

“Can Individual Investor Beat The Market?”

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Abstract

"You don't make money by investing in a good company. You make money by investing in a company that is better than the market thinks," Investments are done with an objective of earning some return in future. If an individual is not earning return on his investment then his investment decision is not justifiable. However, all the time the individual cannot depend on luck; he should take a proper investment decision. If a correct investment decision is made the individual investor can not only earn return but many a times he can beat the market also.

Under this background, the study has been conducted to test whether it is possible for the individual investor to beat the market. For this purpose it is essential to study the efficiency of the stock market. The analysis was carried out in this study to test the efficiency level of the Indian Stock market and also to test whether the prices of the indices follow a random walk or not, by using the run test and the autocorrelation function and fundamental analysis of stocks. The study carried out in this research has presented the evidence of the inefficient form of the Indian Stock Market. This means that the individual investor can beat the stock market.

This also means that historical data can be used to predict future value of stock prices. Using fundamental analysis the worth of companies can be found out and based on this stock can be selected. Mid cap companies are providing more returns than sensex and nifty companies so it is better to invest in mid cap companies. Some mid cap companies are providing more than 100% returns for a year. Deciphering the performance of a company and predicting its future prospects requires 'analysis'. While a majority (54%) relied on fundamental analysis, 27% seemed to be following technical charts while the remaining 19% based their decisions purely on news and rumours.

Background of the Study

It is one of the great investment contradictions. Yes, stock investors do all kinds of goofy things. No, beating the market isn't easy. On the face of it, this seems absurd. If some folks behave irrationally, others should be able to make money at their expense. Yet, as is patently clear from the long-run market-lagging performance of most stock, it is awfully difficult to beat the market. This is not just an issue of how to manage money. It is also a raging debate among finance professors. For years, the prevailing academic wisdom was that the stock market was highly efficient, with prices set by rational investors. But lately, that notion has come under assault from behavioralists, who argue that market movements aren't adequately explained by traditional economic models. No doubt about it, irrationality is on display everywhere. Why do investors trade so much? Not all that buying and selling can be rationally justified. Why do companies bother splitting their stocks, say, and two for one? All it means is that shareholders now have twice as many shares, each with a 50% smaller claim on the company's earnings. Why do companies pay dividends? From the standpoint of taxes, it makes far more sense to buy back stock. Yet shares often rise after a company announces a dividend increase. "It doesn't look to me like markets behave as if investors are

rational," says Richard Thaler, an economics professor at the University of Chicago. "Everybody agrees that there are some irrational investors out there," Mr. Thaler says. "The controversial question is whether they set prices. The behavioralist line is that they do some of the time. The efficient-market line is that prices are set by rational traders." Not all behavioral quirks hurt market efficiency.

This shows up in investors' ill-advised tendency to trade too much and to bet heavily on a limited number of stocks. However, it also manifests itself in the huge effort made to find undervalued stocks. Mr. Rubinstein says. "But what this means is that active manager spend too much on research. It makes the markets too efficient. It's like a gold mine where most of the gold has already been taken out. Occasionally, you will find some, which will egg you on. But it's just not cost-effective to keep mining." Mr. Thaler says the validity of behavioral economics does not hinge on being able to beat the market. "It could be that stock prices were wildly irrational, but unpredictable," he says. "If so, it wouldn't be possible to make money."

The efficient market hypothesis (EMH) says that at any given time, asset prices fully reflect all available information. The chief corollary of the idea that markets are efficient, that prices fully reflect all information, is that price movements do not follow any patterns or trends. This means that past price movements cannot be used to predict future price movements. Rather, prices follow what is known as a 'random walk', an intrinsically unpredictable pattern. In the world of the strong form EMH, trying to beat the market becomes a game of chance not skill. The weak form of the EMH asserts that all past market prices and data are fully reflected in asset prices. The implication of this is that technical analysis cannot be used to beat the market. The semi-strong form of the EMH asserts that all publicly available information is fully reflected in asset prices. The implication of this is that neither technical nor fundamental analysis can be used to beat the market. The implication of this is that not even insider information can be used to beat the market.

In reality, markets are neither perfectly efficient nor completely inefficient. All are efficient to a certain degree - and new technology probably serves to make them more efficient. However, some markets are more efficient than others are. In addition, in markets with substantial pockets of predictability, active investors can strive for outperformance. Peter Bernstein concludes that there is hope for active management: 'the efficient market is a state of nature dreamed up by theoreticians. Neat, elegant, even majestic, it has nothing to do with the real world of uncertainty in which you and I must make decisions every day we are alive.'

Design of the Study

Problem of study:

To collect the data of selected scripts representing all industries and analyzing their individual share prices compared with market indices. This study emphasizes more on testing efficiency of stock markets in India.

Objective of the study:

To test Market efficiency

To study whether individual investor can beat the market or not?

To know the influence of individual and institutional investors on the stock market

Scope of Study:

The study envisages mainly on investors influence on the performance and efficiency on stock market.

Research Methodology

Type of Research : Analytical Research

Sources of Data : NSE, S & P CNX Nifty, BSE Sensex, Capitaline

Research Instruments : Auto Correlation Test

Methodology of Data

Collection : Secondary Data

Plan of Analysis:

Auto Correlation are used to test whether market is Efficient or inefficient.

To measure individual stock performance we found out P/E Ratio, EPS and Beta of individual stocks.

Limitations of Study:

Unavailability of data regarding individual investors influence on market

Unavailability of evidence of insider trading in the stock market

Research is restricted to Equity stocks only

The historical data of the companies is taken for only 1 year

Operational definitions of concepts:

Auto correlation test: A test of the efficient market hypothesis that compares the security price changes over a time to check for predictable correlation pattern

P/E Ratio: The number by which expected earnings per share is multiplied to estimate a stock value; also called the earnings multiplier

Beta: A standardized measure of systematic risk based upon an assets co-variance with the market portfolio.

EPS = Net Earnings / Outstanding Shares.

Literature Review

An issue that is the subject of intense debate among academics and financial professionals is the Efficient Market Hypothesis (EMH). The Efficient Market Hypothesis states that at any given time, security prices fully reflect all available information. The implications of the efficient market hypothesis are truly profound. Most individuals that buy and sell securities (stocks in particular), do so under the assumption that the securities they are buying are worth more than the price that they are paying, while securities that they are selling are worth less than the selling price. However, if markets are efficient and current prices fully reflect all information, then buying and selling securities in an attempt to outperform the market will effectively be a game of chance rather than skill. The Efficient Market Hypothesis evolved in the 1960s from the Ph.D. dissertation of Eugene Fama. Fama persuasively made the argument that in an active market that includes many well-informed and intelligent investors, securities will be appropriately priced and reflect all available information. If a market is efficient, no information or analysis can be expected to result in outperformance of an appropriate benchmark.

