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HORIZON RESEARCH

INDIAN EQUITY OPPORTUNITIES

This report examines the Indian equity markets, their structure, constituents and metrics over time. There are approximately 4,000 actively traded companies in India, offering a sizeable group of businesses for superior stock selection.

India has a deeply rooted equity culture dating to the period of British rule. The Bombay Stock exchange (BSE), founded in 1875, is Asia's oldest public bourse. In addition to the BSE investors can trade through the National stock exchange (NSE). There are approximately 18 other stock exchanges in existence but with little traded market volume. At present 1,652 companies are listed on the NSE and nearly all of these are listed on the BSE as well. An additional feature of the Indian equity markets is that there is a single stock futures market with 208 companies traded on 30/60/90 day contracts. These future contracts assist the price discovery process and are a vehicle for short selling.

HORIZON PROCESS

Idea generation is a rigorous and often contrarian process and adherence to fundamental discipline in volatile markets is tantamount to success. At the core of our process is identification of securities and sectors for investment along with an on-going maintenance of the valuation and event universe to provide advanced insights to unfolding investment landscapes. Some of the characteristics we look for:

- Discount to Private Trade Sale Valuations
- A margin of safety during periods of uncertainty is essential
- Attractive risk adjusted returns
- Low PEG ratio
- Strong corporate governance
- Oriented for the growth of the Indian Sub Continent
- Meaningful free cashflow

The Indian equity market has certain attributes that allow us to believe that there are opportunities to earn risk-adjusted returns through superior stock selection using the Horizon process. We believe that it is possible to identify pockets of value/price misalignment especially within domestic demand led industries. With secular trends led by increasing GDP, growing population and increasing disposable income among other long-term trends there are ample opportunities to invest in companies that will benefit.

INDIA EQUITY MARKET ANALYSIS

Trading and participation

The annual value traded on the NSE in 2011 was USD 584 billion and the ratio of value traded to market capitalisation was 58%, which is well below the value traded to market capitalisation ratios of NASDAQ and NYSE of 185% and 124% respectively (Table 1).

Table 1: Annual value of share trading in 2011

Bourse	Annual value of share trading (USD billion)	As a % of GDP	As a % of M Cap
NASDAQ	28,914	192%	185%
NYSE	19,329	128%	124%
NSE	584	34%	58%
BSE	148	9%	15%

Source: Horizon Research, WFE, The World Bank

An analysis of trading per market participant reveals that retail investor participation has declined in the past 2 years, decreasing from a peak of INR 137 billion in FY09 to INR 69 billion in FY12 (Table 2). To incentivize greater retail participation in the stock market the Indian government is introducing a series of tax policy and legislative changes.

Table 2: Average daily value of share trading FY05-12 (INR billion)

Year	FIIs	DIIs	MF	Retail	Total Turnover
FY05	21	1	6	61	89
FY06	37	1	10	77	125
FY07	64	17	15	101	196
FY08	61	21	14	103	198
FY09	48	24	15	137	225
FY10	58	27	14	109	207
FY11	51	22	10	67	151
FY12	50	22	11	69	151

Source: Economic Times

The Indices

There is a heavy concentration of market capitalization represented through, the primary indices. The NIFTY[1], which comprises 50 companies, and the SENSEX[2], which comprises 30 companies, are the two major indices, and represent 57.6% and 47.6% of the total market capitalisation respectively. The stocks that participate in the NIFTY Index represent 53% (USD 309 billion) of the annual value traded in the exchange. The broad market index (using the CNX 500[3] Index as a proxy for the broad market) with a 17.8% CAGR between 2001-2011 and the NIFTY index with a 15.9% CAGR between 2001-2011 have outperformed both the MSCI EM Index (11.2% CAGR

[1] The NSE S&P CNX Nifty index is computed using the Free Float Market Capitalisation weighted method, wherein the level of index reflects the free float market capitalisation of all stocks in Index. (Source NSE Website)
[2] The BSE Sensitive Index, or Sensex, consists of companies selected on the basis of market capitalization, liquidity and industry representation. (Source BSE Website)
[3] The CNX 500 Equity Index reflects the market as closely as possible and represents ~95.53% of the free float market capitalization of the stocks listed on NSE as on September 28, 2012. Industry weightages in the index reflect the industry weightages in the market to ensure Industry Representation

between 2001-2011) and the S&P 500 (0.9% CAGR between 2001-2011) over the past 10 years (Table 3).

