH CREATION STUDY

- Favorable or unfavorable terms of trade depends on bargaining power with suppliers and customers.
- Companies with strong brands and/or dominant market position enjoy high bargaining power.

STUDY 12: 2002-2007

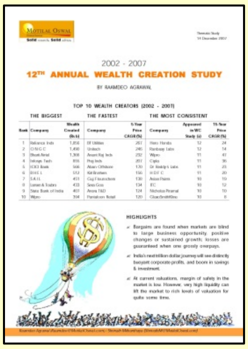
Next Trillion Dollar Opportunity

Essence

India's NTD (next trillion dollar of GDP) journey will see distinctly buoyant corporate profits, and significant boom in savings and investment.

Highlights & Insights

- For 25 years from 1977, India's nominal GDP (US$ terms) grew at 6.2% CAGR to US$ 0.5 trillion in 2002. However, in next 5 years, India's GDP doubled to US$ 1 trillion by 2007.
- Going forward, for every 5-7 years, India will add its next trillion dollar (NTD) of GDP. This linear GDP growth will translate into exponential opportunity for several businesses.
- Boom in savings and investment on the back of rising GDP and per capita GDP spells excellent growth for sectors like financial services, capital goods, cement and steel.



2002 - 2007

12TH ANNUAL WEALTH CREATION STUDY

STUDY 13: 2003-2008

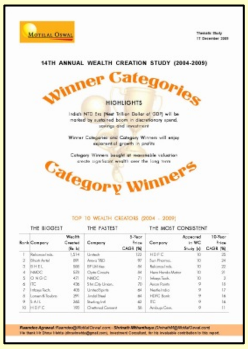
Great, Good, Gruesome

Essence

Proper insight into Great, Good and Gruesome companies is critical for long-term wealth creation. Gruesome companies are best avoided.

Highlights & Insights

- A **Great** company has an enduring moat (i.e. long-term competitive advantage) that protects excellent returns on capital. Great companies are fountains of dividend.
- **Good** companies are fountains of earnings. They grow at healthy rates, but need significant capital infusion from time to time to sustain growth.
- **Gruesome** companies are bottomless pits of capital consumption.'
- Buy 'Good' companies at great (bargain) price or buy 'Great' companies at good (reasonable) price.



STUDY 14: 2004-2009

Winner Categories & Category Winners

Essence

1. Winner Categories = India's NTD opportunity + Scalability
2. Category Winners = Winner Categories + Entry Barriers + Great Management
3. Winning Investments = Category Winners + Reasonable Valuation

Highlights & Insights

- Winner Categories are sectors, which are expected to grow at least 1.5 times the nominal rate of GDP growth.
- Category Winners are companies within these Winner Categories, which enjoy (1) Entry barriers (i.e. long-term competitive advantage) and (2) Great management.
- Winning Investments are made when Category Winner stocks are bought at reasonable (but not necessarily cheap) valuations.

STUDY 15: 2005-2010

UU Investing: Wealth Creation from the unknown & unknowable

Essence

A stock's journey from UU (Unknown & Unknowable) to KK (Known & Knowable) is marked by high earnings growth and sharp rerating, leading to rapid wealth creation.

Highlights & Insights

- In many cases, the stock market presents investors with a different dimension of uncertainty, bordering on the world of ignorance or unknown and unknowable (UU).
- The key success principles of UU investing are: (1) Asymmetric payoffs (i.e. limited absolute downside, unlimited upside) (2) Complementary (i.e. special investing) skills, and (3) Portfolio approach (even if one UU idea clicks, the portfolio performance is good).

STUDY 16: 2006-2011

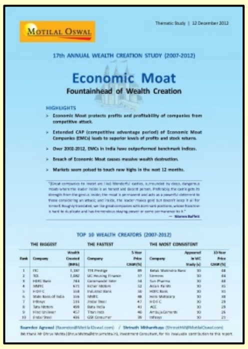
Blue Chip Investing: Wealth Creation through dividends

Essence

Blue chips are fountains of dividend, and offer as much, if not more, investment growth potential than companies with far less brand recall, but with far less risk as well.