The random walk theory asserts that price movements will not follow any patterns or trends and that past price movements cannot be used to predict future price movements. Much of the theory on these subjects can be traced to French mathematician Louis Bachelier whose Ph.D. dissertation titled "The Theory of Speculation" (1900) included some remarkably insights and commentary. Bachelier came to the conclusion that "*The mathematical expectation of the speculator is zero*" and he described this condition as a "fair game."

The debate about efficient markets has resulted in hundreds and thousands of empirical studies attempting to determine whether specific markets are in fact "efficient" and if so to what degree. Many novice investors are surprised to learn that a tremendous amount of evidence supports the efficient market hypothesis. Early tests of the EMH focused on technical analysis and it is chartists whose very existence seems most challenged by the EMH. And in fact, the vast majority of studies of technical theories have found the strategies to be completely useless in predicting securities prices. However, researchers have documented some technical anomalies that may offer some hope for technicians, although transactions costs may reduce or eliminate any advantage.

Researchers have also uncovered numerous other stock market anomalies that seem to contradict the efficient market hypothesis. The search for anomalies is effectively the search for systems or patterns that can be used to outperform passive and/or buy-and-hold strategies.

The paradox of efficient markets is that if every investor believed a market was efficient, then the market would not be efficient because no one would analyze securities. In effect, efficient markets depend on market participants who believe the market is inefficient and trade securities in an attempt to outperform the market.

In reality, markets are neither perfectly efficient nor completely inefficient. All markets are efficient to a certain extent, some more so than others. Rather than being an issue of black or white, market efficiency is more a matter of shades of gray. In markets with substantial impairments of efficiency, more knowledgeable investors can strive to outperform less knowledgeable ones. Government bond markets for instance, are considered to be extremely efficient. Most researchers consider large capitalization stocks to also be very efficient, while small capitalization stocks and international stocks are considered by some to be less efficient. Real estate and venture capital, which don't have fluid and continuous markets, are considered to be less efficient because different participants may have varying amounts and quality of information.

While proponents of the EMH don't believe it's possible to beat the market, some believe that stocks can be divided into categories based on risk factors (and corresponding higher or lower expected returns). For instance, some believe that small stocks are riskier and therefore are expected to have higher returns. Similarly, some believe "value" stocks are riskier than "growth" stocks and therefore have higher expected returns. While many argue that outperformance by one or more participants in a market signifies an inefficient market, it's important to recognize that successful active managers should be evaluated in the context of all participants. It's difficult in many cases to determine whether outperformance can be attributed to skill as opposed to luck. For instance, with hundreds or even thousands of active managers, it's common and in fact expected (based on probability) that one or more will experience sustained and significant outperformance. However, the challenge is to identify an outperformer before the fact, rather than in hindsight.

"Market efficiency is a description of how prices in competitive markets respond to new information. The arrival of new information to a competitive market can be likened to the arrival of a lamb chop to a school of flesh-eating piranha, where investors are - plausibly enough - the piranha. The instant the lamb chop hits the water; there is turmoil as the fish devour the meat. Very soon, the meat is gone, leaving only the worthless bone behind, and the water returns to normal. Similarly, when new information reaches a competitive market there is much turmoil as investors buy and sell securities in response to the news, causing prices to change. Once prices adjust, all that is left of the information is the worthless bone.

Data Analysis and Interpretation

Market Efficiency Test

4.1 Auto Correlation Function

S&P CNX NIFTY

Date	One	High	Low	Clos	Shares	Turno
01-Apr-2010	5249	5298	5249	5290	12777326	5365.
05-Apr-2010	5291	5377	5291	5368	13241986	5762.
06-Apr-2010	5369	5388	5351	5366	14705190	5746.
07-Apr-2010	5365	5399	5345	5374	16679024	6530.
08-Apr-2010	5376	5383	5290	5304	15678588	5830.
09-Apr-2010	5302	5377	5302	5361	15449775	6207.
12-Apr-2010	5354	5382	5324	5339	13490199	5502.
13-Apr-2010	5340	5356	5301	5322	12658180	7839.
15-Apr-2010	5323	5373	5265	5273	19501323	7702.
16-Apr-2010	5273	5283	5237	5262	15101352	5498.
19-Apr-2010	5279	5279	5160	5203	15532141	5791.
20-Apr-2010	5208	5257	5208	5230	19947813	7155.
21-Apr-2010	5230	5266	5230	5244	19690159	6577.
22-Apr-2010	5248	5331	5221	5269	18028607	8794.
23-Apr-2010	5269	5311	5269	5304	15412042	6935.
26-Apr-2010	5299	5342	5299	5322	12702247	5920.
27-Apr-2010	5322	5330	5301	5308	14442850	5684.
28-Apr-2010	5308	5308	5202	5215	17864511	6812.
29-Apr-2010	5215	5264	5214	5254	17168341	7264.
30-Apr-2010	5254	5294	5254	5278	15249525	6591.
03-May-	5278	5278	5210	5222	11144566	4663.
04-May-	5223	5250	5134	5148	14553973	5782.
05-May-	5148	5148	5056	5124	20767913	7373.
06-May-	5124	5124	5037	5090	19210570	6560.
07-May-	5072	5085	4984	5018	23334572	8765.
10-May-	5026	5203	5026	5193	19163276	7272.

11-Mav-	5189	5206	5126	5136	16875193	6431.
12-Mav-	5133	5172	5098	5156	18711135	6559.
13-Mav-	5157	5212	5147	5178	17937858	6054.
14-Mav-	5180	5192	5070	5093	14438100	6094.
17-Mav-	5093	5094	4966	5059	16930679	7203.
18-Mav-	5059	5105	5024	5066	13702723	6336.
19-Mav-	5065	5065	4908	4919	21295038	8688.
20-Mav-	4924	4980	4924	4947	19730333	7215.
21-Mav-	4946	4946	4842	4931	23048380	7363.
24-Mav-	4944	5029	4923	4943	18442484	6576.
25-Mav-	4945	4946	4786	4806	19818721	6759.
26-Mav-	4807	4925	4807	4917	22198511	7246.
27-Mav-	4915	5016	4897	5003	23827006	9374.
28-Mav-	5005	5077	5005	5066	18794794	6703.
31-Mav-	5076	5097	5038	5086	17939896	5600.
01-Jun-2010	5086	5086	4961	4970	18301603	6170.
02-Jun-2010	4970	5031	4967	5019	21793082	6768.
03-Jun-2010	5020	5125	5020	5110	17460639	5784.
04-Jun-2010	5112	5147	5091	5135	17456131	5755.
07-Jun-2010	5132	5132	5004	5034	17560717	5958.
08-Jun-2010	5036	5071	4967	4987	18065655	6149.
09-Jun-2010	4985	5050	4980	5000	19991293	6619.
10-Jun-2010	4999	5085	4997	5078	17685339	6038.
11-Jun-2010	5078	5139	5078	5119	19834205	7105.
14-Jun-2010	5120	5201	5120	5197	15883119	5616.
15-Jun-2010	5201	5231	5171	5222	21893046	6642.
16-Jun-2010	5225	5255	5214	5233	20372742	7283.
17-Jun-2010	5233	5285	5206	5274	18995372	7662.
18-Jun-2010	5274	5302	5245	5262	20519816	7934.
21-Jun-2010	5266	5366	5266	5353	18620010	6565.
22-Jun-2010	5353	5354	5311	5316	16204335	5453.
23-Jun-2010	5316	5333	5288	5323	15016045	5457.
24-Jun-2010	5323	5348	5284	5320	21878711	8902.
25-Jun-2010	5320	5320	5259	5269	16496780	6750.
28-Jun-2010	5271	5339	5270	5333	15414041	6284.
29-Jun-2010	5333	5334	5235	5256	15872026	5859.
30-Jun-2010	5254	5320	5210	5312	18372282	7083.
01-Jul-2010	5312	5312	5232	5251	14143094	5489.
02-Jul-2010	5251	5277	5225	5237	14997935	5158.