Table 3: Performance of Indian Vs. International Indices (2001-11)

	Index level			CAGR		
Index	**2001**	**2007**	**2011**	**2001-07**	**2001-11**	**2007-11**
S&P 500	1,148	1,468	1,257	*4.2%*	*0.9%*	*-3.8%*
NIFTY	1,059	6,139	4,624	*34.0%*	*15.9%*	*-6.8%*
CNX500	701	5,354	3,598	*40.3%*	*17.8%*	*-9.5%*
MSCI EM - MXEF	317	1,246	916	*25.6%*	*11.2%*	*-7.4%*

Source: S&P, Bloomberg

The balance of shares not captured by the indices equate to approximately 4,000 companies, and results in opportunities for superior stock selection. Our efforts emphasize valuations with catalysts, and believe that a significant portion of small and mid-caps present opportunities for investment.

The Indian equity market quantity of traded companies offers investment diversification opportunities within the Indian market itself. The NIFTY also offers diversity of the market, with the NIFTY comprising companies across each of the 10 broad industry segments.

Concentration offers opportunities

A closer look at the market focusing on company size helps identifying divergences among the listed companies. The largest 50 companies by market capitalisation represent 61.7% of the broad market capitalization. An analysis of value traded as a percentage of total traded volume reveals that nearly 48% of the total traded volume is restricted to the largest 50 companies by market capitalisation. On an aggregate basis, these companies offer attractive values (Table 4).

The largest 50 have a net debt to enterprise value of 16.2%, FY12 FCF yield of 1.3%, FY12 dividend yield of 1.7%, FY12 P/E of 18.3x, FY12 EV/ EBITDA of 11.9x and a FY12 PEG of 1.4x. In contrast after extracting the top 1,000 companies by market capitalisation, the remaining 3,086 companies have a net debt to enterprise value of 61%, FY12 FCF yield of -20.9%, FY12 dividend yield of 3%, FY12 P/E of 9.5x, FY12 EV/ EBITDA of 4.9x and a FY12 PEG of 3.2x. As investors, we find opportunities masked in the aggregates and underscore that these broad differences provide opportunities in individual stock selection.

Table 4: Analysis of performance highlights by market capitalisation

BY MARKET CAPITALISATION	Number of co's	Share of Total Indian Market Cap	Market Cap in USD BN	Net Debt in USD BN	FCF Yld FY12	Dvd Yld FY12	P/E: FY12	EV/ EBITDA FY12	EV/ EBITDA FY13E	P/B FY11	PEG Ratio	Return YTD	EPS in INR	Annual Value Traded in USD BN	Value Traded as % of all stocks
BSE SENSEX INDEX	30	48%	533	91	0.4%	1.8%	18.2	12.1	10.4	5.5	1.4	16%	52	225	40%
S&P CNX NIFTY INDEX	50	58%	645	143	1.0%	1.7%	17.9	12.0	10.4	5.1	1.4	18%	52	296	53%
All India traded equities, Cap Weighted	4,086	100%	1,119	492	-3.7%	1.7%	19.5	13.1	10.6	5.8	1.7	24%	43	558	100%
Top 10 Companies by M Cap	10	30%	332	30	3.6%	2.0%	17.8	11.6	10.2	4.9	1.6	19%	59	113	20%
Top 25 Companies by M Cap	25	48%	534	89	1.6%	1.7%	18.2	12.1	10.4	6.8	1.4	17%	48	191	34%
Top 50 Companies by M Cap	50	62%	691	110	1.3%	1.7%	18.3	11.9	10.3	6.4	1.4	18%	53	270	48%
Top 100 Companies by M Cap	100	76%	846	225	-1.8%	1.7%	18.7	12.9	10.8	6.2	1.3	21%	48	371	66%
Top 500 Companies by MCap	500	95%	1,068	386	-3.7%	1.7%	19.6	13.2	10.7	6.0	1.7	22%	44	528	95%
Top 1,000 Companies by M Cap	1,000	99%	1,103	423	-3.7%	1.7%	19.5	13.1	10.6	5.9	1.7	24%	43	553	99%
Remaining 3,086 by M Cap	3,086	1%	16	69	-20.9%	3.0%	9.5	4.9	3.9	1.8	3.2	47%	6	5	1%

