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Indian Stock Market: Cycles Within

A historic – review of earnings, returns and secular bull and bear cycles in the Indian Stock Market.

History: a better teacher

When I was in school, I would often wonder about the relevance of history and how the battle of Panipat in the year 1526 had any bearing on my life in the late twentieth century.

The great investor Jeremy Grantham of GMO recently said "This is no market for young men. At least us old men remember what a real bear market is like, and the young men haven't got a clue."

The only way for young people to escape from this is to look back at history and learn from it rather than experience it firsthand. And believe you me, experience is a more expensive teacher than history, so it's better to gain returns in the market, rather than gain painful experience.

In next few letters, we will review the history of the Indian stock market, in an attempt to be better prepared to confront the mercurial moods of Mr Market.

Cycles: Inevitable Truth

The father of value investing Benjamin Graham in his master piece 'The Intelligent Investor' wrote "..in the short term, the stock market behaves like a voting machine, but in the long term it acts like a weighing machine.." If we examine this statement, it suggests that Mr. Market in his continuous attempt to assess the right valuation generates cycles of over valuation and under valuation. A question regularly asked by institutional as well as retail investors is "Which cycle are we in and where are we standing in this cycle?"

Whilst the period and extent of under valuation and over valuation varies from one cycle to another, use of historical analysis of such cycles is one of the tools employed at Bamboo Shoot Advisors to help us determine the level of margin of safety available at any given level of the market.

In the following analysis, we use the Sensex as a proxy for the Indian market. We have tried to analyse three important cycles playing out simultaneously in the market, the interplay of which is reflected in the returns from the market.

1. Earnings Growth Cycle
2. Capital Cycle
3. Secular Bull and Bear Cycles

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Indian Market Cycles

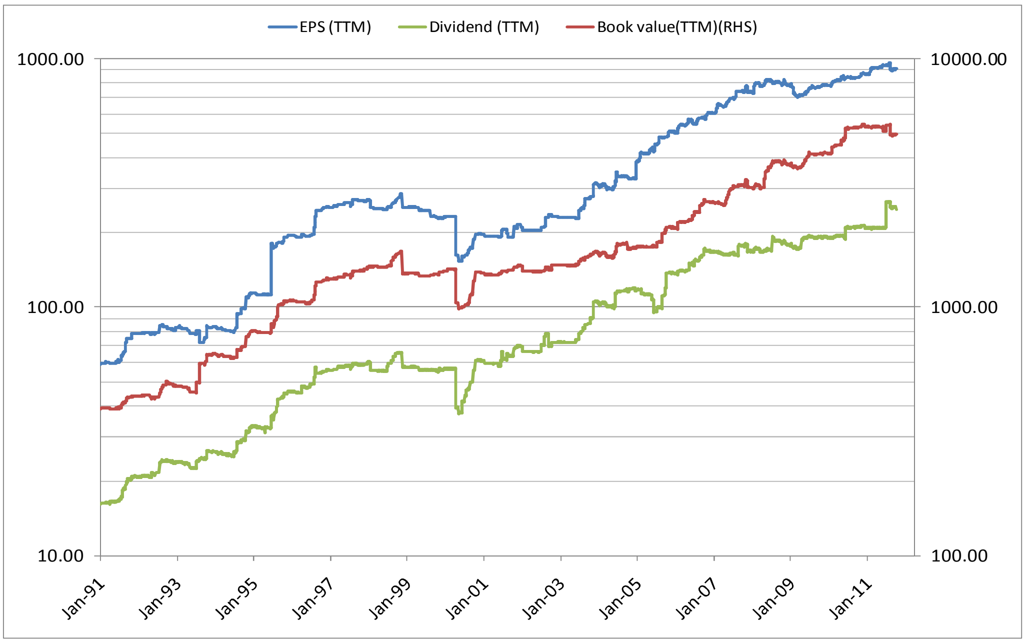
Sensex: Earnings Growth Cycle

All around us in Nature, there is evidence of cycles at play. The progress of the human race itself, while generally on an uptrend, has been marked by wars , epidemics and other such disturbances temporarily reversing the progress brought about by inventions such as steam power, electricity etc .

The Economy and Market being a reflection of human behaviour are also subject to this truth of cycles. Although the earnings of the Sensex grew at a rate in excess of 14% CAGR since 1990, it was not a smooth rise during this period. In fact the Sensex has seen two full cycles of high and low earnings growth rates as shown in Table 1.