05-Jul-2010	5237	5252	5225	5235	10062141	3333.
06-Jul-2010	5236	5297	5231	5289	11550619	4290.
07-Jul-2010	5293	5296	5233	5241	13239023	4490.
08-Jul-2010	5242	5320	5242	5296	12729712	4878.
09-Jul-2010	5297	5359	5297	5352	21666064	6889.
12-Jul-2010	5352	5402	5351	5383	18950008	6566.
13-Jul-2010	5370	5406	5357	5400	22604598	7302.
14-Jul-2010	5402	5453	5371	5386	21103489	7700.
15-Jul-2010	5387	5399	5360	5378	15511882	6035.
16-Jul-2010	5376	5401	5374	5393	14322057	6261.
19-Jul-2010	5392	5409	5361	5386	11658479	4686.
20-Jul-2010	5387	5416	5353	5368	12162646	4136.
21-Jul-2010	5368	5409	5368	5399	12285903	4953.
22-Jul-2010	5399	5447	5372	5441	15599509	6239.
23-Jul-2010	5441	5477	5435	5449	16592594	6466.
26-Jul-2010	5446	5466	5409	5418	14733037	5545.
27-Jul-2010	5420	5450	5407	5430	15530618	7037.
28-Jul-2010	5436	5447	5386	5397	14693875	6793.
29-Jul-2010	5397	5415	5381	5408	16230909	7592.
30-Jul-2010	5408	5413	5349	5367	13179742	5934.
02-Aug-2010	5369	5438	5351	5431	10423128	5012.
03-Aug-2010	5432	5459	5426	5439	13072791	5577.
04-Aug-2010	5441	5481	5428	5467	12078145	5308.
05-Aug-2010	5470	5487	5443	5447	12963812	5375.
06-Aug-2010	5448	5471	5431	5439	11666807	4724.
09-Aug-2010	5439	5492	5433	5486	13700527	4943.
10-Aug-2010	5486	5491	5445	5460	16421810	6726.
11-Aug-2010	5460	5474	5412	5420	17463266	7684.
12-Aug-2010	5418	5431	5372	5416	17203938	7991.
13-Aug-2010	5420	5476	5415	5452	15491363	6503.
16-Aug-2010	5452	5465	5397	5418	18945349	6283.
17-Aug-2010	5422	5443	5408	5414	13828218	5458.
18-Aug-2010	5416	5487	5416	5479	15425240	6293.
19-Aug-2010	5478	5544	5478	5540	16774083	5669.
20-Aug-2010	5540	5546	5513	5530	14407238	5301.
23-Aug-2010	5531	5549	5519	5543	11873515	5263.
24-Aug-2010	5541	5547	5488	5505	13914747	5551.
25-Aug-2010	5505	5506	5452	5462	15776442	5517.
26-Aug-2010	5462	5486	5454	5477	18637829	7554.

27-Aug-2010	5489	5495	5391	5408	14232582	5450.
30-Aug-2010	5408	5469	5390	5415	11384255	4230.
31-Aug-2010	5413	5413	5348	5402	15713136	6686.
01-Sep-2010	5403	5478	5403	5471	14422848	5883.
02-Sep-2010	5471	5513	5471	5486	15966561	5066.
03-Sep-2010	5486	5510	5473	5479	14680946	4234.
06-Sep-2010	5479	5589	5479	5576	15893830	6388.
07-Sep-2010	5575	5625	5571	5604	17747699	6050.
08-Sep-2010	5604	5625	5567	5607	13533327	5689.
09-Sep-2010	5608	5647	5608	5640	13806107	6234.
13-Sep-2010	5639	5770	5639	5760	15279995	7515.
	5760	5838	5760	5795	18842696	8111.
15-Sep-2010	5795	5869	5792	5860	18720609	8805.
16-Sep-2010	5861	5901	5815	5828	19246612	7830.
17-Sep-2010	5828	5898	5828	5884	21138036	7874.
20-Sep-2010	5885	5989	5885	5980	19347467	7658.
21-Sep-2010	5980	6032	5961	6009	20095047	9035.
22-Sep-2010	6008	6037	5946	5991	17015032	8003.
23-Sep-2010	5991	6006	5932	5959	13557752	6114.
24-Sep-2010	5959	6029	5951	6018	17645688	7167.
27-Sep-2010	6018	6073	6018	6035	16677389	6621.
28-Sep-2010	6036	6049	5991	6029	17065134	6860.
29-Sep-2010	6029	6071	5979	5991	18315444	7028.
30-Sep-2010	5991	6048	5963	6029	21777023	9926.
01-Oct-2010	6030	6153	6030	6143	17917386	8626.
04-Oct-2010	6144	6222	6144	6159	18460042	7416.
05-Oct-2010	6159	6188	6118	6145	14523563	6398.
06-Oct-2010	6150	6223	6148	6186	15249766	6668.
07-Oct-2010	6186	6199	6107	6120	16888093	7191.
08-Oct-2010	6121	6148	6067	6103	13463871	6623.
11-Oct-2010	6105	6187	6105	6135	11577669	5662.
12-Oct-2010	6135	6144	6057	6090	10994386	5166.
13-Oct-2010	6091	6240	6089	6233	14866252	8169.
14-Oct-2010	6234	6284	6157	6177	12848639	6591.
15-Oct-2010	6175	6200	6050	6062	11105842	6512.
18-Oct-2010	6112	6115	5985	6075	13875072	7739.
19-Oct-2010	6114	6127	6008	6027	13045847	6428.
20-Oct-2010	6002	6038	5966	5982	10510700	5029.
21-Oct-2010	6008	6113	5984	6101	12310128	6706.