Source: Horizon Research and Bloomberg

We observe that the market capitalisation of a small number of companies within each industry sector constitute a majority of that industry sectors broad market capitalisation. This heavy concentration is observed in most industry sectors. For example in the broad market there are 676 consumer discretionary companies of which 5 companies constitute 43% of the market capitalisation. This trend is repeated in the consumer staples industry where 2 out of 237 companies constitute 56% of the market capitalisation (Table 5).

Table 5: Concentration of market capitalisation by industry

BY INDUSTRY	BROAD MARKET Number of securities	BROAD MARKET Market Cap in USD MN	NIFTY Number of securities	NIFTY Market Cap in USD MN	Market Cap of NIFTY securities as a % of the broad market
Consumer Discretionary	676	99,727	5	43,301	43%
Consumer Staples	237	101,049	2	56,721	56%
Energy	49	175,135	5	147,702	84%
Financial	485	205,194	10	123,126	60%
Health Care	172	63,139	4	26,538	42%
Industrials	522	112,193	4	33,184	30%
Information Technology	299	114,972	4	22,687	20%
Materials	631	143,166	10	54,507	38%
Others	962	3,643	-	-	NA
Telecom Services	11	27,184	1	17,986	66%
Utilities	42	73,908	5	49,709	67%

Source: Horizon Research and Bloomberg

Industry sectors oriented for growth

The materials, energy, informational technology and industrials are among the largest industry sectors by market capitalisation in the Indian equity market with respective participations of 14.5%, 14.9%, and 12.2%. Only the financial industry, with 18% is larger than the aforementioned.

Each sector of the Indian market has its particular economics, and it would not always be accurate to compare two industries using the same financial indicator. However, certain trends are discernible when we analyze performance highlights by industry grouping (Table 6).

Table 6: Analysis of performance highlights by industry

BY INDUSTRY	Number of co's	Share of Total Indian Market Cap	Market Cap in USD BN	Net Debt in USD BN	FCF Yld FY12	Dvd Yld FY12	P/E: FY12	EV/ EBITDA FY12	EV/ EBITDA FY13E	P/B FY11	PEG Ratio	Return YTD	EPS in INR	Annual Value Traded in USD BN	Value Traded as % of all stocks
Consumer Discretionary	676	9%	100	29	-2%	1.5%	21.1	13.2	10.2	8.3	1.2	27%	67	76	14%
Consumer Staples	237	9%	101	11	3%	1.7%	42.0	25.1	20.5	13.1	1.6	44%	20	38	7%
Energy	49	16%	175	19	2%	2.4%	12.1	7.3	6.9	3.0	1.6	16%	39	40	7%
Financial	485	18%	205	197	-6%	1.7%	16.2	21.6	14.3	2.8	5.8	30%	66	163	29%
Health Care	172	6%	63	7	1%	0.9%	23.9	18.4	14.5	6.3	1.2	41%	24	27	5%
Industrials	522	10%	112	116	-19%	1.3%	21.0	11.5	9.6	11.4	1.5	26%	27	70	12%
Information Technology	299	10%	115	-3	3%	1.4%	19.0	13.4	11.0	6.8	1.9	13%	66	44	8%
Materials	631	13%	143	41	-4%	1.2%	14.4	9.3	7.7	3.6	0.4	23%	37	61	11%
Others	962	0%	4	2	-9%	0.0%	-	-	-	6.2	-	149%	3	2	0%
Telecom Services	11	2%	27	27	0%	0.3%	22.2	7.2	6.5	2.4	0.9	-17%	6	11	2%
Utilities	42	7%	74	47	-16%	2.1%	15.7	13.2	9.5	3.5	2.2	10%	13	27	5%

Source: Horizon Research and Bloomberg

The consumer discretionary industry, which includes textiles, media, automobiles, hotels and household durables, represent 8.9% of market capitalisation and 13.6% of traded volume. This sector has FY12 FCF yield of -1.9%, and 2012 dividend yield of 1.5%. The sector traded at FY12 P/E ratio of 21.1x and 13.2x EV/EBITDA, marginally above the Index. These disconnects in financial ratios versus the index respond to secular trends in the sector (e.g. increasing disposable income leading to higher demand).