Chart 1 below shows the EPS, Book Value and Dividend for Sensex since Jan 1991 on a log scale.

Chart 1



(Source: BSE India, Bamboo Shoot Advisors)

Table 1: Sensex – Earnings Growth Rate Cycles (cyclicality around the trend growrh rate of 14.2%)

	Full Period		High Growth	Low Growth		High Growth	Low Growth
	Dec 1990 -		Dec 1990 -	Jan 1997 -		Dec 2002 -	Dec 2007 -
Growth rates (CAGR)	Dec 2011(e)		Dec 1997	Dec 2002		Dec 2007	Dec 2011(e)
EPS	14.4%		22.5%	-1.6%		27.6%	6.6%
Book Value	13.4%		20.6%	0.3%		15.4%	16.4%
Dividend	14.4%		19.2%	5.3%		18.4%	12.8%
Average							
RONW	18.3%		16.8%	15.9%		23.6%	18.3%
Payout Ratio	26.6%		26.4%	28.3%		26.7%	24.3%

(Source: BSE India, Bamboo Shoot Advisors)

Thus whilst the long term earnings growth was 14.2% CAGR, we had two cycles in the last two decades, with varied growth rates; and it appears that currently we are in the slow growth phase of the second earnings growth cycle.

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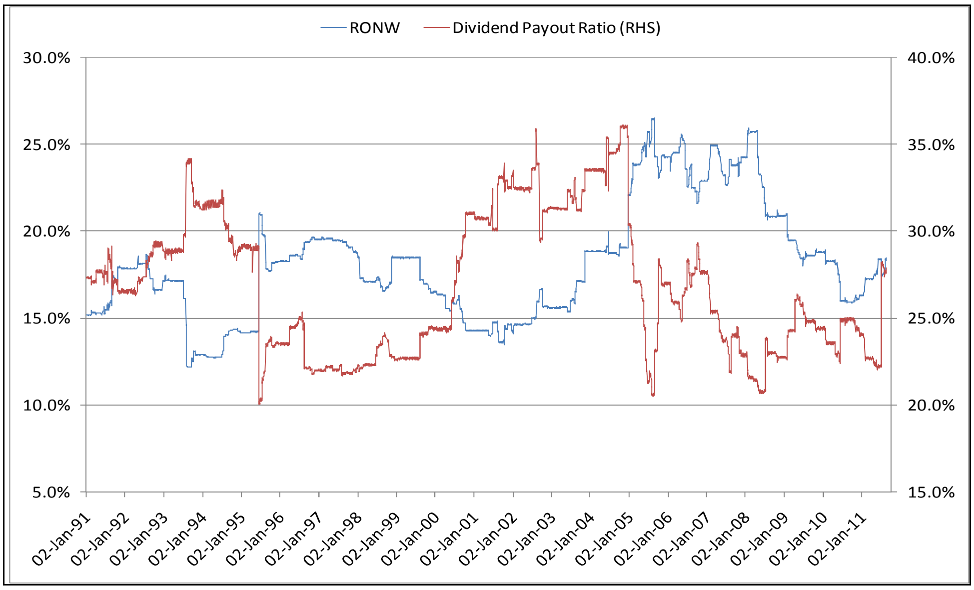
Sensex: Capital Cycle

Capital cycle theory states that when an industry makes higher returns in an up cycle, it inevitably attracts new investments and capacity expansion leading to oversupply, and a consequent decline in returns over time. In a down cycle the reverse happens, as lack of investment results in supply shortages leading to higher returns. (The only exceptions to this are those industries or businesses, which enjoy wide moats or barriers to entry, limiting competition, so higher returns can be sustained for long periods.)

We can clearly see in Chart 2, how the capital cycle played out in the Indian market. As companies made higher returns, they lowered the payout ratios indicating that companies retained more money for reinvestment in capacity expansion, resulting in a supply glut. That led to lower returns in subsequent periods, impacting reinvestment behaviour; companies started paying out more money to shareholders, thus investing lower amounts in capacity building and growth. This leads to a supply-demand mismatch, resulting in higher returns in later periods. Witness the low profitability and high payout period of2000 – 05 followed by the high profitability and low payout period of 2005 – 09.