22-Oct-2010	6113	6121	6041	6066	10937488	5611.
25-Oct-2010	6101	6151	6094	6105	12311809	5936.
26-Oct-2010	6116	6120	6074	6082	11345156	6237.
27-Oct-2010	6075	6075	5987	6012	11671058	5892.
28-Oct-2010	6039	6071	5968	5987	22878663	11869
29-Oct-2010	6021	6032	5937	6017	13787815	7152.
01-Nov-2010	6092	6132	6084	6117	12890952	6679.
02-Nov-2010	6127	6138	6094	6119	12209222	6081.
03-Nov-2010	6150	6182	6146	6160	11132441	5241.
04-Nov-2010	6209	6290	6199	6281	12503236	6442.
05-Nov-2010	6321	6338	6303	6312	27174949	1143.
08-Nov-2010	6335	6335	6265	6273	15392561	6799.
09-Nov-2010	6281	6310	6243	6301	13982278	7037.
10-Nov-2010	6303	6307	6269	6275	12560985	6187.
11-Nov-2010	6286	6296	6179	6194	16929591	7013.
12-Nov-2010	6182	6202	6056	6071	15520015	7348.
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16-Nov-2010	6143	6144	5970	5988	13919148	7327.
18-Nov-2010	6075	6076	5906	5998	19022131	9720.
19-Nov-2010	6011	6013	5863	5890	15074432	7332.
22-Nov-2010	5920	6020	5905	6010	12342313	6138.
23-Nov-2010	5971	5973	5824	5934	15886628	7781.
24-Nov-2010	5946	5976	5833	5865	12584653	6608.
25-Nov-2010	5883	5907	5780	5799	37167346	12228
26-Nov-2010	5828	5838	5690	5751	28720125	9841.
29-Nov-2010	5789	5843	5754	5830	15507102	6132.
30-Nov-2010	5811	5892	5768	5862	21795919	8862.
01-Dec-2010	5871	5971	5865	5960	17335499	7422.
02-Dec-2010	6023	6029	5980	6011	19737673	8206.
03-Dec-2010	6013	6025	5964	5992	16537930	6957.
06-Dec-2010	6033	6069	5981	5992	14531717	7255.
07-Dec-2010	5995	6001	5939	5976	14541082	7503.
08-Dec-2010	5954	5960	5878	5903	12257279	7342.
09-Dec-2010	5924	5927	5742	5766	16951090	8924.
10-Dec-2010	5761	5865	5721	5857	16748792	9006.
13-Dec-2010	5882	5913	5795	5907	13822865	6888.
14-Dec-2010	5928	5953	5888	5944	12529690	6074.
15-Dec-2010	5931	5942	5865	5892	12632311	7089.
16-Dec-2010	5910	5956	5855	5948	14982668	8378.

20-Dec-2010	5926	5985	5900	5947	12182149	7312.
21-Dec-2010	5960	6007	5960	6000	12654297	6485.
22-Dec-2010	6019	6023	5958	5984	11882329	5864.
23-Dec-2010	6005	6006	5964	5980	85460029	4301.
24-Dec-2010	5940	6017	5940	6011	12357462	4656.
27-Dec-2010	6013	6045	5991	5998	95958318	3459.
28-Dec-2010	6005	6010	5982	5996	90722187	3636.
29-Dec-2010	6005	6067	6002	6060	92994810	4053.
30-Dec-2010	6062	6106	6062	6101	19434826	7239.
31-Dec-2010	6105	6147	6103	6134	11375490	4945.
03-Jan-2011	6177	6178	6147	6157	96028639	4477.
04-Jan-2011	6172	6181	6124	6146	18172790	7678.
05-Jan-2011	6141	6141	6062	6079	13961419	6606.
06-Jan-2011	6107	6116	6022	6048	15233897	7050.
07-Jan-2011	6030	6051	5883	5904	17180910	8325.
10-Jan-2011	5901	5907	5740	5762	15694585	7920.
11-Jan-2011	5767	5842	5698	5754	16126170	8307.
12-Jan-2011	5800	5874	5711	5863	18811699	8709.
13-Jan-2011	5850	5857	5736	5751	17534753	8150.
14-Jan-2011	5752	5833	5639	5654	17456844	7372.
17-Jan-2011	5648	5696	5624	5654	14849710	6417.
18-Jan-2011	5682	5730	5671	5724	14100888	6160.
19-Jan-2011	5737	5747	5662	5691	14671993	6694.
20-Jan-2011	5656	5729	5634	5711	13049698	6947.
21-Jan-2011	5692	5717	5674	5696	11999078	6083.
24-Jan-2011	5717	5756	5697	5743	10883215	6641.
25-Jan-2011	5763	5801	5680	5687	12612866	7302.
27-Jan-2011	5725	5726	5594	5604	20149667	9182.
28-Jan-2011	5614	5614	5459	5512	17310700	8122.
31-Jan-2011	5452	5526	5416	5505	17784768	7873.
01-Feb-2011	5537	5539	5402	5417	17123206	7797.
02-Feb-2011	5469	5490	5415	5432	17219822	7860.
03-Feb-2011	5430	5532	5418	5526	15422875	6254.
04-Feb-2011	5519	5556	5369	5395	18781954	7685.
07-Feb-2011	5430	5440	5376	5396	15044706	5905.
08-Feb-2011	5432	5432	5303	5312	15560026	6479.
09-Feb-2011	5293	5339	5225	5253	24652593	9294.
10-Feb-2011	5246	5272	5196	5225	22523799	8309.
11-Feb-2011	5219	5319	5177	5310	21125058	7717.

14-Feb-2011	5340	5463	5340	5456	17571033	7073.
15-Feb-2011	5467	5506	5408	5481	17045970	7071.
16-Feb-2011	5467	5504	5460	5481	14051719	5258.
17-Feb-2011	5501	5553	5463	5546	14366962	5601.
18-Feb-2011	5557	5599	5441	5458	18090649	7684.
21-Feb-2011	5456	5526	5413	5518	13763402	6109.
22-Feb-2011	5504	5519	5437	5469	16627141	7383.
23-Feb-2011	5452	5495	5427	5437	17358466	7203.
24-Feb-2011	5408	5423	5242	5262	25934767	11011
25-Feb-2011	5321	5338	5232	5303	19353632	7679.
28-Feb-2011	5330	5477	5308	5333	31724575	10276
01-Mar-2011	5382	5533	5373	5522	21049826	7411.
03-Mar-2011	5478	5570	5468	5536	21880479	8848.
04-Mar-2011	5586	5608	5524	5538	16200686	6522.
07-Mar-2011	5490	5491	5408	5463	13458162	5145.
08-Mar-2011	5466	5530	5464	5520	12750667	5176.
09-Mar-2011	5542	5563	5477	5531	14982286	5595.
10-Mar-2011	5516	5516	5468	5494	13573011	4854.
11-Mar-2011	5456	5502	5411	5445	13344196	5586.
14-Mar-2011	5436	5537	5434	5531	17352175	5310.
15-Mar-2011	5420	5497	5373	5449	19103759	7745.
16-Mar-2011	5475	5535	5475	5511	13519674	5724.
17-Mar-2011	5455	5510	5435	5446	13525569	5962.
18-Mar-2011	5475	5483	5366	5373	12949242	5729.
21-Mar-2011	5408	5413	5348	5364	10717473	4222.
22-Mar-2011	5390	5428	5376	5413	94938100	3978.
23-Mar-2011	5411	5484	5401	5480	11203640	4852.
24-Mar-2011	5501	5529	5496	5522	11526205	4766.
25-Mar-2011	5588	5667	5560	5654	13345138	6457.
28-Mar-2011	5645	5709	5643	5687	13071796	6675.