The consumer staples industry, which includes alcohol, tobacco, packaged foods, and agricultural products, represents 9% of all market capitalisation and 6.7% of value traded. It has a 9.8% net debt to enterprise value ratio, and FY12 ROE of 46.2%, with FCF yield of 2.7% and dividend yield of 1.7%. The sector is trading at 42x 2012 P/E and 25x FY12 EV/EBITDA. Valuations for the 'consumer staples' sector are a reflection of high growth in this sector with the PEG ratio near 1.

The energy industry, which includes oil, gas and coal exploratory companies and allied services represents 15.6% of all market capitalisation and only 7.2% of value traded, has a 10% net debt to enterprise value ratio, and FY12 ROE of 21.4%, with FCF yield of 1.8% and dividend yield of 2.4%. The sector is trading at 12.1x FY12 P/E and 7.3x FY12 EV/EBITDA.

The financial industry, which includes banks, asset management, mortgage finance and thrifts represents 18.3% of all market capitalisation and 29% of value traded which is the highest amongst all industry groups. The financial industry has weighted average ROE of 16.7% for FY12 and dividend yields of 1.7% expected for 2012. The sector traded at FY12 P/E of 16.2x and a FY12 P/B ratio of 2.8.

The health care industry represents 5.6% of the total market capitalisation and 4.8% of total value traded. It has an ROE of 22.4%, FY12 FCF yield of 1.1%, and a 2012 dividend yield of 0.9%. The sector traded at FY12 P/E of 23.9x and 18.4x FY12 EV/EBITDA.

Industrials represent 12.3% of all Indian market capitalisation and 12.5% of all value traded. The sector has net debt to enterprise value of 50% (which is the highest amongst all industry groups). The FY12 ROE of the sector is 16.1%, FY12 FCF yield is -18.5% (which is the lowest amongst all industry groups), while still maintaining 1.3% FY12 dividend yield. The sector traded at FY12 P/E of 21x and 11.5x FY12 EV/EBITDA.

The information technology industry represents 10.3% of all market capitalisation and 7.8% of value traded. It has a negative net debt (i.e. cash is more than debt). The FY12 ROE of the sector is 31%, FY12 FCF yield is 2.8% (the highest amongst all industry groups), while still maintaining 1.4% FY12 dividend yield. The information technology industry is the only industry group that has seen positive free cash flow yields every year in the past 3 years. The sector traded at FY12 P/E of 19x and 13.4x FY12 EV/EBITDA.

The materials industry, which includes chemicals, metals and mining, construction material, paper and pulp and fertilizers, represents 12.8% of all market capitalisation and 11% of value traded. The sector has net debt to enterprise value of 20%. The FY12 ROE of the sector is 20.9%, FY12 FCF yield is -3.8% and the FY12 dividend yield is 1.2%. The sector traded at FY12 P/E of 14.4x and 9.3x FY12 EV/EBITDA. The sector has a PEG ratio of 0.4x, which is the lowest amongst all industry groups.

Telecommunication services represent 2.4% of all Indian market capitalisation and 2% of all value traded. The sector has net debt to enterprise value of 48% (which is the second highest amongst all industry groups). A single telecom company Bharti Airtel (BSE: 532454) is responsible for 43% of the entire net debt of the industry. The FY12 ROE of the sector is 5.2% (the lowest amongst all industry groups), FY12 FCF yield is 0.3% and the FY12 dividend yield is 0.3%. The sector traded at 2012 P/E of 22.2x and 7.2x FY12 EV/EBITDA.

The utilities industry, which includes independent power producers & energy traders, electric, water and gas utilities represents 6.6% of all market capitalisation and 4.8% of value traded. The sector has net debt to enterprise value of 38%. The FY12 ROE of the sector is 11.6%, FY12 FCF yield is 0.3% and the FY12 dividend yield is 0.3%. The sector traded at FY12 P/E of 15.7x and 13.2x FY12 EV/EBITDA. The sector has a PEG ratio of 2.2x.