Chart 2: Profitability Cycle or Capital Cycle



(Source: BSE India, Bamboo Shoot Advisors)

Table 2 shows the capital cycles experienced in India reflected by higher ROWNs (profitability)

Table 2: Profitability Cycle or Capital Cycle

	Dec 1990 -	Dec 1994 -	Dec 1998 -	Dec 2002 -	Dec 2007 -
Growth rates (CAGR)	Dec 1994	Dec 1998	Dec 2002	Dec 2007	Dec 2011e
EPS	17.0%	22.4%	-2.3%	27.6%	6.6%
Book Value	19.2%	14.6%	1.9%	15.4%	16.4%
Dividend	19.0%	15.1%	5.9%	18.4%	12.8%
Average					
RONW	15.5%	18.5% ↑	15.2% ↓	23.6% ↑	18.3% ↓
Payout Ratio - with 2 years lag	28.1%	22.9% ↓	32.0% ↑	24.9% ↓	25.2% ↑

(Source: BSE India, Bamboo Shoot Advisors)

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Sensex: Understanding Secular Bull and Bear Cycles with Change in P/E multiples

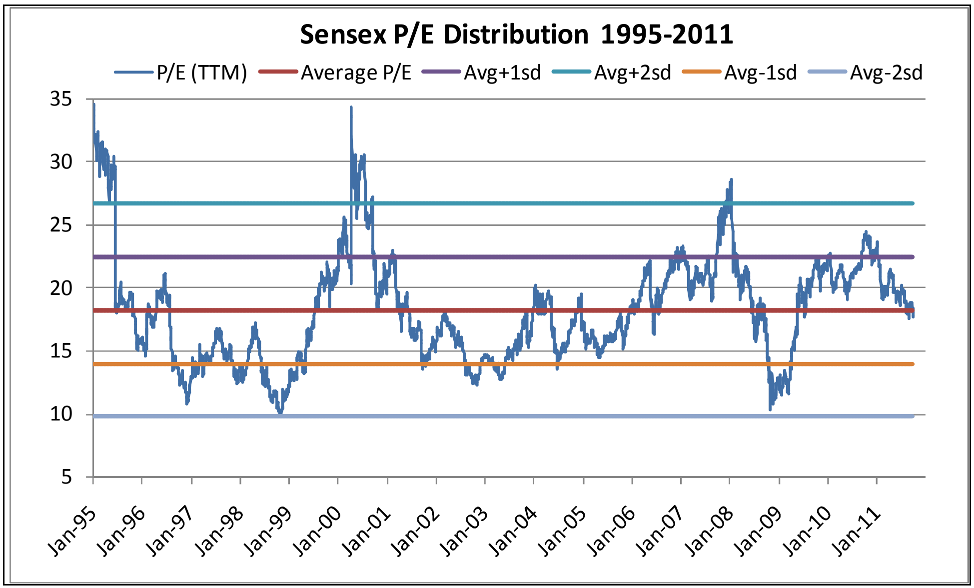
As explained by renowned investor and author Ed Easterling in his work "Unexpected Returns", total equity returns are driven by three major factors:

1. Dividend yield
2. Earnings growth
3. Change in valuation multiples

Wherein, the first two factors drive the long term returns from equity investment, the third and last factor results in (or is the result of) secular bull and bear cycles in interim periods and drives the short to medium term returns.

Whilst the capital cycles result in volatile returns on investments and earnings growth, economic cycles including inflation, interest rates, credit expansions and investors' sentiments result in change in multiples. As Ed Easterling explained, the change in multiples is the key driver of secular bull and bear markets. We have listed these secular bull and secular bear market cycles experienced in the Indian market in Chart 3 and Table 3 below.

Chart 3: Sensex P/E (TTM) and Secular Bull and Bear Cycles



(Source: BSE India, Bamboo Shoot Advisors)

Please note that whilst all these three cycles, namely earning growth cycle, capital cycle and secular bull and bear cycles played out simultaneously, they are caused by different factors and may not be synchronous with each other. Each cycle merits detailed discussion, which we will bring forth in our future letters. In fact Table 3 clearly shows that these cycles may sometimes move in opposing directions. Only during period 2002-07, all three cycles moved in one direction, which resulted in a massive bull market for the period - a dream run for any investor.