Year 01-04-2010 to 31-03-2011

Correlations

		VAR 01	VAR 02
VAR 01	Pearson	1.000	.791
	N	248	248
VAR 02	Pearson	.791	1.000
	N	248	248

Market Efficiency Test

Auto Correlation Function

BSE (Sensex)

Date	Open	High	Low	Close	Price/Earnings	Price/Book value	Dividend Yield
1-Apr-10	17555.04	17706.56	17555.04	17692.62	21.49	3.93	1.1
5-Apr-10	17693.66	17948.54	17693.66	17935.68	21.78	3.98	1.08
6-Apr-10	17940.32	17991.41	17898	17941.37	21.77	3.98	1.08
7-Apr-10	17915.6	18047.86	17878.31	17970.02	21.84	3.99	1.08
8-Apr-10	17950.56	17960.91	17679.34	17714.4	21.55	3.94	1.09
9-Apr-10	17715.16	17971.47	17715.16	17933.14	21.75	3.97	1.08
#####	17874.16	17995.25	17816.19	17853	21.65	3.96	1.09
#####	17831.38	17892.78	17736.09	17821.96	21.67	3.95	1.09
#####	17804.55	17975.57	17619.02	17639.26	21.48	3.92	1.1
#####	17645.91	17663.99	17529.55	17591.18	21.39	3.9	1.1
#####	17584.86	17584.86	17276.8	17400.68	21.12	3.85	1.12
#####	17394.68	17560.09	17394.68	17460.58	21.07	3.86	1.11
#####	17458.76	17565.55	17446.51	17472.56	21.09	3.86	1.11
#####	17476.48	17778.34	17408.02	17573.99	21.22	3.89	1.11
#####	17533.88	17725.88	17533.88	17694.2	21.23	3.9	1.1
#####	17692.26	17826.48	17692.26	17745.28	20.88	3.78	1.1
#####	17744.93	17769.25	17678.56	17690.62	20.84	3.77	1.1
#####	17643.59	17643.59	17344.58	17380.08	20.51	3.71	1.12
#####	17382.09	17532.86	17382.09	17503.47	20.62	3.73	1.11
#####	17503.47	17646.61	17503.47	17558.71	20.69	3.74	1.11
3-May-10	17536.86	17536.86	17345.92	17386.08	20.47	3.71	1.12
4-May-10	17371.75	17464.82	17101.96	17137.14	20.18	3.66	1.13
5-May-10	17103.95	17121.66	16858.23	17087.96	20.15	3.65	1.14
6-May-10	17080.47	17080.47	16823	16987.53	20.04	3.63	1.14
7-May-10	16939.58	16939.58	16684.13	16769.11	19.79	3.59	1.16
#####	16799.49	17356.54	16799.49	17330.55	20.43	3.71	1.12
#####	17336.13	17379.15	17104.45	17141.53	20.11	3.66	1.13
#####	17141.53	17252.52	17028.08	17195.81	20.14	3.67	1.13
#####	17323.63	17389.15	17240.35	17265.87	20.22	3.68	1.13
#####	17267.25	17329.32	16923.65	16994.6	19.94	3.63	1.14
#####	16961.92	16961.92	16551	16835.56	19.87	3.52	1.16
#####	16840.59	17000.34	16744.13	16875.76	19.97	3.51	1.15
#####	16802.39	16802.39	16373.32	16408.49	19.45	3.41	1.18
#####	16419.1	16617.8	16419.1	16519.68	19.7	3.46	1.17
#####	16317.94	16486.74	16187.03	16445.61	19.52	3.43	1.18
#####	16494.61	16757.73	16413.03	16469.55	19.56	3.44	1.18
#####	16444.57	16444.57	15960.15	16022.48	19.09	3.34	1.21
#####	16069.78	16410.35	16069.78	16387.84	19.78	3.47	1.16
#####	16410.88	16694.55	16331.1	16666.4	20.02	3.47	1.14
#####	16692.66	16891.17	16692.66	16863.06	20.27	3.5	1.12
#####	16872.17	16971.15	16806.5	16944.63	20.4	3.52	1.12
1-Jun-10	16942.82	16942.82	16318.39	16572.03	19.74	3.39	1.14

2-Jun-10	16574.79	16774.15	16571.45	16741.84	19.99	3.43	1.13
3-Jun-10	16786.28	17072.63	16786.28	17022.33	20.31	3.47	1.11
4-Jun-10	17036.55	17150.42	16963.92	17117.69	20.38	3.48	1.1
7-Jun-10	17069.77	17069.77	16686.73	16781.07	20.01	3.42	1.12
8-Jun-10	16760.6	16895.73	16560.64	16617.1	19.81	3.17	1.26
9-Jun-10	16621.12	16817.69	16591.26	16657.89	19.88	3.18	1.25
10-Jun-	16668.91	16942.6	16668.91	16922.08	20.18	3.23	1.23
11-Jun-	16994.07	17131.56	16994.07	17064.95	20.31	3.25	1.23
14-Jun-	17118.74	17351.18	17118.74	17338.17	20.64	3.3	1.21
15-Jun-	17355.49	17442.5	17249.46	17412.83	20.7	3.31	1.2
16-Jun-	17500.3	17530.38	17407.3	17462.87	20.72	3.32	1.2
17-Jun-	17490.52	17647.42	17394.9	17616.69	20.89	3.34	1.19
18-Jun-	17628.02	17721.99	17525.29	17570.82	20.86	3.34	1.19
21-Jun-	17654.81	17919.62	17654.81	17876.55	21.17	3.39	1.18
22-Jun-	17868.12	17868.12	17725.63	17749.69	21.01	3.36	1.18
23-Jun-	17694.87	17782.41	17629.19	17755.94	21.01	3.36	1.18
24-Jun-	17750.51	17845.65	17632.8	17730.24	20.95	3.35	1.19
25-Jun-	17705.11	17714.73	17546.73	17574.53	20.9	3.34	1.19
28-Jun-	17577.66	17794.8	17571.85	17774.26	21.16	3.39	1.18
29-Jun-	17777.95	17777.95	17465.73	17534.09	20.91	3.35	1.19
30-Jun-	17476.85	17725.04	17373.78	17700.9	21.09	3.38	1.18
1-Jul-10	17679.34	17679.34	17455.41	17509.33	20.85	3.34	1.19
2-Jul-10	17523.47	17598.94	17426.78	17460.95	20.83	3.33	1.19
5-Jul-10	17473.83	17505.73	17423.74	17441.44	20.77	3.32	1.2
6-Jul-10	17402.68	17643.14	17395.58	17614.48	20.96	3.36	1.19
7-Jul-10	17623.66	17623.66	17447.15	17471.03	20.81	3.33	1.2
8-Jul-10	17536.48	17728.37	17536.48	17651.73	21.01	3.36	1.18
9-Jul-10	17667.85	17857.58	17667.85	17833.54	21.23	3.4	1.17
12-Jul-	17875.97	18010.07	17874.95	17937.2	21.34	3.42	1.17
13-Jul-	17908.3	17998.04	17855.85	17985.9	21.39	3.42	1.16
14-Jul-	18024.95	18167.22	17897.26	17938.16	21.29	3.4	1.17
15-Jul-	17874.71	17978.56	17858.73	17909.46	21.25	3.4	1.17
16-Jul-	17911.13	17980.27	17892.16	17955.82	21.3	3.41	1.17
19-Jul-	17914.12	18005.07	17856.4	17928.42	21.27	3.41	1.17
20-Jul-	17918.43	18040.17	17848.07	17878.14	21.21	3.4	1.17
21-Jul-	17873.92	18012.2	17873.92	17977.23	21.33	3.42	1.16
22-Jul-	17978.37	18127.9	17879.88	18113.15	21.48	3.45	1.15
23-Jul-	18132.29	18237.56	18093.93	18130.98	21.46	3.45	1.15
26-Jul-	18056.24	18194.09	17993.88	18020.05	21.34	3.43	1.16
27-Jul-	17998.74	18149.56	17998.74	18077.61	21.59	3.44	1.16
28-Jul-	18077.85	18137.14	17925.4	17957.37	21.22	3.42	1.16
29-Jul-	17961.58	18013.1	17902.84	17992	21.17	3.42	1.16
30-Jul-	17981.06	18000.35	17838.92	17868.29	21.23	3.39	1.17
2-Aug-10	17911.31	18104.24	17911.31	18081.21	21.46	3.43	1.16
3-Aug-10	18149.9	18167.45	18072.38	18114.83	21.49	3.44	1.16
4-Aug-10	18115.56	18249.46	18093.03	18217.44	21.62	3.46	1.15
5-Aug-10	18234.85	18295.43	18156.45	18172.83	21.57	3.45	1.15
6-Aug-10	18165.49	18244.56	18118.19	18143.99	21.51	3.44	1.15