Highlights & Insights

- Six criteria help shortlist Blue Chips: (1) 20 years of uninterrupted dividends; (2) Dividends raised in at least 5 of last 12 years; (3) Earnings growth in at least 7 of last 12 years; (4) 12-year Avg RoE of at least 15%; (5) At least 5 million shares, and (6) Owned by at least 80 institutional investors.
- The two signals to buy into Blue Chips: (1) Dividend yield higher than 10-year median and PE lower than 10-year median, and (2) Dividend yield >3%.


Economic Moat
Fountainhead of Wealth Creation

STUDY 17: 2007-2012

Economic Moat: Fountainhead of Wealth Creation

Essence

"Great companies are like wonderful castles, surrounded by deep, dangerous moats."

— *Warren Buffett*

Highlights & Insights

- Economic Moat protects a company's profits from the onslaught of multiple business forces, primarily competition.
- The strength of a company's Economic Moat is determined by the: (1) Industry structure, and (2) Its own strategy.
- A company's Economic Moat needs to ultimately reflect by way of Return on Equity (RoE) superior to peers in a sustained way (i.e. at least 7 of 10 years). Economic Moat Companies tend to significantly outperform the market, and also peer companies without moats.

STUDY 18: 2008-2013

Uncommon Profits: Emergence & Endurance


Uncommon Profits
Emergence & Endurance

Essence

Uncommon profits in companies (Value Creators) leads to uncommon wealth creation in stock markets. Successful emergence of value creators is very rare; a strong corporate-parent in a non-cyclical business significantly increases the probability.

Highlights & Insights

- Uncommon Profitability (% terms) = RoE > Cost of Equity (15% in Indian context).
- Emergence is a company's first entry into the potential Uncommon Profit zone. Its next challenge is Endurance i.e. sustaining RoE above 15% for a long period of time.
- Successful emergence is rare. Hence the need to consider investing in Enduring Value Creators, which also outperform markets over the long term.

STUDY 19: 2009-2014

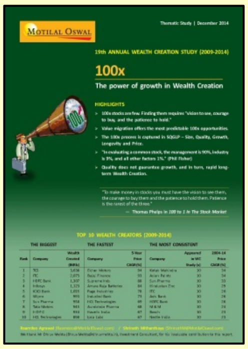
100x: The power of growth in Wealth Creation

Essence

100x stocks are few. Finding them requires vision to see, courage to buy, and the patience to hold.

Highlights & Insights:

- '100x' refers to stock prices rising 100-fold over time i.e. '100-baggers'.
- In India, benchmark indices tend to go 100x in 30 years (17% CAGR). Smart investors should target to achieve 100x in less time, say, 20 years (26% CAGR).
- 100x is the alchemy of five elements forming the acronym SQGLP – Size (small, relatively unknown company), with high Quality (of business and management), Growth (in earnings), Longevity (of quality & growth) and favourable Price.


100x
The power of growth in Wealth Creation

STUDY 20: 2010-2015

Mid-to-Mega: Power of industry leadership in Wealth Creation

Essence

Most mega companies are industry leaders. Mid-size companies which demonstrate this trait are potential Wealth Creators.

Highlights & Insights

- Value Migration is increasingly becoming the key driver of rapid Wealth Creation.
- Industry leadership is a necessary pre-requisite to be a megacorp.
- Market cap rank is a powerful tool to assess a company's current standing and the roadmap ahead.
- Mid-to-Mega marks a big change in ranks, driven by the lollapalooza effect of MQGLP (Mid-size, Quality, Growth, Longevity and Price).