Also for simplicity in this first article of series, we have used reported P/E by BSE based on trailing twelve months (TTM) earnings without any normalisation. Sometimes the reported P/E its not representative of the true market multiple. This happens at extremities of the capital cycle, when profitability is either extremely high or low. We will explain the importance and methods of normalisation used by us in our future letters.

Table 3: Secular Bull and Bear Cycles based on Multiple Changes

Period From	02-Jan-95	30-Oct-98	11-Feb-00	28-Oct-02	09-Jan-08	27-Oct-08	13-Oct-10
To	30-Oct-98	15-Feb-00*	30-Apr-03	09-Jan-08	27-Oct-08	13-Oct-10	30-Sep-11#
Beginning P/E TTM	34.5	9.8	25.5	12.3	28.6	10.4	24.5
Ending P/E TTM	9.8	25.5	12.3	28.6	10.4	24.5	18.1
Secular Cycle	Bear	Bull	Bear	Bull	Bear	Bull	Bear
Cycle Period (Months)	45.9	15.4	32.5	62.4	9.6	23.5	11.6#
Sensex Returns (CAGR)	-8.4%	78.8%	-23.8%	46.8%	-67.4%	57.3%	-21.1%
Growth rates (CAGR)							
EPS	27.2%	-15.0%	-0.2%	24.7%	15.8%	1.5%	7.8%
Book Value	21.3%	-12.5%	1.5%	14.7%	36.7%	17.6%	-7.0%
Dividend	19.5%	-10.8%	9.4%	17.5%	13.4%	7.0%	21.0%

*on 10 April 2000, 2 months after the Tach boom, BSE replaced 4 companies in Sensex, resulting in more than 30% decline in Index EPS & Dividend. Thus P/E shot up for next few months. Those high P/Es for cycle's identification have been ignored, although result was not much different.

It appears that we are in a state of secular bear cycle. Just need to await the final outcome.

(Source: BSE India, Bamboo Shoot Advisors)

As evident by the data above, Indian markets experienced three cycles in the last 16 years. We leave the details about the drivers of these secular cycles for another discussion, but factual data points that we are in a secular bear cycle currently.

Sensex: Understanding Secular Bull and Bear Cycles with change in Sensex level

Value investor Chetan Parikh of Jeetay Investments introduced me to what he says is an eight-nine years cycle in the Indian markets. According to him, these cycles started from 1984, after what is perceived as the first liberal budget in independent India.

I have tried to capture these cycles in Table 4 by taking data points from one market bottom to another market bottom, capturing intermediary peaks and corrections of more than 20%. Each of these 20% corrections should be preceded and followed by at least a 50% price rise. There were few incidences during corrections, when market fell more than 20% without >50% pull back, which is just the volatility in correction and we have taken the next lower level for our calculations. **The cycle ends with a market bottom after a more than 50% correction in price.** The results were fascinating and do overlap with the Secular Bull and Bear Cycles defined by Ed Easterling.

History shows us that whilst typical bull markets end with significant gains from the beginning, a bear phase typically ends at around the levels from which it begun.. However in both cases the interim correction may be as high as 40%. So we should beware jumping the gun after a 10-20% correction.

Second, the market typically peaks with the P/E multiple expanding to mid 20s level, and a bear market drives the P/E multiples to low double digits in the range of 10-13x. Even in a bull phase, the P/E multiples can pull back to 14-16x in corrections.