9-Aug-10	18141.11	18309.25	18139.9	18287.5	21.69	3.47	1.15
#####	18272.28	18293.4	18170.77	18219.99	21.58	3.45	1.15
#####	18177.35	18263.88	18042.89	18070.19	21.57	3.42	1.16
#####	17972.65	18113.62	17914.78	18073.9	21.55	3.43	1.16
#####	18080.29	18260.39	18050.42	18167.03	21.52	3.45	1.15
#####	18169.8	18203.92	17997.46	18050.78	21.55	3.43	1.16
#####	18049.19	18140.15	18026	18048.85	21.51	3.42	1.16
#####	18067.67	18286	18067.67	18257.12	21.73	3.46	1.15
#####	18276.5	18475.27	18276.5	18454.94	21.87	3.48	1.14
#####	18444.24	18464.14	18360.9	18401.82	21.8	3.47	1.14
#####	18400.33	18454.38	18371.02	18409.35	21.86	3.48	1.14
#####	18407.01	18451.73	18260.71	18311.59	21.75	3.46	1.15
#####	18308.51	18312.43	18156	18179.64	21.61	3.44	1.15
#####	18194.78	18261.06	18159.13	18226.35	21.68	3.45	1.15
#####	18205.9	18248.36	17944.16	17998.41	21.48	3.42	1.16
#####	18063.48	18216.5	17960.23	18032.11	21.54	3.43	1.16
#####	18015.66	18015.66	17819.99	17971.12	21.44	3.41	1.16
1-Sep-10	18027.12	18227.14	18027.12	18205.87	21.7	3.45	1.15
2-Sep-10	18215.28	18355.84	18215.28	18238.31	21.68	3.45	1.15
3-Sep-10	18238.08	18316.32	18206.5	18221.43	21.68	3.45	1.15
6-Sep-10	18124.29	18600.3	18124.29	18560.05	22.06	3.51	1.13
7-Sep-10	18571.73	18711.2	18571.43	18645.06	22.16	3.53	1.13
8-Sep-10	18627.67	18721.21	18540.65	18666.71	22.23	3.54	1.12
9-Sep-10	18669.12	18823.17	18669.12	18799.66	22.36	3.56	1.12
#####	18845.31	19243.44	18845.31	19208.33	22.83	3.63	1.09
#####	19218.13	19487.02	19218.13	19346.96	23.01	3.66	1.08
#####	19343.74	19554.5	19340.99	19502.11	23.18	3.69	1.08
#####	19476.93	19636.66	19383.46	19417.49	23.06	3.67	1.08
#####	19436.71	19639.18	19436.71	19594.75	23.26	3.7	1.07
#####	19445.42	19927.3	19445.42	19906.1	23.56	3.75	1.06
#####	19925.79	20088.96	19860.88	20001.55	23.69	3.77	1.05
#####	20039.43	20105.54	19804.02	19941.72	23.62	3.76	1.06
#####	19944.3	19998.32	19771.63	19861.01	23.56	3.75	1.06
#####	19836.43	20071.75	19833.52	20045.18	23.79	3.78	1.05
#####	20082.26	20267.98	20082.26	20117.38	23.92	3.81	1.04
#####	20114.37	20157.51	19981.96	20104.86	23.93	3.81	1.04
#####	20086.89	20234.05	19923.11	19956.34	23.72	3.77	1.05
#####	19931.49	20114.73	19864.46	20069.12	23.8	3.79	1.05
1-Oct-10	20094.1	20475.47	20094.1	20445.04	24.24	3.86	1.03
4-Oct-10	20501.21	20706.74	20437.36	20475.73	24.24	3.86	1.03
5-Oct-10	20461.98	20560.54	20383.16	20407.71	24.18	3.85	1.03
6-Oct-10	20448.69	20669.95	20447.05	20543.08	24.32	3.87	1.03
7-Oct-10	20544.3	20581.29	20272.77	20315.32	24.08	3.83	1.04
8-Oct-10	20297.58	20409.19	20145.74	20250.26	24	3.82	1.04
11-Oct-	20291.59	20461.27	20274.95	20339.89	24.09	3.83	1.03
12-Oct-	20357.79	20368.4	20107.25	20203.34	23.93	3.81	1.04
13-Oct-	20223.45	20703.97	20211.66	20687.88	24.47	3.89	1.02
14-Oct-	20700.42	20854.55	20442.82	20497.64	24.23	3.86	1.03