Mid-to-Mega

Space for Notes

Space for Notes

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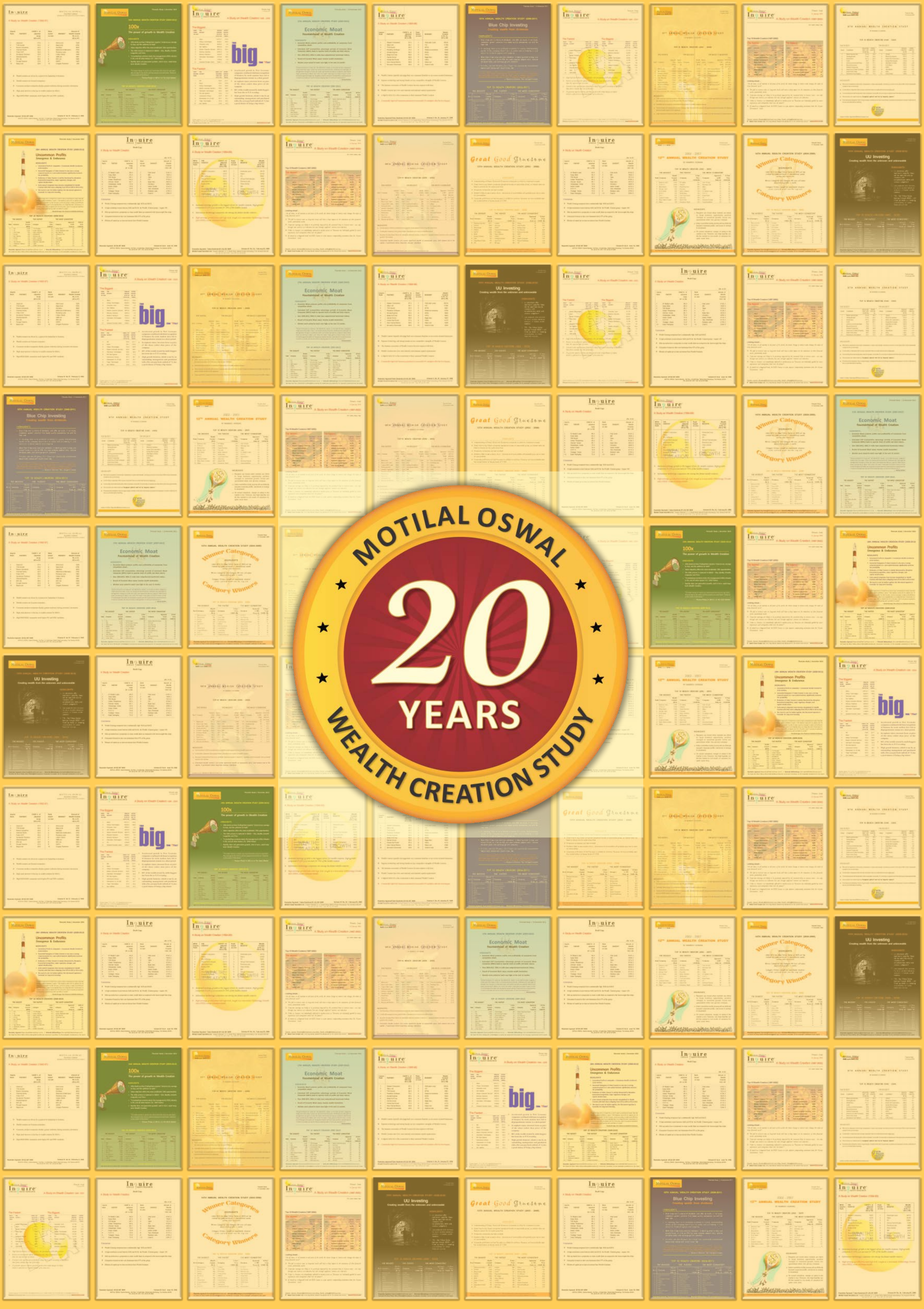
Kadambari Balachandran
Email : kadambari.balachandran@motilaloswal.com
Contact : (+65) 68189233 / 65249115
Office Address : 21 (Suite 31),16 Collyer Quay,Singapore 04931

Motilal Oswal Securities Ltd
Motilal Oswal Tower, Level 9, Sayani Road, Prabhadevi, Mumbai 400 025
Phone: +91 22 3982 5500 E-mail: reports@motilaloswal.com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