We observe that companies in the services sector are under represented in the broad market based on their contribution to GDP and that there are opportunities to select stocks within this sector that will benefit from the normalization of this relationship. Agriculture, industry and services sector contribution to GDP was 17%, 26% and 56% respectively in 2011. Taking the financial, healthcare, information technology, telecommunication and utilities industry as a proxy for 'services', we observe that the services and industry market capitalisation as share of total market capitalisation are 43% and 57% respectively.

THE INDIAN ECONOMY

While Indian GDP (at market prices) has increased at a CAGR of 13.2% from USD 0.49 trillion in 2001 to USD 1.70 trillion in 2011, the total market capitalisation to GDP ratio is below global levels leading to lower valuations in the Indian equity markets. Indian broad market capitalisation of USD 1.02 trillion in 2011 represents 55% of Indian GDP. This also equals the 12-year average market capitalisation to GDP ratio for India, but is nearly 60% lower than the peak in 2008 of 147%. In comparison, the ratio of US market capitalisation to global GDP is ~104% (Table 7).

We believe Indian GDP (at market prices) will continue to grow at its 2007-11 CAGR of 7.6%, which will provide an added impetus to companies across capitalisation and industry sectors. India is the tenth largest economy in the world with an estimated GDP in 2011 of USD 1.7 trillion in current dollars.[4]

Table 7: Market cap of listed companies as a % of GDP (2001-11)

Indicator	2001	2007	2011	*CAGR* 2001-07	2001-11	2007-11
GDP India (current USD trillion)	0.49	1.27	1.70	*17.1%*	*13.2%*	*7.6%*
GDP US (current USD trillion)	10.23	13.96	15.09	*5.3%*	*4.0%*	*2.0%*
M Cap India (current USD trillion)	0.11	1.82	1.02	*59.5%*	*24.8%*	*-13.6%*
M Cap US (current USD trillion)	13.85	19.95	15.64	*6.3%*	*1.2%*	*-5.9%*
M Cap/GDP India (%)	22	147	55	*37.2%*	*9.6%*	*-21.8%*
M Cap/GDP US (%)	135	143	104	*1.0%*	*-2.6%*	*-7.7%*

Source: The World Bank

Indian exports are diversified, though in general refined petroleum products, gems and jewelry, software, pharmaceuticals and agri-commodities are the largest export items in most years. With export/GDP ratio increasing, India is becoming more integrated with and sensitive to global economic conditions. The degree of openness to trade represented by the percentage of merchandise trade to GDP is lower in India at 40.5% in 2011, as compared to over 50% for China and 44% for Russia.

Net FDI that had increased to a record USD 43 billion in 2008, had declined to USD 24 billion in 2010, but marginally recovered to USD 28 billion in 2011 (Table 8). Portfolio inflows reached a record USD 40 billion in 2010 but declined to a negative 0.5 billion in 2011. Portfolio inflows in the first 6 months of 2012 are USD 10 billion.

Table 8: India economic indicators for the past 10 years

Indicator	2001	2007	2011
Foreign direct investment, net (BoP, current USD billion)	4.1	25.5	27.6
GDP growth (annual %)	4.9	9.8	6.9
GDP per capita, PPP (current international USD billion)	1,612.9	2,733.1	3,652.0
Merchandise trade (% of GDP)	19.0	30.6	40.5
Portfolio equity, net inflows (BoP, current USD billion)	2.9	32.9	-0.6

Source: The World Bank

[4] Source World Bank

Manjit Singh Kalha, the analyst who prepared this report, hereby certify that the views expressed in this report accurately reflect the analyst's personal views about the subject companies and their securities. The Research Analyst has not been, is not and will not be receiving direct or indirect compensation for expressing the specific recommendation or view in this report.

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A **Buy** rated stock is one that in our view is trading at a meaningful discount to our estimated PMV. We could expect a more modest private market value to increase at an accelerated pace, the discount of the public stock price to PMV to narrow through the emergence of a catalyst, or some combination of the two to occur.

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