15-Oct-	20518.5	20578.45	20090.18	20125.05	23.75	3.79	1.05
18-Oct-	20160.55	20229.39	19870.51	20168.89	23.83	3.8	1.04
19-Oct-	20298.55	20332.02	19923.96	19983.13	23.55	3.77	1.05
20-Oct-	19924.02	20043.82	19822.66	19872.15	23.41	3.75	1.06
21-Oct-	19951.34	20293.1	19886.12	20260.58	23.92	3.82	1.04
22-Oct-	20334.14	20351.74	20088.67	20165.86	23.74	3.81	1.04
25-Oct-							
10	20199.73	20452.3	20199.73	20303.12	23.87	3.83	1.04
26-Oct-	20325.44	20344.68	20189.3	20221.39	23.74	3.81	1.04
27-Oct-	20220.58	20220.58	19923.71	20005.37	23.43	3.77	1.05
28-Oct-	20116.49	20185.46	19869.32	19941.04	23.35	3.76	1.06
29-Oct-	19986.32	20080.33	19768.96	20032.34	23.23	3.75	1.06
1-Nov-10	20272.49	20609.65	20267.1	20355.63	23.29	3.8	1.04
2-Nov-10	20407.18	20418.35	20281.73	20345.69	23.27	3.79	1.04

3-Nov-10	20472.86	20538.8	20426.18	20465.74	23.38	3.81	1.04
4-Nov-10	20605.63	20917.03	20605.63	20893.57	23.87	3.89	1.02
5-Nov-10	21045.66	21108.64	20961.98	21004.96	24.15	3.91	1.01
8-Nov-10	21041.97	21075.71	20822.37	20852.38	23.96	3.88	1.02
9-Nov-10	20851.91	20984.08	20762.81	20932.48	24.02	3.86	1.02
#####	20917.54	20970.91	20849.92	20875.71	23.99	3.84	1.02
#####	20930.45	20937.38	20544.22	20589.09	23.62	3.78	1.04
#####	20529.74	20593.91	20108.4	20156.89	23.17	3.71	1.06
#####	20167.62	20335.51	20046.6	20309.69	23.22	3.74	1.05
#####	20371.73	20380.1	19832.22	19865.14	22.74	3.66	1.07
#####	19997.83	20056.44	19615.51	19930.64	22.8	3.67	1.07
#####	19982.75	19982.75	19504.87	19585.44	22.38	3.6	1.09
#####	19713.84	19989.02	19641.42	19957.59	22.79	3.67	1.07
#####	19841.42	19841.42	19342.69	19691.84	22.47	3.62	1.08
#####	19735.28	19835.57	19375.92	19459.85	22.19	3.57	1.1
#####	19560.25	19628.27	19257.37	19318.16	22.02	3.54	1.11
#####	19391.96	19417.61	18954.82	19136.61	21.84	3.51	1.12
#####	19230.34	19450.09	19167.19	19405.1	22.15	3.56	1.1
#####	19373.23	19610.46	19218.02	19521.25	22.38	3.6	1.09
1-Dec-10	19529.99	19887.26	19525.15	19850	22.72	3.66	1.07
2-Dec-10	20038.66	20084.25	19917.77	19992.7	22.88	3.68	1.06
3-Dec-10	20007.89	20067.81	19877.12	19966.93	22.86	3.68	1.07
6-Dec-10	20038.25	20217.86	19944.71	19981.31	22.93	3.74	1.05
7-Dec-10	19982.9	20008.36	19824.44	19934.64	22.92	3.74	1.05
8-Dec-10	19874.3	19875.51	19611.35	19696.48	22.69	3.7	1.06
9-Dec-10	19746.15	19771.09	19160.87	19242.36	22.19	3.62	1.08
#####	19201.89	19537.4	19074.57	19508.89	22.48	3.67	1.07
#####	19600.28	19710.57	19321.41	19691.78	22.69	3.7	1.06
#####	19746.75	19836.82	19621.41	19799.19	22.83	3.72	1.05
#####	19791.22	19817.61	19571.43	19647.77	22.68	3.7	1.06
#####	19698.58	19897.22	19554.35	19864.85	22.93	3.74	1.05
#####	19770.02	20006.16	19711.12	19888.88	22.92	3.74	1.05
#####	19925.76	20090.84	19925.76	20060.32	23.07	3.76	1.04
#####	20118.82	20151.25	19931.31	20015.8	23.04	3.76	1.04
#####	20038.83	20076.08	19939.3	19982.88	23	3.75	1.05
#####	19911.46	20086.42	19880.36	20073.66	23.11	3.77	1.04
#####	20062.6	20190.13	20010.33	20028.93	23.06	3.76	1.04
#####	20056.47	20090.41	19981.76	20025.42	23.05	3.76	1.04
#####	20060.88	20274.2	20054.64	20256.03	23.3	3.8	1.03
#####	20274.12	20410.91	20274.12	20389.07	23.44	3.82	1.03
#####	20412.76	20552.03	20412.76	20509.09	23.56	3.84	1.02
3-Jan-11	20621.61	20664.8	20531	20561.05	23.59	3.85	1.02
4-Jan-11	20617.38	20651.21	20449.01	20498.72	23.53	3.84	1.02
5-Jan-11	20509.95	20509.95	20243.95	20301.1	23.33	3.81	1.03
6-Jan-11	20395.5	20425.85	20107.17	20184.74	23.19	3.78	1.04
7-Jan-11	20163.85	20210.62	19629.22	19691.81	22.65	3.7	1.06
10-Jan-	19714.42	19720.43	19158.43	19224.12	22.12	3.61	1.09
11-Jan-	19279.77	19431.56	19003.6	19196.34	22.1	3.61	1.09