Table 4: Secular Bull and Bear Cycles based on price changes

Date	Sensex Closing	Change %	Cycle Period	P/E TTM	Comment/Event	Winning Portfolio Style
09-May-84	233		Years		First Liberal Budget by	
27-Feb-86	665	185%	1.8		Late Rajiv Gandhi Govt.	
28-03-1988	390	-41%	2.1			
09-Oct-90	1,559	300%	2.5	23.0		
25-Jan-91	956	-39%	0.3	16.1	India's Forex problem	
22-Apr-92	4,467	367%	1.2	57.4	Harshad Mehta Scam	Sailing Strategy /
03-May-93	2,084	-53%	1.0	26.7		Passive Strategy /
Overall Return		894%	9.0	Bull Cycle		Buy and Hold Strategy
03-May-93	2,084			26.7		
12-Sep-94	4,631	122%	1.4	47.0	First FII Boom	
04-Dec-96	2,745	-41%	2.2	10.8		
05-Aug-97	4,548	66%	0.7	16.8		
20-Oct-98	2,764	-39%	1.2	10.0		
11-Feb-00	5,934	115%	1.3	25.5	Tech Bubble	
21-Sep-01	2,600	-56%	1.6	13.5		Rowing Strategy, /
Overall Return		25%	8.4	Bear Cycle		Active Strategy.
21-Sep-01	2,600			13.5		
14-Jan-04	6,194	138%	2.3	20.1		
17-May-04	4,505	-27%	0.3	14.8	NDA lost election	
10-May-06	12,612	180%	2.0	22.2		
14-Jun-06	8,929	-29%	0.1	16.3		
08-Jan-08	20,873	134%	1.6	28.5		Sailing Strategy /
09-Mar-09	8,160	-61%	1.2	11.6	Subprime meltdown	Passive Strategy /
Overall Return		214%	7.5	Bull Cycle		Buy and Hold Strategy
09-Mar-09	8,160			11.6		Whats best now ???
05-Nov-10	21,005	157%	1.7	24.2		Sailing or
26-Aug-11	15,849	-25%	0.8	17.6	European sovereign deb	Rowing Strategy?
					crises underway	
Averages						
Expansion Phase Returns		179%	1.6			
Contraction Phase Returns		-43%	1.1			

(Source: BSE India, Bamboo Shoot Advisors)

"You can't predict, you can prepare"

I would like to end this letter with the famous quote from another great investor Howard Marks of Oaktree Capital Management "You can't predict, you can prepare".

Irrespective of whether we are in another bear cycle or a prolonged correction in a bull cycle, historical evidence says that the current level of P/E of around 18x and a correction of 22% by 30th September can't be defined as a bottom as yet. We may not be able to predict which way the market will go from here, but if history is any guide, we certainly can't call the current level of the market as 'Cheap' either.

All we can do is to prepare ourselves with some dry powder to fire at a later stage. If the market has to go down by 40% from its most recent peak, as it did in most of the corrections, we still have significant pain in the pipeline. If markets goes down to the P/E levels of 13-16x assuming we are in a bull market correction and not in a bear market correction, then also we have some downside left in the market.

Thus rather than predicting the next move of the market, we should be prepared for some more correction and a significant recovery thereafter.

With special thanks to Mr. Chetan Parikh for his continuous motivation and mentoring in writing this letter.

Happy Investing

Pramod Dangi, CA, CFA

Bamboo Shoot Advisors

About Bamboo Shoot Advisors:

Bamboo Shoot Advisors has been co-promoted by Jeetay Investments Private Limited and Pramod Dangi. Bamboo Shoot Advisors has been started with an objective to provide independent research services on Indian equities markets to investors. The goal of Bamboo Shoot is to enhance investors' risk management and asset allocation capabilities.

Jeetay Investments Private Limited is a SEBI registered portfolio management firm based in Mumbai, India. It invests principally in publicly traded Indian securities. It is driven by a value investment philosophy and seeks to maximize investor capital by buying securities which are trading at values materially lower than what it considers to be their true business value.

Mr. Chetan Parikh is a director of Jeetay Investments. He is also associated with www.capitalideasonline.com, a website dedicated to investor education. He had obtained his MBA from the Wharton School. He had written for 'Investment Week' which was a popular weekly financial publication in India and developed a statistical model for them. His writings have been published in Business Standard, Business World, Economic Times and Business India. He has been rated as amongst one of India's best investors by Business India. He is a visiting faculty member of Jamnalal Bajaj Institute of Management Studies, Mumbai, teaching on 'Security Analysis'.

Mr. Vinay Parikh, co-founder of Jeetay Investments, obtained his MBA from the Wharton School appearing on the Dean's list in 1982. He did his B.Sc. with distinction in Statistics and Economics from Bombay University, India in 1978. He is associated with investment world for more than three decades and has rich experience in equity management.

Pramod Dangi is a CFA charter holder and a member of ICAI, India. He has a rich experience of a decade in equity markets in India and other global markets. He has held a number of positions in equity research as well as portfolio management. His last assignment was as portfolio manager to lead the PMS activities of a SEBI Registered PMS provider in India. His responsibilities included asset allocation, investments, trades and overseeing and supervising the entire research activity of the PMS firm.