12-Jan-	19353.34	19574.63	19048.56	19534.1	22.45	3.66	1.07
13-Jan-	19492.3	19522.38	19136.27	19182.82	22.1	3.6	1.09
14-Jan-	19198.04	19447.82	18811.96	18860.44	21.73	3.55	1.1
17-Jan-	18911.43	19018.94	18779.38	18882.25	21.73	3.55	1.1
18-Jan-	18983.2	19120.62	18933.47	19092.05	21.91	3.59	1.09
19-Jan-	19153.31	19167.06	18898.56	18978.32	21.74	3.57	1.1
20-Jan-	18892.43	19100.26	18794.73	19046.54	21.78	3.58	1.1
21-Jan-	19007.08	19065.34	18932.4	19007.53	21.61	3.57	1.1
24-Jan-	19095.69	19194.46	18998.38	19151.28	21.56	3.59	1.09
25-Jan-	19227.42	19340.99	18949.44	18969.45	21.26	3.57	1.1
27-Jan-	19086.69	19086.69	18656.05	18684.43	20.94	3.51	1.12
28-Jan-	18708.62	18723.12	18235.45	18395.97	20.64	3.46	1.13
31-Jan-	18226.21	18395.09	18038.48	18327.76	19.97	3.46	1.13
1-Feb-11	18425.18	18452.06	17982.17	18022.22	19.66	3.4	1.15
2-Feb-11	18216.91	18306	18042.61	18090.62	19.82	3.42	1.15
3-Feb-11	18113.73	18466.21	18064.61	18449.31	20.22	3.49	1.12
4-Feb-11	18450.07	18542.2	17926.98	18008.15	19.78	3.41	1.15
7-Feb-11	18135.02	18180.94	17977.01	18037.19	19.83	3.42	1.15
8-Feb-11	18141.51	18141.51	17742.18	17775.7	19.51	3.36	1.17
9-Feb-11	17723.99	17864.32	17508.35	17592.77	19.18	3.31	1.18
#####	17603.29	17636.88	17362.59	17463.04	19.02	3.29	1.19
#####	17519.13	17752.56	17295.62	17728.61	19.28	3.33	1.18
#####	17940.16	18227.62	17857.12	18202.2	19.78	3.42	1.15
#####	18260.08	18361.66	18050.48	18273.8	19.92	3.43	1.14
#####	18273.06	18358.84	18216.12	18300.9	19.9	3.44	1.14
#####	18345.12	18532.61	18233.79	18506.82	20.07	3.47	1.13
#####	18564.08	18690.97	18159.82	18211.52	19.76	3.41	1.15
#####	18238.54	18457.49	18082.66	18438.31	20.04	3.46	1.13
#####	18390.72	18457.9	18187.33	18296.16	19.9	3.44	1.14
#####	18233.77	18377.48	18150.01	18178.33	19.76	3.41	1.15
#####	18135.12	18135.12	17559.7	17632.41	19.23	3.32	1.18
#####	17775.08	17812.44	17469.97	17700.91	19.28	3.33	1.18
#####	17811.08	18296.53	17718.88	17823.4	19.44	3.36	1.17
1-Mar-11	17982.28	18478.68	17964.39	18446.5	20.05	3.46	1.13
3-Mar-11	18318.32	18603.57	18253.62	18489.76	20.07	3.47	1.13
4-Mar-11	18622.7	18736.97	18448.69	18486.45	20.04	3.46	1.13
7-Mar-11	18361.65	18361.65	18058.71	18222.67	19.76	3.41	1.15
8-Mar-11	18277.34	18466.81	18266.62	18439.65	20.01	3.45	1.13
9-Mar-11	18522.8	18583.3	18303.8	18469.95	20.04	3.46	1.13
#####	18430.84	18430.84	18261.26	18327.98	19.91	3.44	1.14
#####	18248.11	18368.43	18063.29	18174.09	19.75	3.41	1.15
#####	18167.1	18463.84	18155.43	18439.48	20.02	3.46	1.13
#####	18113.79	18326.33	17920.55	18167.64	19.71	3.4	1.15
#####	18263.68	18444.47	18263.68	18358.69	19.93	3.44	1.14
#####	18227.16	18354.27	18104.02	18149.87	19.74	3.41	1.15
#####	18251.18	18259.61	17849.53	17878.81	19.45	3.36	1.17
#####	17984.72	18007.73	17792.17	17839.05	19.4	3.35	1.17
#####	17929.09	18041.38	17878.8	17988.3	19.56	3.38	1.16

#####	17972.04	18218.28	17950.17	18206.16	19.77	3.41	1.15
#####	18286.42	18373.97	18269.32	18350.74	19.92	3.44	1.14
#####	18480.69	18858.3	18480.69	18815.64	20.39	3.52	1.11
#####	18799.71	19024.18	18799.57	18943.14	20.54	3.55	1.1
#####	18949.57	19226.21	18944.82	19120.8	20.76	3.58	1.09
#####	19178.77	19357.1	19178.77	19290.18	20.94	3.62	1.08
#####	19339.75	19575.16	19284.35	19445.22	21.15	3.65	1.07

Year 01-04-2010 to 31-03-2011

Correlations

		VAR 01	VAR 02
VAR 01	Pearson	1.000	.784
	N	230	230
VAR 02	Pearson	.784	1.000
	N	230	230

There are two methods to test efficiency of stock market Auto correlation and run test. Auto correlation of both national stock exchange and Bombay stock exchange are high so it shows that Indian stock markets are inefficient. Index prices are highly fluctuating year by year this is due to speculation and financial institutional investment in India, hence individual investor can beat the stock market by application of efficient market hypothesis theory and fundamental analysis by using historical data to predict future stock prices Auto correlation of 4years as follows

	BSE	NSE
Year 2006-2007	0.255	0.214
Year 2007-2008	0.532	0.603
Year 2008-2009	0.065	-0.182
Year 2009-2010	0.784	0.791

From the above table it is clear that Indian stock market is inefficient because of auto correlation values for 1/4/2006to 3/3/2007 and 1/4/2008to 31/3/2009 are high for BSE 0.784 for NSE 0.791 this shows volatility and highly fluctuating closing prices of index so chance to beat market by using past data you can make money and this shows that volatility of Indian stock market and speculative market.

Summary of Findings

The research shows that Indian stock market is not that efficient. This has been found out by conducting auto correlation test.

This means that share prices are not adjusted to the new information as soon as they are available and speculators can make money out of this. And research shows that low correlation between index and price of individual stock.

Individual investor can beat the market by using technical and fundamental analysis.

Past data can be used to predict the future stock prices in Indian stock markets. Because Indian stock market are influenced by other factor rather than market factors i.e. Indian market is inefficient

The activity of Financial Institutional Investor is one of the reasons for volatility of the Indian stock market.

Indian stock market is very speculative.

Individual Investor can increase his return by seeking the advice of the professional and experts in the field of stock market. Rumors plays major role in stock market.

Recommendation

- Taking experts or professional help would increase returns on investments instead of Investing own.
- Investing in mid cap companies is better because it is providing more returns compared to sensex and nifty companies.
- Government should reforms policy to strengthen efficiency of market.
- Investor should be well alert to the new information and rumors and act accordingly.

Conclusion

Individual investors put money in the stock market; Individuals invest in the stocks with the objective of generating return on the capital invested. Many investors try not only to make a profitable return but also to outperform, or beat, the market by conducting research. It is clear that Indian stock market is inefficient. Past data can be used to predict future stock prices, so skillful individual investor can beat market with proper study of fundamental analysis of the company. The individuals can make better investment decision by studying the Price Earnings Ratio and Earning per Share of the companies. Mid Cap companies are providing better returns than Index returns. With the help of experts you get an idea of investing in a particular stock, how much to invest, and when to invest. There are different types of investors like risk taking, risk averse. Risk taking investor invests in directly in the equity market where as risk adverse investor invests through mutual fund and brokers. Now-a-days Rumors are playing major role compared to fundamental and technical analysis. Some investors who invest on the bases of rumors are earning more returns compared to investors who use fundamental and technical analysis for taking investment decision. Indian stock market is highly fluctuating because of activities of foreign financial institutional investors who are investing in Indian stock markets due to promising return on investment. As Indian economy is growing in a rapid pace, more and more foreign investment is happening in the Indian capital market.

From the study, it can be concluded that still Indian Stock market is not efficient as compared to developed nations' stock market. Even though Indian stock market is inefficient, they are catching up very rapidly with other stock market particularly emerging countries. Reforms have to be undertaken in the capital market in order to strengthen the stock market. The government should undertake policy measures to strengthen the stock market. The regulatory authority for the stock market, SEBI should be strengthened.

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